

A Review of Adaptation Policies to Climate Change: Insights from Mahanadi Delta, Odisha

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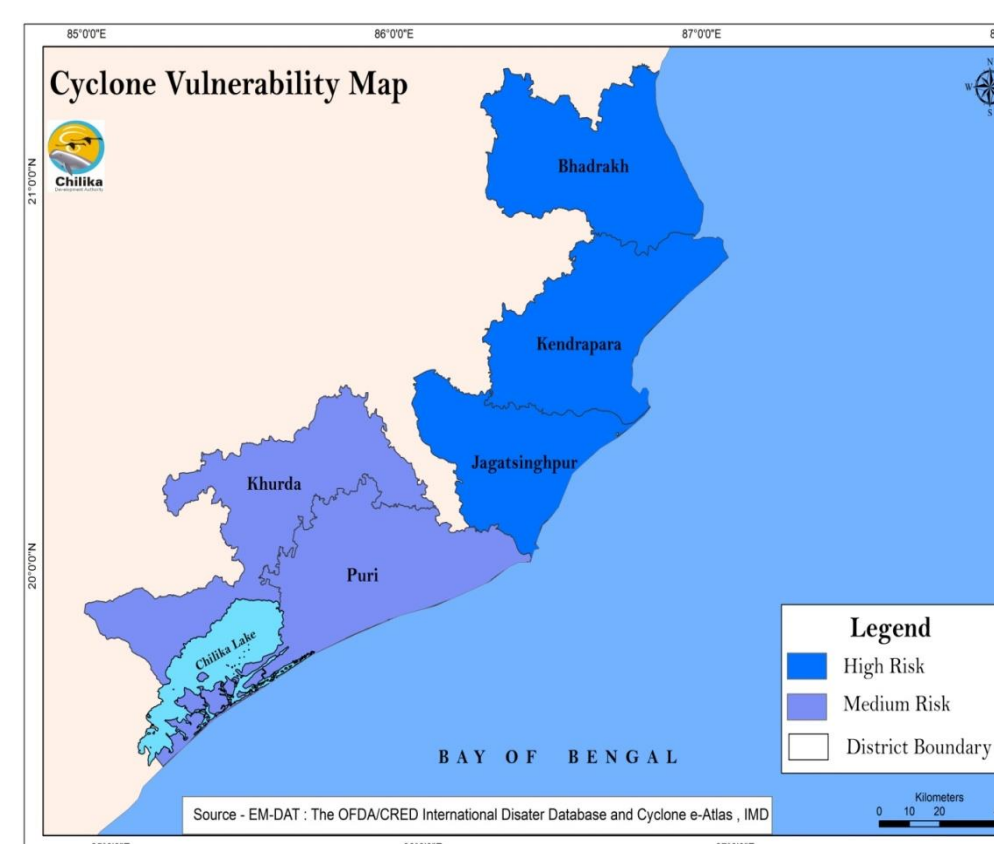
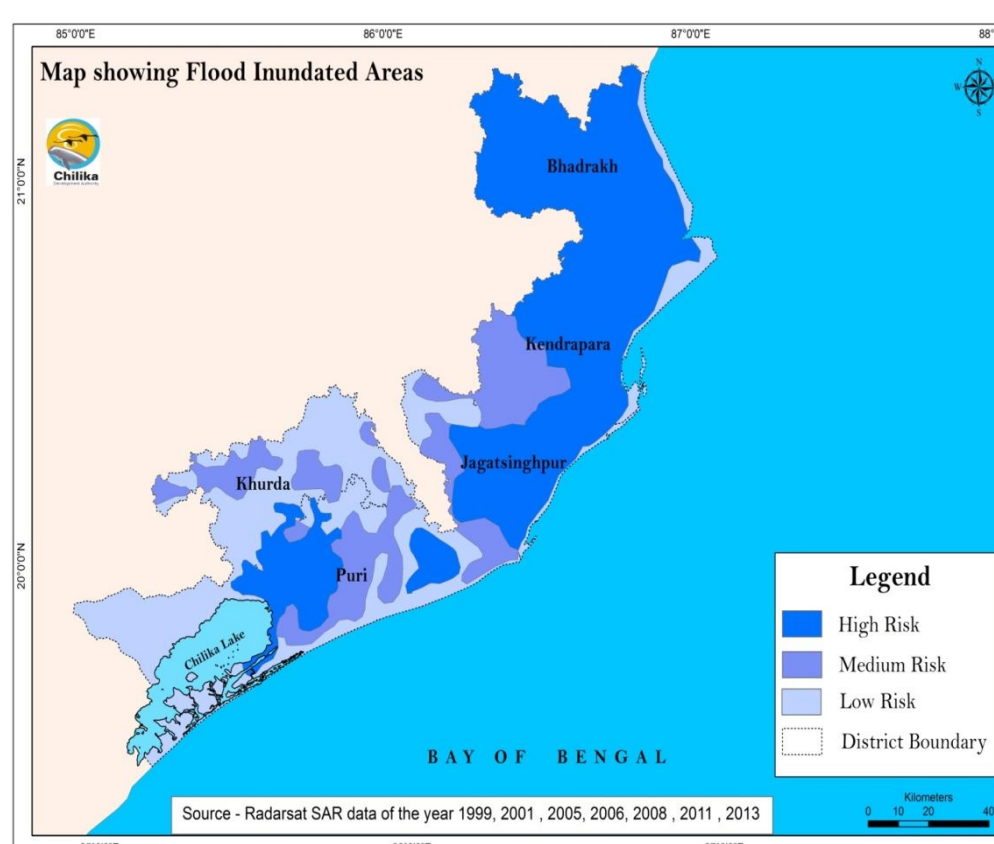
