

Climate Risk Storylines for Navigating Uncertainties of Climate Change in Humanitarian Action



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1 Climate risk storylines

The Red Cross Red Crescent Climate Centre has developed an approach to facilitate climate risk navigation in the humanitarian sector. The approach builds on methods from climate narratives, storylines and forensic investigations of disasters while focusing on the unique challenges and modalities of decision making in the humanitarian sector.

2 Storyline development

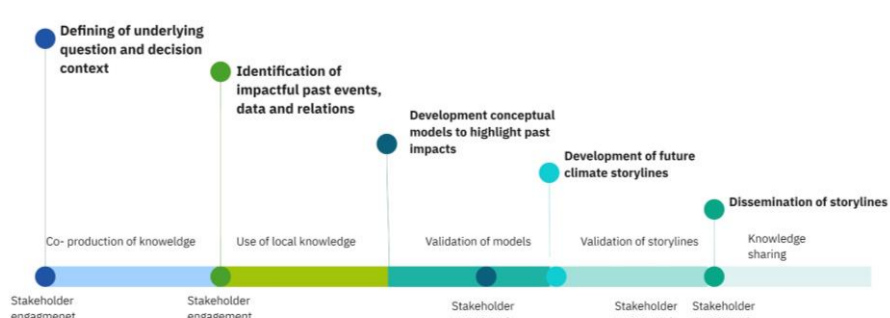
1. Decide on places and issues of concern
2. Identification of impactful past event
3. Identification of event impact data and possible relations using different types of knowledge including, climate data, grey literature, lived experiences and local knowledge
4. Develop conceptual models
 - Causal maps show drivers of climate risk and describing potential climate impact pathways within a particular context
 - Causal maps are constructed using a combination of evidence: retrospective analysis of past impactful events, prior research and associated literature, and expert or local lived experience.
5. Examine how future climate change and other drivers may alter future impacts by considering the cascading and compounding impacts including compounding non-climate factors.

We emphasize that this approach is designed to explore and integrate knowledge rather than to provide definitive predictions

3 Stakeholder engagement

To integrate different types of knowledge such as climate data, lived experiences, local knowledge, grey literature, climate-risk storylines should be co-developed with representatives from the concerning communities.

Storyline development and stakeholder engagement

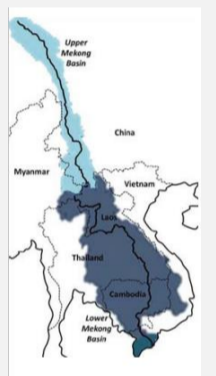


4 El Niño Storylines for the lower Mekong basin

The Indo-Pacific region faces a complex risks resulting from the interplay of climate change impacts, El Niño Southern Oscillation (ENSO) and the Indian Ocean Dipole (IOD), risks of communities relating to contexts of fragility, conflict and violence.

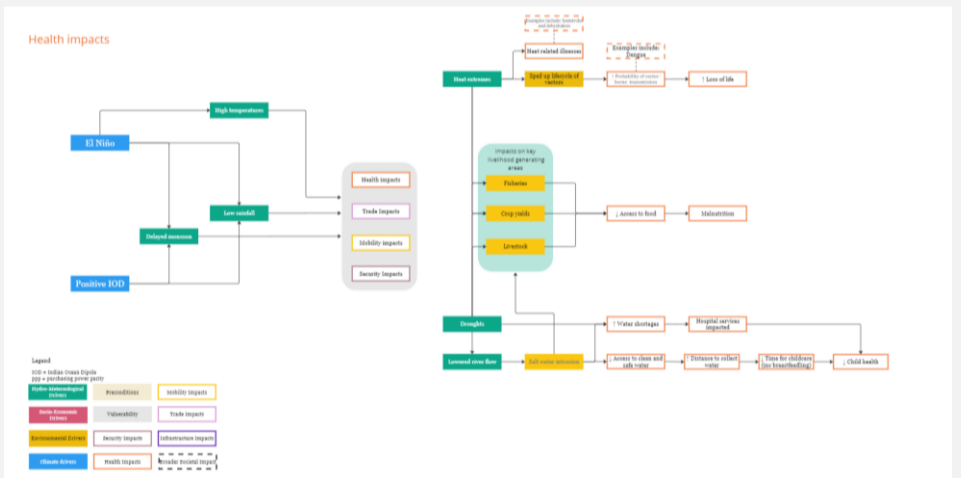
We used the storylines approach to support UK's Foreign, Commonwealth & Development Office in managing future climate risks across health, trade, mobility and security:

1. Analysis of historical timeseries of ENSO and literature to construct plausible physical climate storylines:
 - Describing a sequence of La Niña, neutral, and El Niño conditions evolving over the next 10 years
 - Describing an El Niño event in a 2°C warmer climate
2. Analysis of past El Niño events to construct plausible local climate storylines.



Storyline 1- near-term (2-10 years): El Niño conditions increase the probability of hot and dry conditions and drought over the lower and upper Mekong basin.

From there impacts across health, trade, mobility and security have been explored. Below the causal map for health impacts is shown.



5 Storylines enable

- Contextualizing Uncertainty: Integrate diverse knowledge across all risk components
- Understanding Causality: Illustrate interactions among risk factors
- Informing Adaptation Planning: Provide insights on plausible future risks for long-term decisions
- Identifying Critical Events: Highlight unprecedented, low-probability events with high humanitarian impacts