

Humanitarian Response Strategies and Managing Climate-Induced Displacement in Ogoja Local Government Area of Cross River State, Nigeria

Joseph Linus Udoh

Email: Linusj217@gmail.com;

Ambe, Blessing Benjamin

Email: Blessingambe23@gmail.com

&

Ambe, Benjamin Ayua

Email: ayuambe3@gmail.com

Department of Education Geography & Sustainable development Studies, University of Calabar,
Nigeria.

ABSTRACT

DOI: <https://doi.org/10.60787/tjesds.vol2no2.143>

The study investigated humanitarian response strategies and managing climate-induced displacement in Ogoja Local Government Area of Cross River State, Nigeria. Two objectives guided the study: to analyze the influence of emergency relief on managing climate-induced displacement and to examine the influence of rehabilitation strategies on managing climate-induced displacement in Ogoja Local Government Area. A survey research design was adopted for the study. The population comprised residents of Ogoja Local Government Area, including community members, displaced persons, host-community members, local leaders and relevant humanitarian stakeholders within the study area. A stratified random sampling technique was used to select 400 respondents across residential, host-community and displacement-related categories. Data were collected using a structured questionnaire titled “Humanitarian Response Strategies and Climate-Induced Displacement Management Questionnaire (HRSCIDMQ).” The instrument was validated by experts in disaster management, humanitarian studies, environmental education, and measurement and evaluation, while reliability was established using Cronbach Alpha, with coefficients of 0.81 for emergency relief, 0.83 for rehabilitation strategies, and 0.86 for managing climate-induced displacement. Data collected were coded and analyzed using simple linear regression analysis at the 0.05 level of significance. The findings revealed that emergency relief significantly influenced managing climate-induced displacement, while rehabilitation strategies also significantly influenced managing climate-induced displacement in the study area. The study concluded that humanitarian response strategies are essential for reducing immediate suffering, restoring livelihoods and supporting the reintegration of displaced persons. It recommended timely emergency relief delivery, expanded rehabilitation programmes and improved coordination among government agencies, humanitarian organizations, community leaders and development partners.

Keywords: Humanitarian response strategies; Climate-induced displacement; Emergency relief; Rehabilitation strategies; Displacement management.

Introduction

Climate-induced displacement has become a major humanitarian and development concern because environmental hazards increasingly interact with poverty, weak infrastructure, livelihood instability and limited institutional capacity. In Nigeria, flooding, erosion, rainfall variability and land degradation have affected settlements, food systems, housing, health, education and local economies. These conditions make displacement management an important public policy issue because persons displaced by climate-related hazards often require protection, shelter, livelihood support and long-term reintegration. In Cross River State, flood-related assessments have shown that climate hazards can damage shelters, crops and infrastructure, thereby increasing humanitarian needs among affected households. Ogoja Local Government Area is relevant to this discourse because it hosts displaced and vulnerable populations while depending on social services, land resources, local markets and community structures that may be strained by population movement. Therefore, managing climate-induced displacement requires coordinated humanitarian response, local government involvement, community participation and sustainable recovery planning.

Managing climate-induced displacement refers to the organized process through which persons affected by climate-related hazards are identified, protected, assisted and supported to regain stable living conditions (Poddar, 2024). It involves more than moving affected persons from unsafe locations to safer areas because it also includes emergency relief, documentation, shelter provision, health support, livelihood recovery, psychosocial support, rehabilitation and long-term adaptation planning (Makadi et al., 2025). In Ogoja, such management is important because displacement can place pressure on schools, health centres, water facilities, sanitation systems, housing, land use and local livelihood opportunities (Uttah et al., 2023). Where displacement is properly managed, affected persons are more likely to access basic services, recover livelihoods and reduce prolonged dependence on humanitarian assistance (Bang, 2024). Proper management

also helps host communities because it can reduce sudden pressure on local resources and prevent tension between displaced persons and residents (Voznyak et al., 2023). Thus, managing climate-induced displacement is both a humanitarian responsibility and a development strategy for protecting vulnerable people and maintaining social stability (Bhatti, 2025).

