

Annexures

Annexure 1: Understanding contextual vulnerability

Understanding Contextual Vulnerability

In the context of Comprehensive Integrated Health and Climate Change, contextual vulnerability takes into account the specific factors that contribute to the vulnerability of marginalised groups, such as migrants and daily wage workers, to the impacts of climate change. These factors include not only their exposure to climatic events but also their socio-economic conditions and their constant exposure to temperature and weather changes.

Identifying contextual vulnerability involves assessing the unique circumstances of a particular community or population and understanding how these factors interact to increase their susceptibility to climate change impacts. This can be done through a combination of quantitative and qualitative research methods, including surveys, interviews, and data analysis.

To identify contextual vulnerability, researchers and practitioners may consider the following steps:


1. **Conducting vulnerability assessments:** This involves collecting data on social, economic, political, and environmental factors that contribute to vulnerability. This can include analysing demographic data, assessing infrastructure and resource availability, and understanding governance structures and policies.
2. **Mapping exposure to climatic events:** Assessing the frequency and intensity of climatic events in the region and determining the extent to which the population is exposed to these hazards. This can involve analysing historical climate data, modelling future climate scenarios, and mapping the distribution of vulnerable populations.

3. **Analysing socio-economic conditions:** Examining the socio-economic characteristics of the population, such as income levels, employment patterns, access to healthcare, and social support systems. This helps identify how these factors intersect with climate change impacts and increase vulnerability.
4. **Assessing adaptive capacity:** Evaluating the community's ability to adapt to and cope with climate change impacts. This includes examining existing infrastructure, institutional capacity, community networks, and access to resources and technologies that enable adaptation and resilience.
5. **Engaging stakeholders:** Involving local communities, policymakers, and other stakeholders in the vulnerability assessment process to gather diverse perspectives and ensure that interventions and measures are contextually relevant and effective.

By understanding contextual vulnerability, decision-makers can develop targeted interventions that address the specific needs and challenges faced by vulnerable populations. This can involve implementing measures to enhance adaptive capacity, improve access to healthcare and social services, strengthen infrastructure, and promote sustainable livelihoods. Additionally, addressing the underlying social, economic, and political determinants of vulnerability is crucial for long-term resilience building and comprehensive integrated health in the face of climate change.

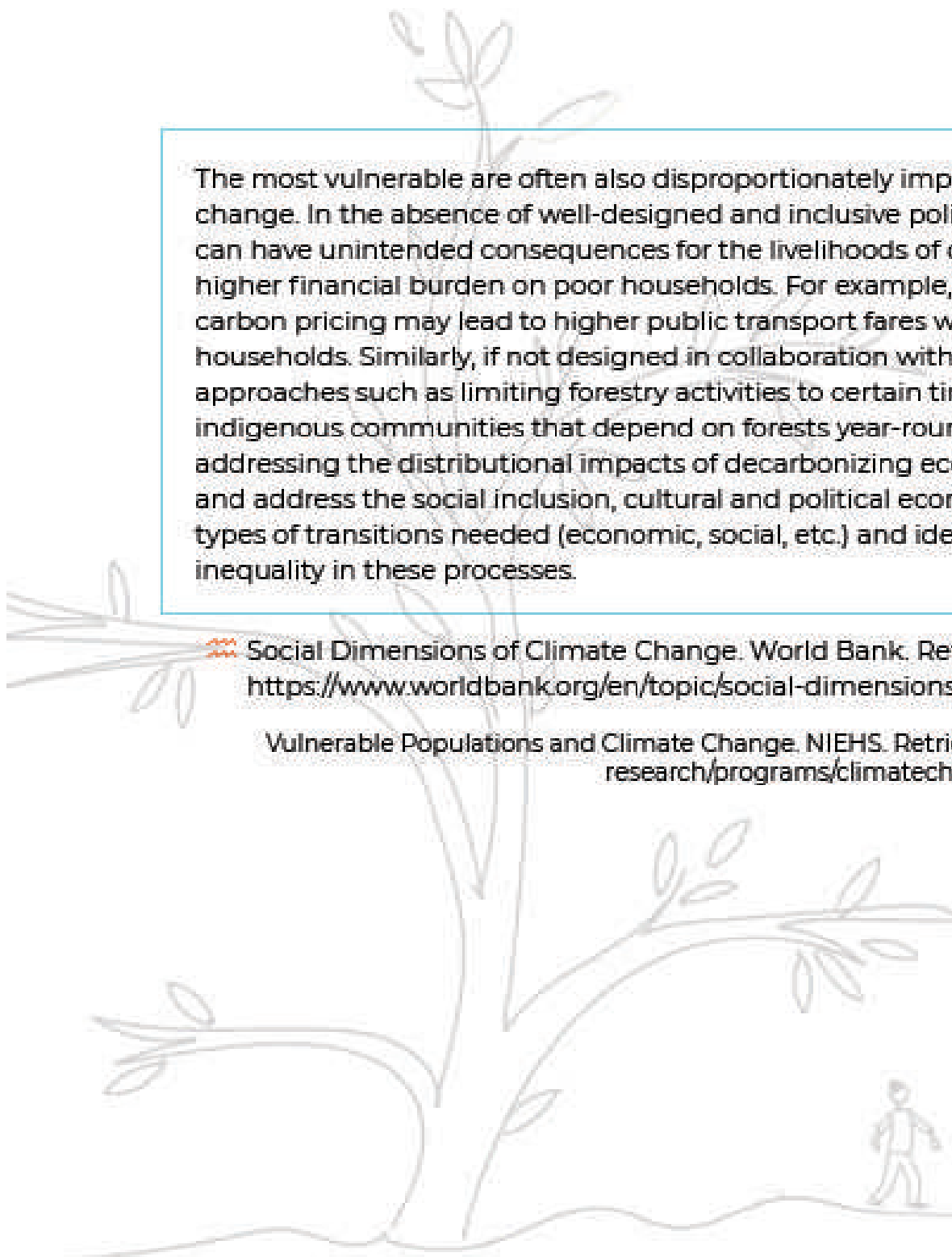
Perspectives on contextual vulnerability in discourses of climate conflict, Earth System Dynamics, Copernicus Publications on behalf of the European Geosciences Union, Retrieved on 10th July, 2023, from <https://esd.copernicus.org/articles/7/89/2016/esd-7-89-2016.pdf>