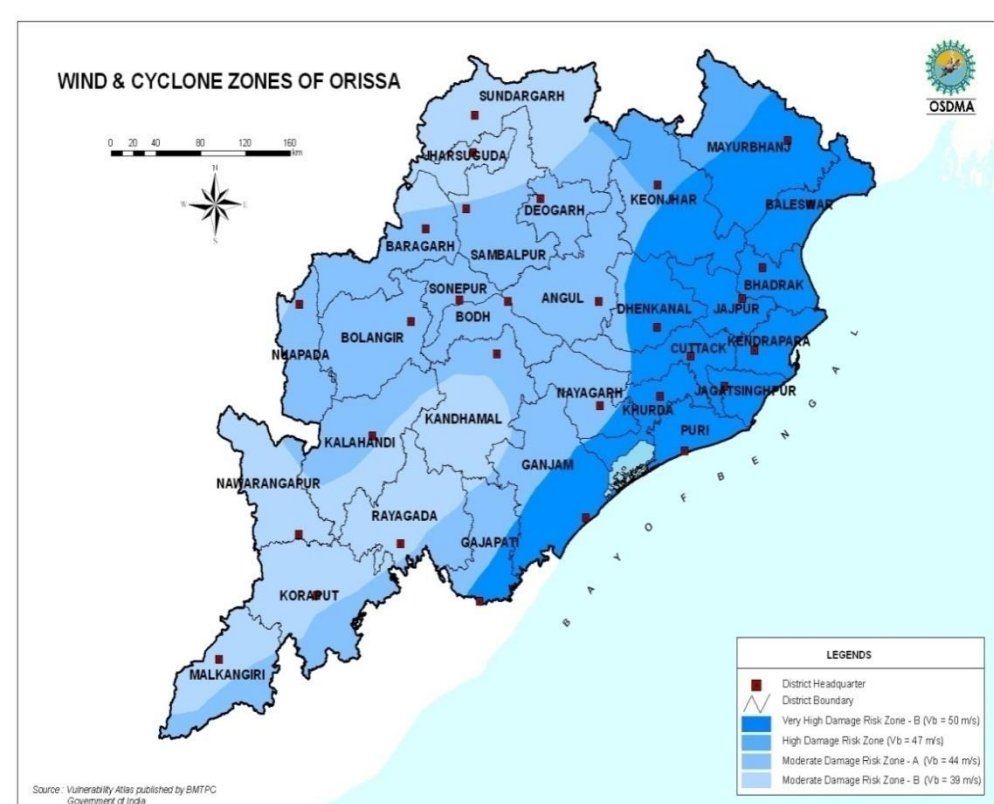
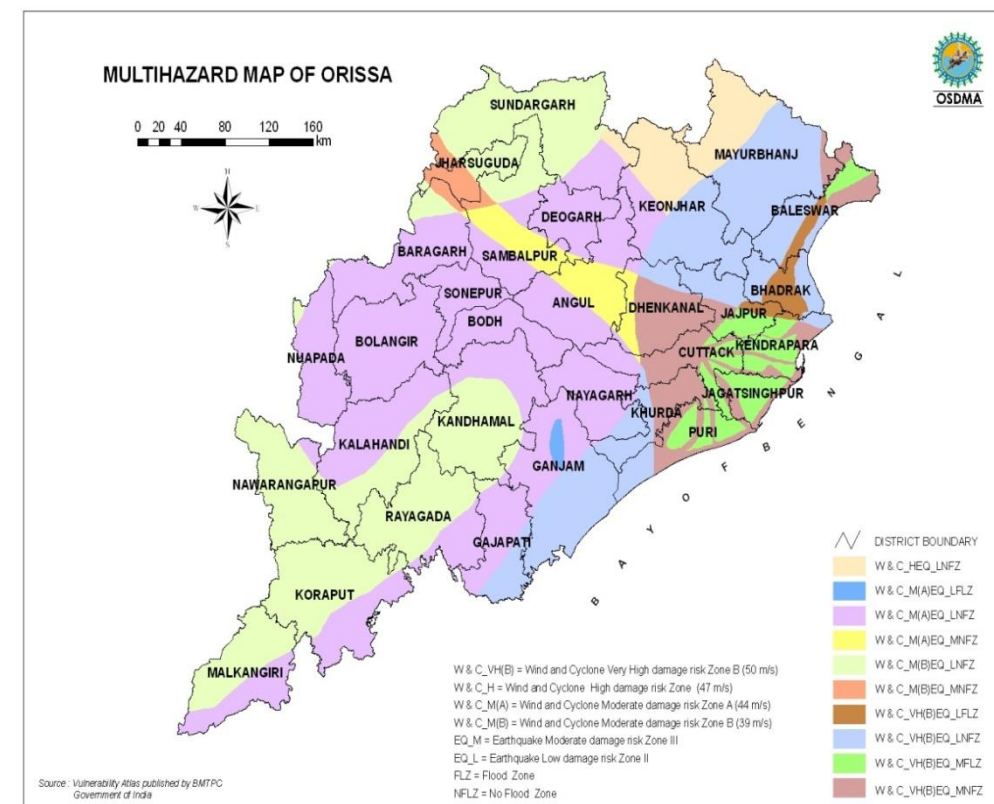
Introduction