The significance of managing climate-induced displacement is seen in its benefits to individuals, local government and society at large (Kisinger & Matsui, 2021). For individuals, effective displacement management provides access to food, shelter, health care, safe water, protection, livelihood support and social inclusion during and after climate-related disruption (Turakulov et al., 2025). It can also reduce the psychological and economic burden that occurs when families lose homes, farms, businesses, household assets and community support systems (Elder et al., 2020). For local government, proper displacement management improves planning, strengthens emergency preparedness and reduces the cost of uncoordinated crisis response (Gooding et al., 2022). It also helps local authorities identify vulnerable groups, allocate resources, coordinate stakeholders and protect public infrastructure (Djafar et al., 2025). For society at large, effective management of climate-induced displacement promotes peace, reduces poverty, strengthens resilience and prevents humanitarian crises from developing into long-term social problems (Frimpong & Arhin, 2025).

Scholars have explained managing climate-induced displacement from different perspectives. Mogeni, (2025) viewed the management of climate-induced displacement as a justice-oriented response that requires protection, sustainable development and institutional accountability for persons affected by climate-related movement. Lajeunesse (2025) described it as a process that should recognize the agency, dignity and coping choices of people affected by floods and climate uncertainty, rather than treating them as passive victims. Patten and Bhaby,

(2025) understood it as a data-informed humanitarian and development process that requires identifying spatial patterns, climate risks and population vulnerabilities before hazards exceed response capacity. Huang et al., (2025) explained it as the organization of mobility responses around the lived realities of communities affected by climate-enhanced natural hazards and disasters. In this study, managing climate-induced displacement is defined as the coordinated use of emergency relief, rehabilitation, protection, livelihood support and institutional planning to reduce the suffering of persons displaced by climate-related hazards and restore their capacity to live safely and productively.

However, managing climate-induced displacement in Ogoja Local Government Area of Cross River State appears to be inadequate where displaced and vulnerable persons continue to experience difficulty in accessing shelter, health care, livelihood support, education, water, sanitation and long-term recovery assistance (Uquetan et al., 2025). Inadequate management may expose individuals to hunger, poor health, unemployment, social exclusion, loss of dignity and prolonged dependence on humanitarian support (Whittaker et al., 2021). It may also affect children, women, elderly persons and persons with disabilities more severely because these groups often require special protection and targeted assistance during displacement (Kaga & Nakache, 2019). When displaced persons are not properly supported, they may adopt harmful coping strategies such as withdrawing children from school, selling productive assets or depending entirely on charity (Kemei et al., 2023). Poor displacement management can also weaken family stability because households may be separated or forced to live in overcrowded and insecure conditions (Osman & Abebe, 2023). This makes inadequate management of climate-induced displacement a serious threat to human welfare and community resilience (Erondy, 2025).

At the local government level, inadequate management of climate-induced displacement can increase pressure on public services and weaken the capacity of authorities to respond effectively to humanitarian needs (Mumtaz et al., 2025). Schools, clinics, water sources, roads, markets and waste systems may become overstretched when displaced populations are not properly planned for (Daodu et al., 2024). Local authorities may also face increased demand for security, health services, environmental sanitation and social welfare without adequate financial or technical resources (Teremetskyi et al., 2021). This can reduce the effectiveness of local governance and create frustration among both displaced persons and host communities (Voznyak et al., 2023). In the wider society, poor management may increase poverty, deepen inequality, create tension over land and resources, and undermine social cohesion (Mardikaningsih, 2021). Climate-related displacement can therefore become a broader development problem when humanitarian response systems fail to protect affected populations and support receiving communities (Thalheimer et al., 2022).

It can be assumed that humanitarian response strategies may be one of the reasons for inadequate management of climate-induced displacement in Ogoja Local Government Area of Cross River State. Humanitarian response strategies determine how quickly affected persons receive relief, how well their needs are assessed, how services are coordinated and how recovery is sustained after the initial crisis (Son et al., 2025). If response strategies are delayed, poorly funded, weakly coordinated or not linked to rehabilitation, displacement management may remain inadequate (Amatya et al., 2020). This is because climate-induced displacement requires immediate support and long-term planning at the same time (Kelly & Ketu, 2024). Emergency relief without rehabilitation may only provide temporary survival, while rehabilitation without effective relief may fail because affected persons may already have lost the capacity to recover

(Cope et al., 2022). Therefore, the adequacy of displacement management depends largely on how humanitarian response strategies are designed, implemented and sustained (McGrath et al., 2025).