In general, children and pregnant women, older adults, certain occupational groups, persons with disabilities, and persons with chronic medical conditions are more vulnerable to health stressors, such as extreme heat, floods, poor air quality, and other climate-related events.



For example, children with underdeveloped immune systems, may experience heightened sensitivity to airborne allergens, potentially leading to increased health risks. Outdoor workers, who often belong to economically disadvantaged communities, may face amplified health consequences from extreme heat due to their occupational exposure. Extreme weather events such as floods or droughts can severely affect agricultural communities that rely on stable climatic conditions for their livelihoods. Small-scale farmers, already facing economic challenges, may experience crop failures, loss of livestock, and reduced income due to unpredictable weather patterns. This can perpetuate a cycle of poverty as families struggle to meet their basic needs and have limited opportunities for economic advancement. Moreover, older adults with limited mobility face challenges in adapting or physically responding to extreme weather events, further perpetuating their vulnerability.

🌊 Social, environmental, political, and economic factors can contribute to health disparities that may have greater impacts on people who are vulnerable to the impacts of climate change. These factors include poverty, racial discrimination, a lack of access to healthcare, inadequate education, and an unhealthy or unsafe built environment. Collectively, these factors are referred to as social determinants of health. Social determinants of health can occur simultaneously with the effects of climate change, like increased temperatures, precipitation changes, and extreme weather events, and the environmental stressors they produce, like disruptions to land-use, ecosystems, or agricultural production.



The most vulnerable are often also disproportionately impacted by measures to address climate change. In the absence of well-designed and inclusive policies, efforts to tackle climate change can have unintended consequences for the livelihoods of certain groups, including by placing a higher financial burden on poor households. For example, policies that expand public transport or carbon pricing may lead to higher public transport fares which can disproportionately impact poorer households. Similarly, if not designed in collaboration with beneficiaries and affected communities, approaches such as limiting forestry activities to certain times of the year could adversely impact indigenous communities that depend on forests year-round for their livelihoods. In addition to addressing the distributional impacts of decarbonizing economies there is also a need to understand and address the social inclusion, cultural and political economy aspects – including agreeing on the types of transitions needed (economic, social, etc.) and identifying opportunities to address social inequality in these processes.

 Social Dimensions of Climate Change. World Bank. Retrieved April 28, 2023, from <https://www.worldbank.org/en/topic/social-dimensions-of-climate-change>

Vulnerable Populations and Climate Change. NIEHS. Retrieved April 28, 2023, from https://www.niehs.nih.gov/research/programs/climatechange/health_impacts/vulnerable_people/index.cfm