The impacts of climate change are being felt across the globe. Climate change reduces the resilience and increases the human vulnerability. The poor and marginalized sections of the society are more vulnerable to climate variability and change. Thus, those with least resources have least capacity to adapt and are most vulnerable. Thus, it is imperative to understand and review the adaptation strategies.

Objective

To review the existing adaptation policies in the context of climate change.

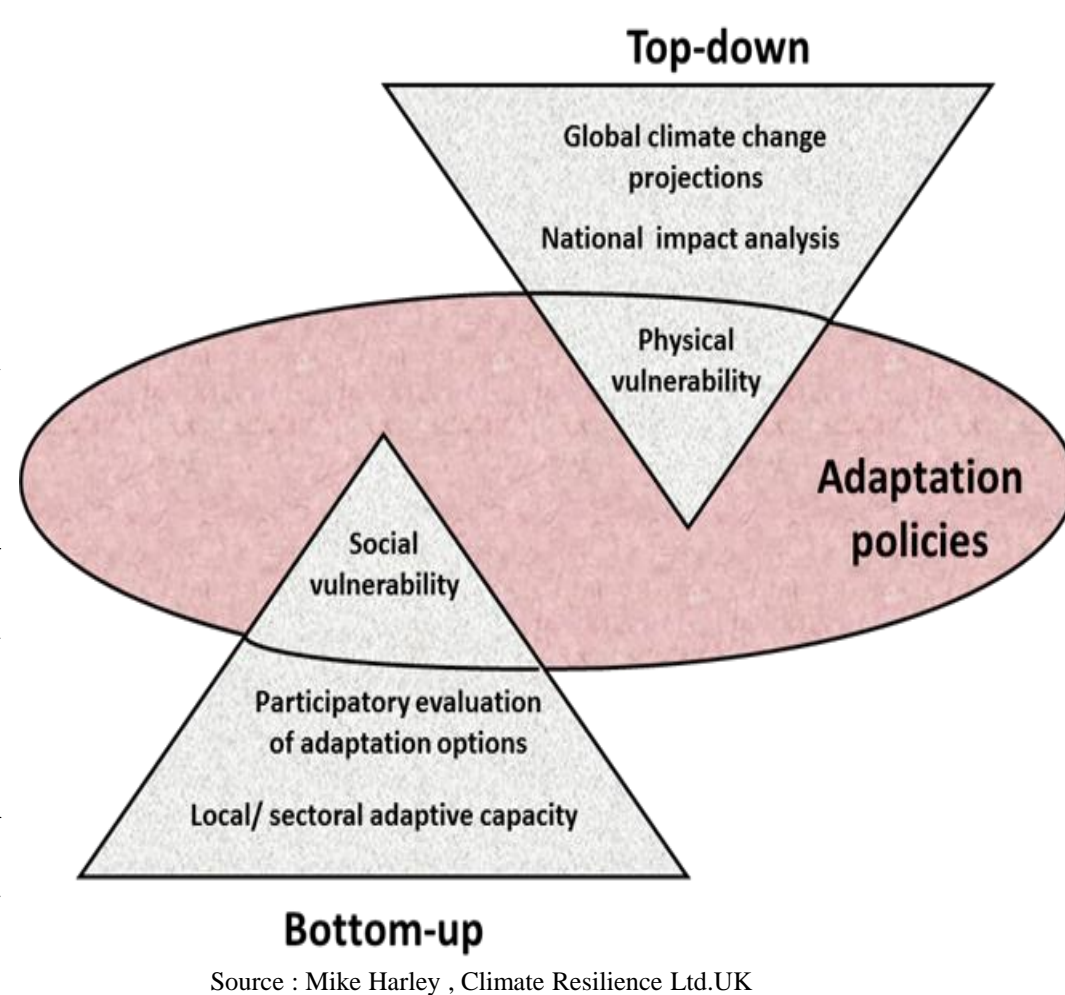
Indicators of Climate Variability



The maps indicate that coastal Odisha is Vulnerable to multi hazards and this vulnerability impact on overall livelihood and adaptive strategies.

Framework for analysis

❖ The framework illustrates that outcome vulnerability concepts that concentrate on physical vulnerability (top-down approach) to inform climate change adaptation policy, whereas socio-economic vulnerability follow a bottom up approach(Desai and Hulme ,2004)



Policy Matrix – Connecting policies to Adaptation Pathways

Policy Component	Minimum Intervention	Economic capacity expansion	System efficiency enhancement	System restructuring
DRR	✓	✓	✗	✗
Agriculture policy	✓	✓	✓	✓
Migration	✓	✓	✗	✓
Vulnerability reduction	✓	✓	✓	✗
Gender	✓	✓	✗	✗
Economic development	✓	✓	✓	✓
Fresh water and hydraulic management	✓	✓	✓	✗
Ecosystem management	✓	✓	✓	✓
Marine	✓	✓	✓	✗

SWOT Analysis

Strength

- ❖ Strong Legal framework on Policy Regime
- ❖ Extensive Institutional Infrastructure
- ❖ Availability of resources under different programmes
- ❖ Vulnerability reduction schemes helpful for adaptation
- ❖ Eight prioritized national mission operational & active
- ❖ National and State Policy Conducive for adaptation

Opportunity

- ❖ National Flagship programmes help mainstreaming
- ❖ Strong Network of Civil society Organizations
- ❖ Organized Groups of Grassroots women organizations
- ❖ Green Climate Fund and Adaptation Fund

Weakness

- ❖ Gender Disaggregated data is not available and in general paucity of data
- ❖ No Investment in Policy research.
- ❖ Targeted Interventions for children with special needs and non-formal education system
- ❖ Interventions are largely supply driven and are not tailored to context specific roles

Threats

- ❖ Unsustainable Development without involvement of women
- ❖ Not Adequate Mainstreaming DRR activities into core Development agenda

Major adaptation activities

- ❖ Infrastructural Interventions
- ❖ Alternate Livelihood Generations
- ❖ Mangroves Plantation & Agriculture



Kitchen Garden



Dry Fish as Alternative Livelihood Promotion



Geo-Synthetic Tube



Multi-purpose Cyclone Shelter



Floating Garden as an Adaption Strategy



Mangrove Nursery

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