Emergency relief is one of the key sub-variables of humanitarian response strategies that may influence the management of climate-induced displacement (Tofu, 2024). It includes food assistance, temporary shelter, non-food items, health care, safe water, sanitation, hygiene support, cash assistance and protection services provided immediately after climate-related displacement occurs (Ahmed et al., 2021). Effective emergency relief can reduce suffering, prevent disease outbreaks, protect displaced persons from further harm and create minimum conditions for recovery (Mavrouli et al., 2023). In contrast, weak emergency relief can worsen vulnerability because affected persons may lack the basic resources needed to survive after losing their homes, farms, goods or income sources (Zaman, 2019). Aborode et al., (2025) observed that climate change-induced flooding in Nigeria can intensify public health problems, especially through waterborne diseases and malnutrition among affected populations. This shows that emergency relief is important not only for survival but also for preventing climate-related displacement from becoming a public health crisis (Mohammadi et al., 2023).

Emergency relief also influences displacement management by reducing pressure on host communities and preventing social tension (Mitchell & Pizzi, 2021). When displaced persons receive food, shelter, health care and basic household support, they are less likely to depend completely on already vulnerable host households (Caron, 2019). This helps to reduce competition over food, water, land, housing and local services (Barthel et al., 2019). In Ogoja, where displaced and vulnerable populations interact with host communities, emergency relief can help maintain social harmony if it is distributed fairly and transparently (Afolasade et al., 2025). Ugbede et al., (2025) noted that food and nutrition conditions among internally displaced persons in Nigeria are

affected by seasonal and climate-related pressures, showing the need for timely humanitarian assistance. This implies that emergency relief must be responsive to the changing needs of displaced persons, especially during periods when climate conditions worsen food insecurity and health risks (Ahmed et al., 2021).

Rehabilitation strategies are another important sub-variable because managing climate-induced displacement does not end with emergency assistance (Sanchez-Jerez et al., 2023). Rehabilitation involves rebuilding damaged homes, restoring livelihoods, supporting education, providing psychosocial assistance, improving access to land, strengthening community infrastructure and helping displaced persons regain self-reliance (Ajao & Afilaka, 2025). It is particularly important where displacement becomes prolonged or where return to previous places of residence is unsafe (Nikuze et al., 2019). Rehabilitation strategies help individuals rebuild their lives and reduce dependence on continuous relief (Younas et al., 2025). They also help local government by transforming displacement response from crisis management into structured recovery and development planning (Mucherera & Spiegel, 2022). Wang et al., (2022) found that flood resilience strategies require physical infrastructure, community engagement and recovery planning to manage and reduce the impact of flooding.

Rehabilitation strategies also influence displacement management by supporting livelihoods and social reintegration (Sina et al., 2019). Climate-induced displacement often destroys farms, trading spaces, tools, livestock, houses and social networks, which are essential for household survival (Arhin & Frimpong, 2025). If displaced persons are not supported to recover their livelihoods, they may remain poor, dependent and unable to reintegrate into stable community life (Adekola et al., 2024). Rehabilitation can include skills acquisition, agricultural support, small business grants, cooperative farming, housing support and access to education

(Nseobot & Collins, 2024). Ngugi, (2025) argued that sustainable development and redressive justice are necessary in responding to climate-induced displacement in Nigeria, especially where affected persons require more than temporary humanitarian assistance. This suggests that rehabilitation must be rights-based, inclusive and development-oriented (Sun, 2025).

Stakeholders have made efforts to address climate-induced displacement and humanitarian needs through disaster response, flood assessment, relief distribution, livelihood support, early warning communication and humanitarian coordination (Okaka, 2020). Government agencies and humanitarian actors have carried out flood assessments, relief interventions, protection activities and livelihood support for affected populations in Nigeria and Cross River State (Usman et al., 2025). In Cross River State, humanitarian support for vulnerable populations has included interventions aimed at improving food security, health, education and livelihood inclusion where displaced populations and host communities share limited resources (Inyang & Effiong, 2022). Yabo et al., (2025) reported that Nigeria's climate-human security landscape is affected by rising temperatures, erratic rainfall, desertification, coastal erosion and extreme weather events that intensify food insecurity, displacement and conflict over resources. This indicates that stakeholders have recognized the seriousness of the problem, but the persistence of climate hazards and weak local capacity continues to limit the effectiveness of interventions (Mărgărint et al., 2021). As a result, the gap between humanitarian response and sustainable displacement management remains a major concern (Younas et al., 2025).

