



The International Research Institute  
for Climate and Society

# Multi-Hazard Risk Analysis for the Eastern Coastal Areas of India affected by the Tsunami TS-2004-000147-IND

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# Outline

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- Motivation and Objectives
- Methodology
- Results
- Discussion and challenges
- Conclusions

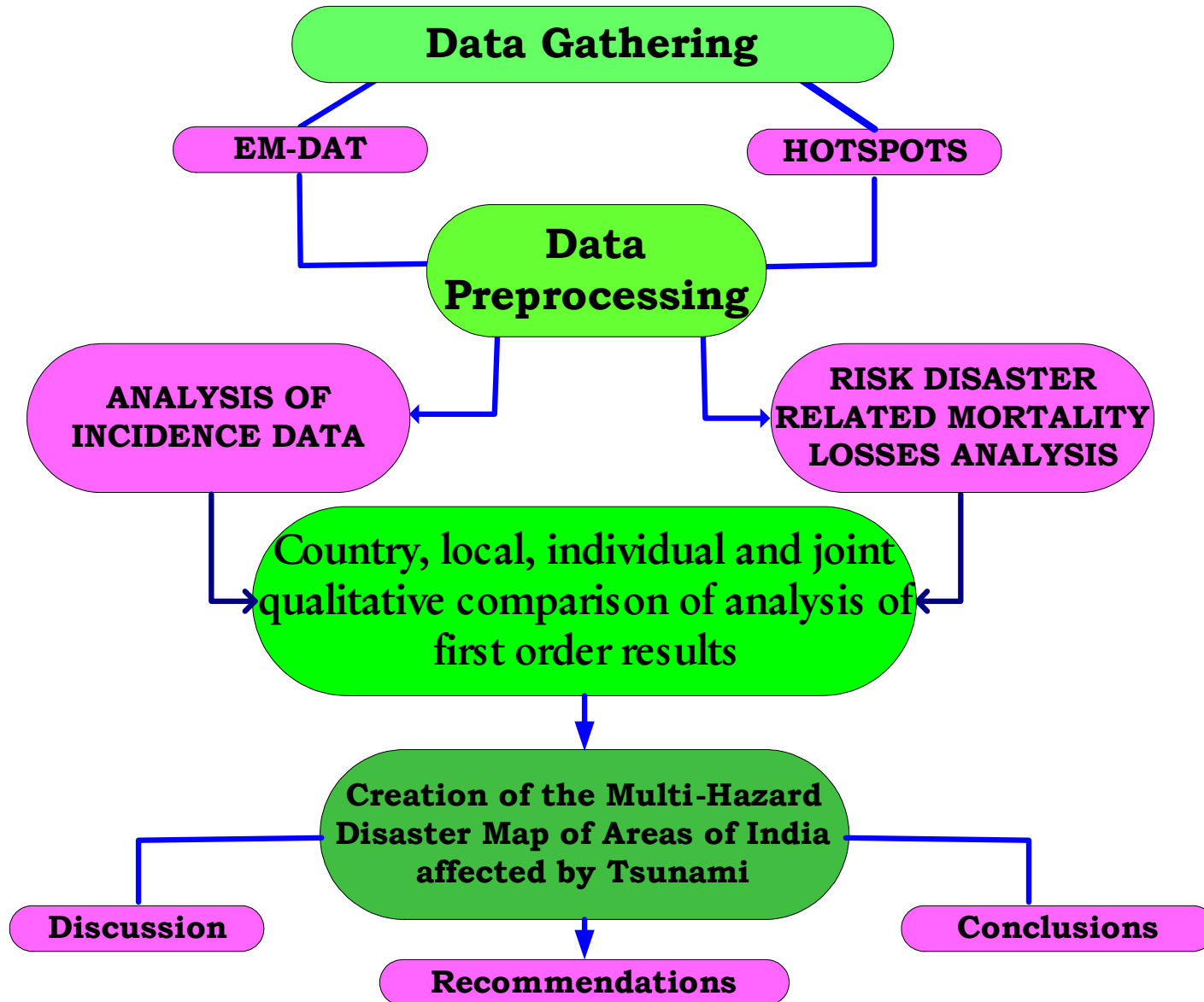


# Objectives

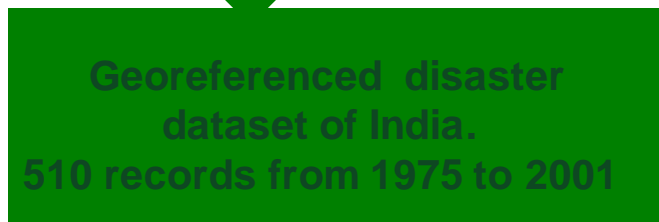
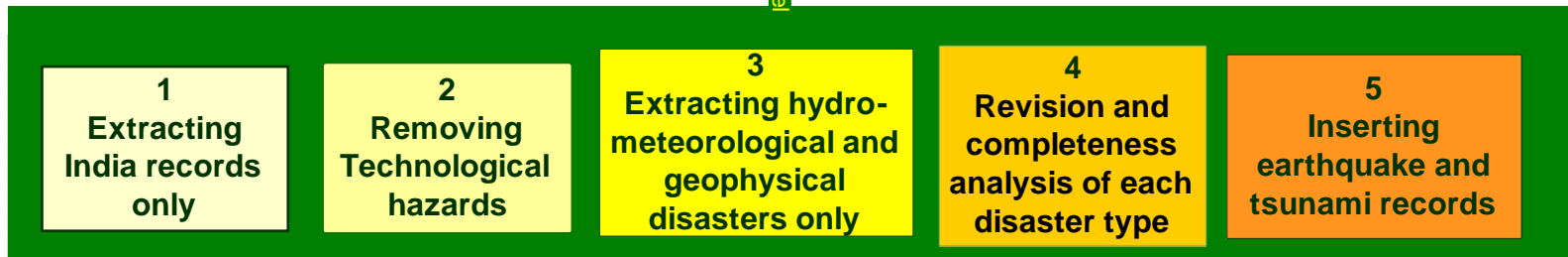
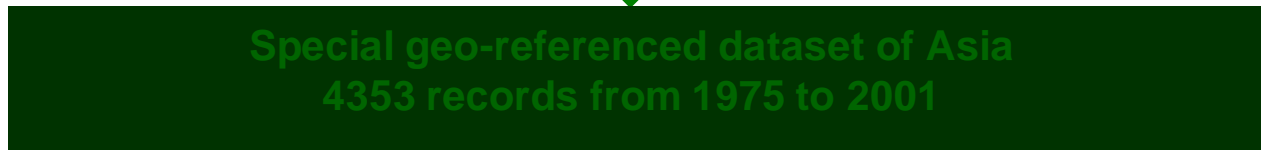
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- ❖ To furnish an analysis for use as a basic input for the development of a regional disaster risk management strategy.
- ❖ To assemble a georeferenced historical record of the diverse set of hazards that have triggered disasters in affected areas of India during the last century
- ❖ To combine knowledge of the past disaster history of the affected areas with lessons learned from previous disasters to promote appropriate land use policies
- ❖ To provide a basis for a proactive and continued response for preventing future hazard events from becoming catastrophic disasters.

