

CALL FOR BOOK CHAPTERS

IMPACT OF CLIMATE CHANGE ON VULNERABLE
POPULATIONS:
SOCIAL RESPONSES TO A CHANGING
ENVIRONMENT

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Shedding light on one of the Grand Challenges of Social Work- Strengthening the Social Fabric of Societies

Background

Climate change threatens the physical and mental health of vulnerable communities and can have a significant impact on their livelihoods. Climate change can also deepen existing social and economic inequities and contribute to the erosion of coping skills and resilience. What is needed in such an ever-changing global environment, are transformative social and economic responses based on inclusion and dialogue with members of the community, an investment in innovative measures to strengthen community-based assets, and the fostering of collective agreements and partnerships between communities and governments.

The unpredictable nature of climate change events often presents vulnerable communities such as farmers, fisherfolk, and Indigenous groups, amongst others, with challenges that threaten the economic stability of the household, the community, and the domestic economy. This may especially the case if the country in question relies on tourism or agriculture as a primary source of revenue. Akanbi et al. (2021), found that for Nigerian farmers engaged in low technology-based food production such as rice farming, climate change poses a significant threat as it increases their vulnerability to food poverty. For this reason, Bedeke (2022) argues that farmers need to change their style of cropping to accommodate exposure to extreme conditions such as erratic rainfall, recurrent floods and droughts, elevated temperatures, and solar radiation. Bedeke suggests that programs that facilitate such behavior change can lead to the propagation of drought tolerant plants, and high-yielding varieties of rice and other crops (Bedeke 2022).

It is important to recognize that climate change, manifest as it is in multiple ways, impacts communities differently depending upon a range of multi-layered factors. Within the coastal regions of Spain and the Mediterranean for example, climate change has played a significant role in the regional disparities in the vulnerability of fisheries and coastal tourism, leading various communities to become more exposed than others. Arago et al. (2021) found that based on the sensitivity of fisheries to climate change and the ability to adapt to such changes, fisherfolk in the Mediterranean were more vulnerable than those in the Atlantic. While tourist resorts on the North-Western Mediterranean coast of Egypt are particularly prone to shoreline and beach erosion, the degradation of infrastructure and the devaluation of properties, which reduces the revenues earned by the tourist industry (El-Masry et al. 2022).

Countries in Sub-Saharan Africa are heavily dependent on agriculture and fishing and women play an integral role in the processing and selling of the commodities produced. However, women have little access to land, to agricultural support services or to financial resources and consequently are more vulnerable to climate change impacts on food security. Anugwa et al. (2022) find that such inequalities arise because of traditional socio-cultural roles, inequities in access to education, and the deprivations faced in particular geographic locations such as coastal or rural communities. Apart from the gender dynamic of climate change, Awolala et al. (2021) find that even though depressed areas may have access to basic amenities, women (and their children) and elderly populations are often income poor, lack the necessary services to ensure their wellbeing and have insufficient support from government institutions.

Extreme weather conditions such as elevated temperatures and prolonged droughts in the case of Africa, as previously mentioned, impacts persons' capacity for food security in a negative

manner, while acerbating social inequality. These conditions impact the health of vulnerable communities, as these extreme climate change events may lead to malnutrition, cholera, and the displacement of entire communities such as nomadic tribes who may lack access to water and consequently have poor levels of sanitation and hygiene (Charnley et al. 2022). Indeed, climate change is increasingly responsible for population displacement and the creation of refugee communities. Focusing on the impact that climate change has on tribal communities such as those in Africa and India, these groups earn their income from engaging in agricultural practices such as cropping and working on tea plantations but are vulnerable to high rainfall, flooding, and landslides (Deb and Mukherjee, 2022; Kaur et al. 2022). For this reason, these groups are slow to adapt and are more vulnerable to climate change events. Even in economically advanced countries like Australia, human induced climate change events such as bushfires are known to harm the health of remote communities, who because of their isolated location have limited access to transport, health care services, infrastructure, and economic resources (Hall and Crosby 2020).

International organizations such as the UNFCCC are tasked with designing and implementing climate change policies to address the impact that climate change has on vulnerable groups in society. However, Biesbroek et al. (2021) explain that the policy literature tends to focus more on the impact of climate change more widely, than on the needs of especially vulnerable groups, adaptation or, governance. Birkmann et al. (2022) add that in addition to focusing on the last three areas, there is a need to review how vulnerability impact assessments are undertaken by institutions around the world because vulnerability ranking determines climate change responses.