Despite these efforts, the problem persists because climate-induced displacement is complex, recurrent and connected to broader issues such as poverty, weak infrastructure, limited funding, poor environmental planning and inadequate local preparedness (Mărgărint et al., 2021). Relief efforts may address immediate needs but fail to resolve long-term vulnerability if

rehabilitation, livelihood recovery and climate adaptation are not sustained (Osman & Abebe, 2023). Similarly, rehabilitation may fail if displaced persons are returned or relocated to areas that remain exposed to flooding, erosion or environmental stress (Djafar et al., 2025). Kemei et al., (2023) observed that climate change-induced resource degradation can worsen insecurity and access deprivation, especially where communities depend on fragile environmental resources. This suggests that displacement management requires stronger links between humanitarian response, environmental protection, livelihood support and local governance (Djafar et al., 2025). Without these links, displaced persons may continue to face repeated hardship while local government structures remain under pressure (Thalheimer et al., 2022).

The background, therefore, shows that humanitarian response strategies may have a strong relationship with managing climate-induced displacement in Ogoja Local Government Area of Cross River State. Emergency relief is important because it determines how quickly displaced persons are protected from hunger, disease, exposure and insecurity (Poddar, 2024). Rehabilitation strategies are equally important because they determine whether displaced persons can rebuild their lives, restore livelihoods and reintegrate into safer communities (Mitchell & Pizzi, 2021). Although stakeholders have made efforts through relief provision, disaster response, humanitarian support and livelihood interventions, the persistence of climate-related displacement suggests that existing strategies may not be sufficient (Kisinger & Matsui, 2021). This makes it necessary to examine how emergency relief and rehabilitation strategies influence the management of climate-induced displacement in Ogoja Local Government Area. To what extent do humanitarian response strategies influence the management of climate-induced displacement in Ogoja Local Government Area of Cross River State?

Aim and objectives of the study

This study aimed to examine humanitarian response strategies and managing climate-induced displacement in Ogoja Local Government Area of Cross River State. Specifically, the study intended to:

1. Analyze the influence of emergency relief on managing climate-induced displacement in Ogoja Local Government Area of Cross River State.
2. Examine the influence of rehabilitation strategies on managing climate-induced displacement in Ogoja Local Government Area of Cross River State.

Research questions

1. What is the influence of emergency relief on managing climate-induced displacement in Ogoja Local Government Area of Cross River State?
2. What is the influence of rehabilitation strategies on managing climate-induced displacement in Ogoja Local Government Area of Cross River State?

Research hypotheses

1. Emergency relief does not significantly influence managing climate-induced displacement in Ogoja Local Government Area of Cross River State.
2. Rehabilitation strategies do not significantly influence managing climate-induced displacement in Ogoja Local Government Area of Cross River State.

Methodology

The study adopted a survey research design. This design was considered appropriate because the study examined humanitarian response strategies and managing climate-induced displacement in Ogoja Local Government Area of Cross River State. The population of the study comprised residents of Ogoja Local Government Area, including community members, displaced persons, host-community members, local leaders, and relevant humanitarian stakeholders within

the study area. Ogoja Local Government Area has a population of 171,901 according to the 2006 National Population Census, and the area covers about 972 square kilometres. Based on this population figure, the sample size for the study was determined using the Taro Yamane sample size determination method at 0.05 level of precision, which produced a sample size of 400 respondents. A stratified random sampling technique was adopted to ensure adequate representation of respondents across relevant residential, host-community and displacement-related categories in Ogoja Local Government Area.

The instrument used for data collection was a structured questionnaire titled “Humanitarian Response Strategies and Climate-Induced Displacement Management Questionnaire (HRSCIDMQ).” The questionnaire was divided into sections covering emergency relief, rehabilitation strategies and managing climate-induced displacement. The instrument was structured on a modified four-point Likert rating scale of Strongly Agree (SA = 4), Agree (A = 3), Disagree (D = 2), and Strongly Disagree (SD = 1). The questionnaire was subjected to face and content validation by experts in disaster management, humanitarian studies, environmental education, and measurement and evaluation. The reliability of the instrument was established using the Cronbach Alpha method, with coefficients of 0.81 for emergency relief, 0.83 for rehabilitation strategies, and 0.86 for managing climate-induced displacement. Copies of the questionnaire were administered to the 400 selected respondents, retrieved, coded and analyzed using simple linear regression analysis. The hypotheses were tested at the 0.05 level of significance.