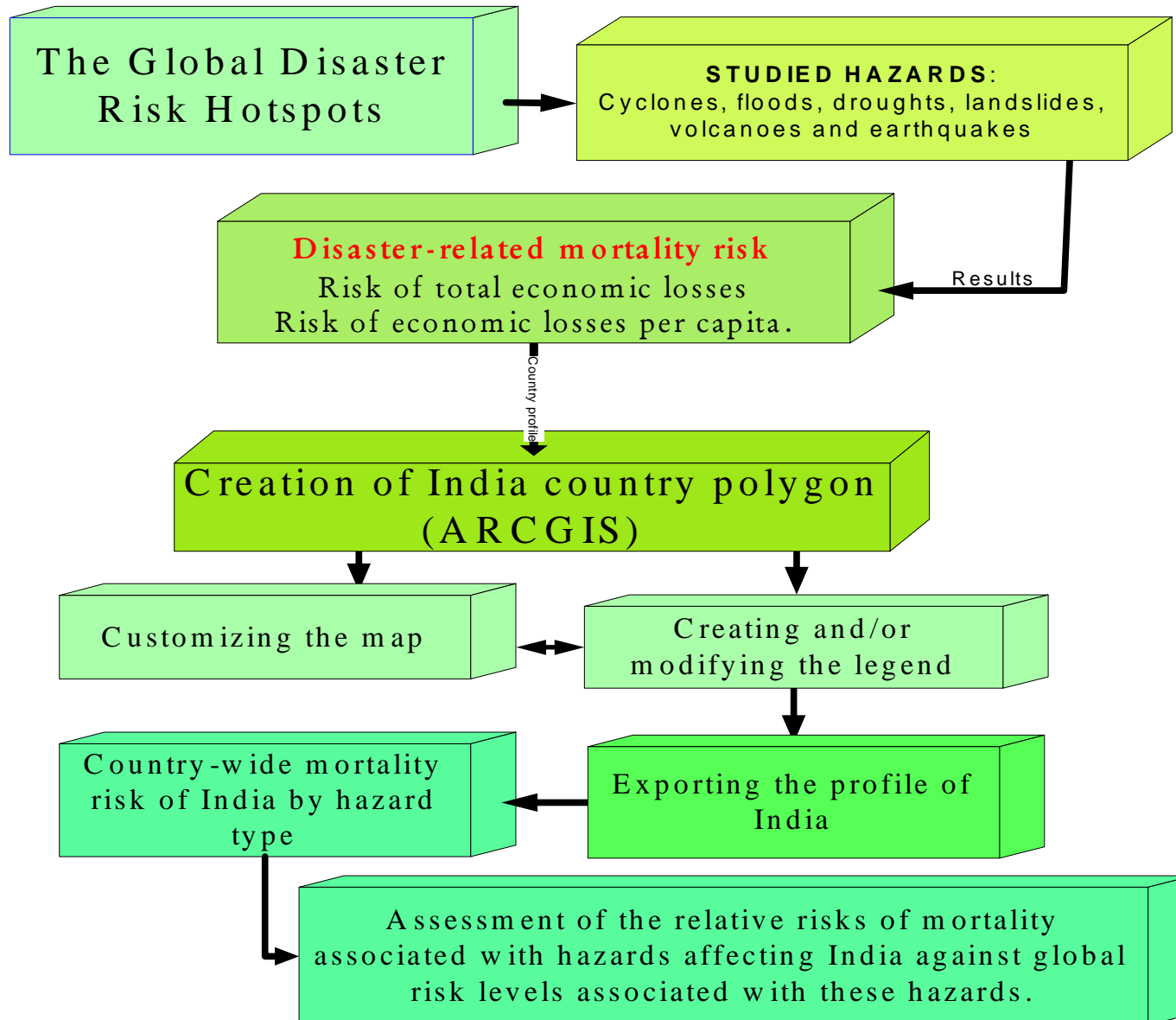
# Methodology



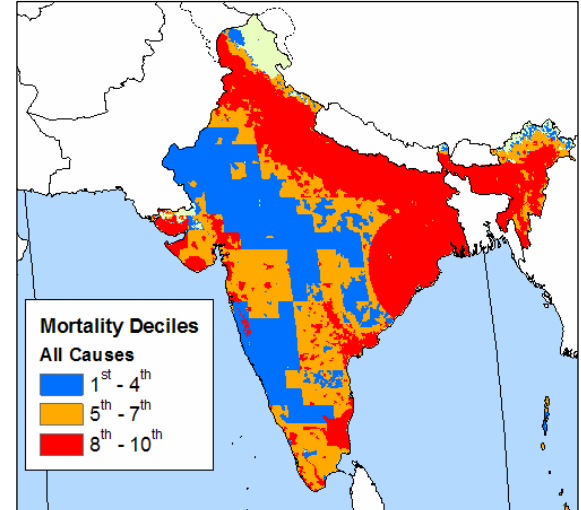
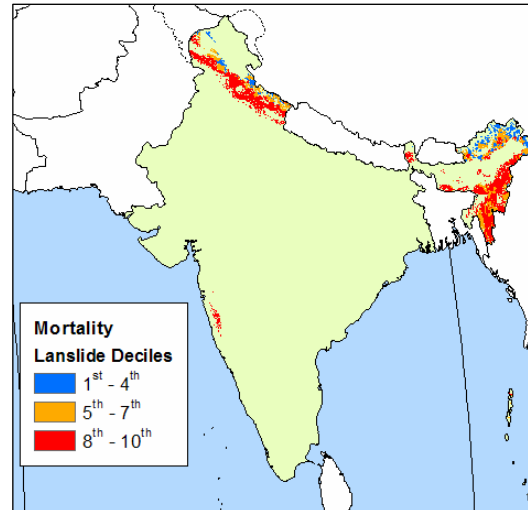