"Vulnerability: the propensity or predisposition to be adversely affected. Vulnerability encompasses a variety of concepts and elements including sensitivity or susceptibility to harm and lack of capacity to cope and adapt. A broad set of factors such as wealth, social status, and gender determine vulnerability and exposure to climate-related risk." (IPCC, 2014: 128)

Nature of the Book

The Impacts of Climate Change (this edited book) will be an open access book which explores the needs of particularly vulnerable populations to climate change and proffers solutions for the creation of safe spaces and the reduction of the worst effects of climate change. It is expected that this book will be used by academics, policy makers, social work students, lecturers, non-governmental and government agencies and other stakeholders to promote advocacy for vulnerable client groups affected by climate change. It is anticipated that the book will not only highlight key issues for environmental sustainability, but in drawing on principles of inclusion and diversity, will

celebrate and promote hope and resilience. To this end, we invite contributions from established and emerging scholars from the areas of:

- Social work
- Sociology and Psychology
- Economics
- Development Studies
- Law, government, and public policy

- Social anthropology, and urbanism
- Tourism
- Indigenous Peoples
- Gender
- Migration

Proposed Themes

Submissions should be original material that has not previously been published. Both empirical and conceptual papers are welcome, and any methodology can be considered if the research meets best academic standards for rigor. Topics/themes of interest of this edited volume include, but are not limited to climate change events related to the following vulnerable populations:

- 1. The social inequalities and health effects of climate change as they impact elderly people.
- 2. The health and housing precariousness of homeless people during climate change events.
- 3. The culture of neglect: climate concerns and disabled people.
- 4. Managing the health effects of climate change and chronic ailments.
- 5. Examining the relationship between climate change and mental health.
- 6. The implications of climate change for maternal and child health.
- 7. Linkages between poverty, HIV/AIDS, and climate change.
- 8. The role of race and ethnicity in the provision of services to reduce the impact of climate change on various populations.
- 9. Climate change and its impact on refugees and migrants.
- 10. Climate change and its impact on prison communities.
- 11. The role of gender in the analysis of climate change impacts.
- 12. Understanding climate change impacts on women in small scale fisheries.
- 13. Climate change and its impacts on farmers and food security.
- 14. Climate change, natural disasters: impact on persons living in small island developing states (SIDS).

Authors may propose other themes/topics, but these must be aligned with the main focus of the book: climate change and vulnerable populations. Authors <u>will not</u> be required to pay a publishing or administrative fee.

Contributors Qualifications

It is expected that authors who have an academic background will have a PhD or be in the final year of their doctoral program. For non-academics, it is expected that contributors have at three years' experience in their field of expertise and evidence of scholarly writing.

Guidelines for Contributors

The contributions for this book will be selected based on the submission of an abstract. The abstract should include:

- 1. The Title of the Article: The title of your manuscript should be concise, specific, and relevant.
- 2. Author details (Full Name, Institutional Affiliation, and Email, inclusive of a short Biography not more than 150 words).
- 3. Abstracts: The abstract should be a total of about 200 words maximum. The abstract should be a single paragraph and should follow the style of structured abstracts but without headings: 1) Background: Place the question addressed in a broad context and highlight the purpose of the study; 2) Methods: Briefly describe the main methods or treatments applied. Include any relevant preregistration numbers, and species and strains of any animals used.

 3) Results: Summarize the article's main findings; and 4) Conclusion: Indicate the main conclusions or interpretations. The abstract should be an objective representation of the article: it must not contain results which are not presented and substantiated in the main text
- 4. Keywords: The inclusion of three to ten pertinent keywords that are relevant to the article.
- **5.** All abstracts and full articles are to be submitted to the following email address: **vulnerablepopulations2022@gmail.com**
- 6. If the Abstract is accepted, the full chapter inclusive of references and appendices should be between 5000-7000 words maximum.
- 7. Main Text: Detailed Guidelines for Formatting your Chapter will be provided after the acceptance of your abstract.
- 8. Reference Style: Chicago Style Guide (Author Date Format).
- 9. All contributions are expected to be original works.

and should not exaggerate the main conclusions

10. Contributors are advised that there is to be strict adherence to the publishers' manuscript guidelines, plagiarism guidelines, and references/citation guidelines.

Deadlines

- 1. Submission of Abstract: 24th June 2022.
- 2. Notification of Acceptance: 8th July 2022.
- 3. Submission of the Chapter: 23rd September 2022.
- 4. Return Reviewed Chapter to Author: 21st October 2022.
- 5. Re-Submission of Revised Chapter: 18th November 2022.
- 6. Publication of the Book: December 2023.

Publishing House

Multidisciplinary Digital Publishing Institute (MDPI), Basel, Switzerland.

