

Spatial Heterogeneities in the impact of climate change on child health and nutrition in India

An Agroecological Approach

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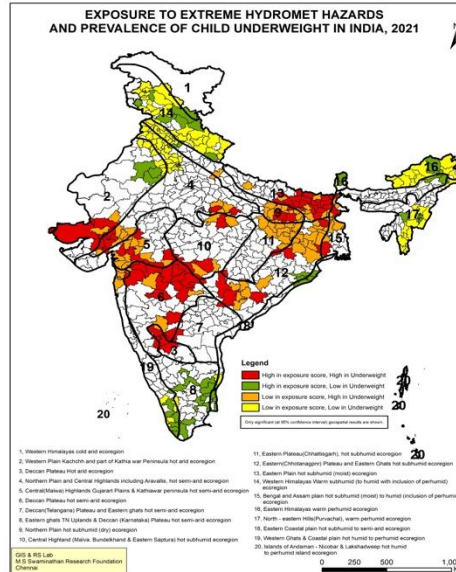
“Climate change has the potential to **undermine many of the gains** we have made in child survival and development – and poses even greater dangers ahead.” - Catherine Russell, UNICEF, Executive Director

Rationale

Nearly half of all children globally are at "extremely high risk" from climate impacts
 India is among the most "at-risk" countries
 Very limited studies on children in India

Objective

This study is an attempt to examine the impact of climate change on child health and nutrition in India



Impact of exposure to extreme hydro-met hazards on child-related indicators in India

	Drought	Flood	Cyclone
Child Underweight	+10%	-6%	NS
Minimum Dietary Diversity	-28%	+16%	NS
Under-5 child deaths	+6%	NS	+13%
Diarrhea among children	+20%	+14%	+24%
Child Immunisation	-18%	-9%	NS
ICDS utilisation for children	NS	-25%	-25%

Data Source and Methods

Data Source: CEEW & DHS
Independent Variable- Exposure Score (1970-2019), Data on Extreme Events – Drought, Flood, Cyclone (2010-19)
Dependent Variable – Underweight, Diarrhoea, mortality, immunisation coverage, ICDS provision
Control Variable – socio-demographic and economic characteristics
Methods: Geospatial Analysis (Identifying spatial hotspots) and Pooled Regression Analysis (Quantifying impact of extreme weather events)

Implications

This is the first child-focused study to examine climate change's impact on health, acknowledging the significance of agroecological zones in India.
 Need for agroecological-specific planning to mitigate climate change's effects
 Disaggregated impacts of extreme hydromet events need attention