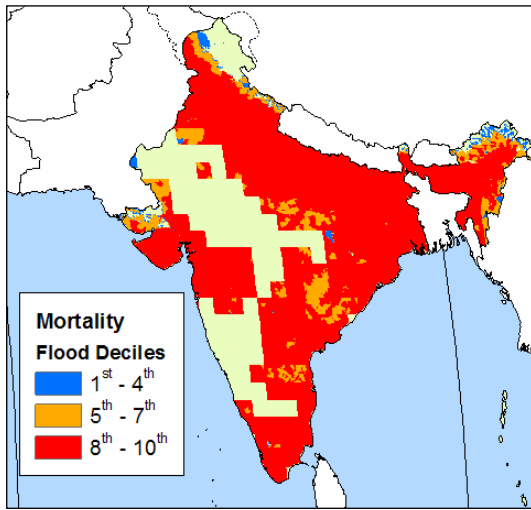
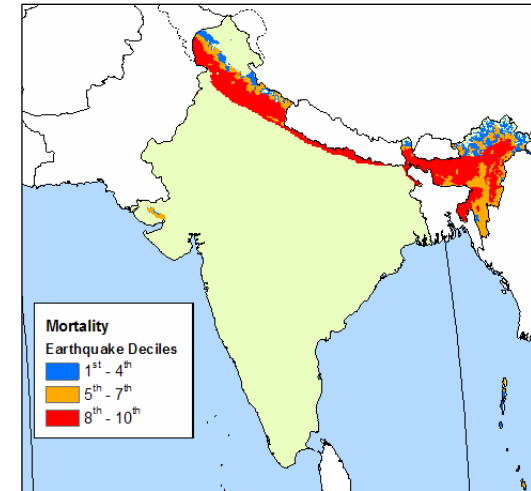
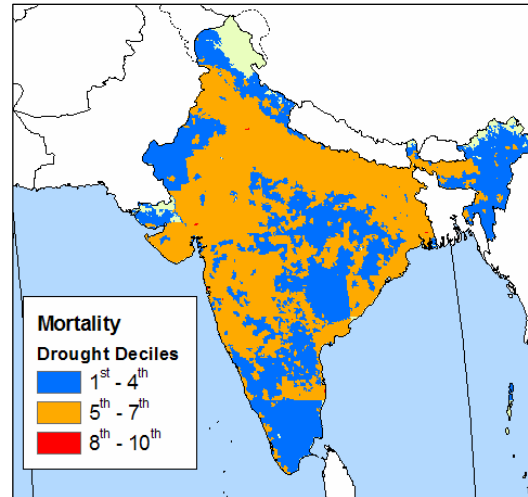
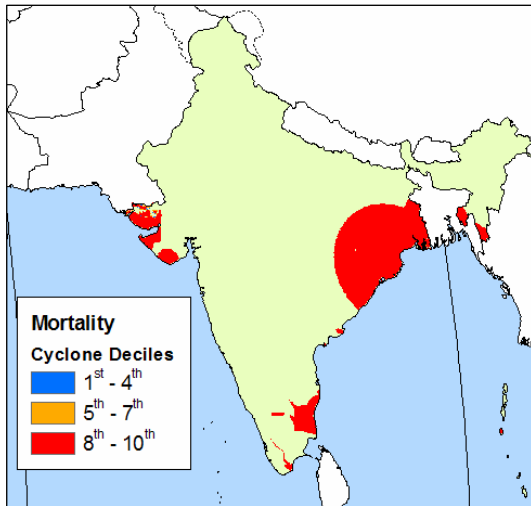
# Methodology