References

- 1. Akanbi, Sheu-Usman O., Olanrewaju S. Olatunji, Olamide S. Oladipo, Uswat T. Adeyemi, and Akinyinka Akinyoade. (2021). "Vulnerability of Rice Farmers to Climate Change in Kwara State, Nigeria." Turkish Journal of Agriculture, 10(2): 374-380. Accessed May 17, 2022. doi: 10.24925/turjaf.v10i2.374-380.4648
- 2. Anugwa, Ifeoma Q., Esdras A. Obossou, Robert U. Onyeneke, and Jane M. Chah. (2022). "Gender perspectives in vulnerability of Nigeria's agriculture to climate change impacts: a systematic review." GeoJournal. Accessed May 17, 2022. doi: 10.1007/s10708-022-10638-z
- 3. Aragao, G., Lucia Lopez-Lopez, Antonio Punzon, Elena Guijarro, Antonio Esteban, Encarnación García, José M. González-Irusta, Julia Polo, Miguel Vivas, and Manuel Hidalgo. 2021. "The importance of regional differences invulnerability to climate change fordemersal fisheries." ICES Journal of Marine Sciences, 79(2):506-518. Accessed May 17, 2022. doi: 10.1093/icesjms/fsab134
- 4. Awolala, D., Igbekele A. Ajibefun, Kehinde Ogunjobi & Ruiqing Miao. 2021. "Integrated assessment of human vulnerability to extreme climate hazards: emerging outcomes for adaptation finance allocation in Southwest Nigeria." Climate and Development, 1-20. Accessed May 17, 2022. doi:10.1080/17565529.2021.1898925
- 5. Bedeke, Sisay B. 2022. "Climate change vulnerability and adaptation of crop producers in Sub-Saharam Africa: a review on concepts, approaches and methods." Environment, Development and Sustainability. Accessed May 17, 2022. doi: 10.1007/s10668-022-02118-8
- 6. Biesbroek, Robbert., Sarah J. Wright, Stefanie K. Eguren, Anita Bonotto and Ioannis N. Athanasiadis. 2022. "Policy attention to climate change impacts, adaptation, and vulnerability: a global assessment of National Communications (1994–2019)." Climate Policy, (22):1, 97-111. Accessed May 17, 2022. doi: 10.1080/14693062.2021.2018986
- 7. Birkmann, Joern, Ali Jamshed, Joanna M. McMillan, Daniel Feldmeyer, Edmond Totinb, William Solecki, Zelina Z. Ibrahimd, Debra Roberts, Rachel B. Kerr, Hans-Otto Poertner, Mark Pellingh, Riyanti Djalante, Matthias Garschagen, Walter L. Filho, Debarati Guha-Sapir l, and Andrés Alegríam. 2022. "Understanding human vulnerability to climate change: A global perspective on index validation for adaptation planning." Science of the Total Environment, 803(150065):1-18. Accessed May 17, 2022. doi: 10.1016/j.scitotenv.2021.150065
- 8. Charnley, Gina., Ilan Kelman, and Kris A. Murray. 2022. "Drought-related cholera outbreaks in Africa and the implications for climate change: a narrative review." Pathogens and Global Health, 116(1): 3-12. Accessed May 17, 2022. doi:10.1080/20477724.2021.1981716

- 9. Deb, P., and Mukherjee, R. 2022. "Household Vulnerability of Tribal People to Climate Change in the Part of Dooars Region, West Bengal, India." In: Mishra, M., Singh, R.B., Lucena, A.J.d., Chatterjee, S. (eds) Regional Development Planning and Practice. Advances in Geographical and Environmental Sciences. Springer, Singapore. Accessed May 17, 2022. Doi:10.1007/978-981-16-5681-1_15
- 10. El-Masry, Esraa A., Mahoud El-Sayed, Mohamed A. Awad, Amr A. El-Sammak and Mohamed A. El Sabarouti. 2022. Vulnerabilityof tourism to climate change on the Mediterranean coastalarea of El Hammam EL Alamein, Egypt." Environment, Development Sustainability, 24: 1145–1165. Accessed May 17, 2022. doi:10.1007/s10668-021-01488-9
- 11. Hall, Nina., and Lucy Crosby. 2020. "Climate Change Impacts on Health in Remote Indigenous Communities in Australia." International Journal of Environmental Health Research, 32(3):487-502. Accessed May 17, 2022. doi: 10.1080/09603123.2020.1777948.
- 12. IPCC 2014. IPCC Fifth Assessment Report. In: Pachauri, R. K. and Meyer, L. A. (eds), Climate change 2014: synthesis report. Contribution of working groups I, II and III to the fifth assessment report of the intergovernmental panel on climate change. IPCC, Geneva, Switzerland, p. 128.
- 13. Kaur, Harjeet., Raju Sarkar, Srimanta Gupta, Surya Parkash, Raju Thapa, and Sansar Raj Meena. 2022. "The Vulnerability of Human Population to Landslide Disaster: A Case Study of Sikkim Himalayas," in R. Sarkar et al. (eds.), Impact of Climate Change, Land Use and Land Cover, and Socio-economic Dynamics on Landslides, Disaster Risk Reduction, Accessed May 17, 2022. doi:10.1007/978-981-16-7314-6_14