# Methodology

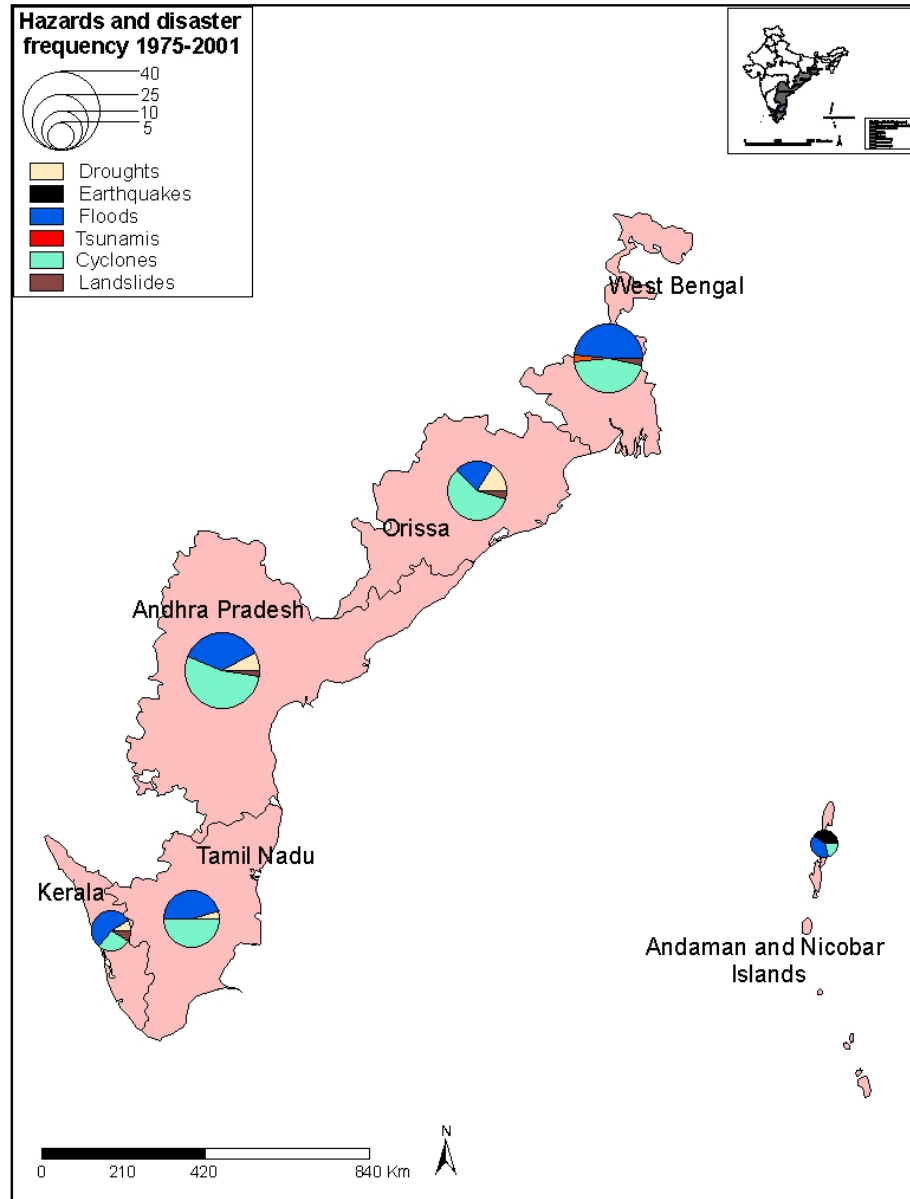


# Results



Natural disaster hotspots country profile of India extracted from Dilley et al, 2005.

# Results





# Recommendations

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- ❑ The pre-disaster conditions created by all hazards in the affected area should be taken into account.
- ❑ Provided additional insights into multi-hazard risk distributions in the affected states
- ❑ The integrated approach contributes to multi-hazard RM during reconstruction.
- ❑ Multi-hazard risk assessment is clearly both necessary and feasible

# Recommendations

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- What are the most effective strategies for addressing the multiplicity and heterogeneity of disasters across the affected states?
- What synergies could be obtained from trying to reduce vulnerabilities to multiple hazards simultaneously?
- How might a culture of risk management be promoted within the population in a continued and natural way
- What is the most effective approach for providing EW of hazard events in the area?
- How to create an EWS that takes into account the multiplicity of the hazards in the region?



# Conclusions?

- EWS are a particularly crucial component of a DRMP.
- A MHEWS could be more sustainable
- A MHEWS could constitute a better risk-reduction investment
  - What hazards should be included?
  - What synergies could be achieved?
- This first cut analysis can be complemented by field-level risk assessment work to fine-tune the MHEW procedures

THANK YOU VERY MUCH

Questions ???