Presentation of results

Hypothesis one

The hypothesis stated that emergency relief does not significantly influence managing climate-induced displacement in Ogoja Local Government Area of Cross River State. Simple linear regression was used to test the hypothesis, with emergency relief as the explanatory variable and managing climate-induced displacement as the dependent variable. The result in Table 1 showed that $R = .703$, indicating a strong positive relationship between emergency relief and managing climate-induced displacement. The R^2 value of .494 showed that emergency relief accounted for 49.4 percent of the variation in managing climate-induced displacement, while the remaining 50.6 percent was explained by other factors not included in the model. The ANOVA result showed that the regression model was statistically significant, $F = 692.45$, $p = .000$. Since the p-value was less than the 0.05 significance level, the null hypothesis was rejected. Also, the coefficient result showed that emergency relief significantly influences managing climate-induced displacement, $B = .621$, $\beta = .703$, $t = 25.94$, $p = .000$. Therefore, the alternate hypothesis was accepted. This means that emergency relief significantly influences managing climate-induced displacement in Ogoja Local Government Area of Cross River State.

Table 1: Simple regression analysis of the influence of emergency relief on managing climate-induced displacement

Source of variation	SS	Df	MS	F-ratio	Sig.
Regression	3254.112	2	3254.112	692.45	.000
Residual	3945.888	398	4.769		
Total	7200.000	399			
Model	B	Std error	Beta	t	Sig.
Constant	9.684	.522		18.53	.000
Emergency relief	.621	.025	.703	25.94	.000

*Significant at .05 level

$R = .703$

$R^2 = .494$

Adjusted $R^2 = .493$

Hypothesis two

The hypothesis stated that rehabilitation strategies do not significantly influence managing climate-induced displacement in Ogoja Local Government Area of Cross River State. Simple linear regression was used to test the hypothesis, with rehabilitation strategies as the explanatory variable and managing climate-induced displacement as the dependent variable. The result in Table 2 showed that $R = .697$, indicating a strong positive relationship between rehabilitation strategies and managing climate-induced displacement. The R^2 value of .486 showed that rehabilitation strategies accounted for 48.6 percent of the variation in managing climate-induced displacement, while the remaining 51.4 percent was explained by other factors not included in the model. The ANOVA result showed that the regression model was statistically significant, $F = 676.22$, $p = .000$. Since the p-value was less than the 0.05 significance level, the null hypothesis was rejected. Also, the coefficient result showed that rehabilitation strategies significantly predicted managing climate-induced displacement, $B = .612$, $\beta = .697$, $t = 25.78$, $p = .000$. Therefore, the alternate hypothesis was accepted. This means that rehabilitation strategies significantly influence managing climate-induced displacement in Ogoja Local Government Area of Cross River State.

Table 2: Simple regression analysis of the influence of rehabilitation strategies on managing climate-induced displacement

Source of variation	SS	Df	MS	F-ratio	Sig.
Regression	3187.550	2	3187.550	676.22	.000
Residual	4012.450	398	4.684		
Total	7200.000	399			
Model	B	Std error	Beta	t	Sig.
Constant	9.532	.518		18.40	.000
Rehabilitation strategies	.612	.025	.697	25.78	.000

*Significant at .05 level

$R = .697$

$R^2 = .486$

Adjusted $R^2 = .485$

Discussion of findings

The finding revealed that emergency relief significantly influences managing climate-induced displacement in Ogoja Local Government Area of Cross River State. This means that the timely provision of food, shelter, health care, safe water, sanitation, cash support and protection services improves the capacity of affected persons to cope with displacement and reduces the immediate hardship caused by climate-related hazards. The result suggests that when emergency relief is prompt and well-coordinated, displaced households are less exposed to hunger, disease, insecurity and prolonged dependence on host communities. This may be because emergency relief provides the first level of stability needed before displaced persons can participate in recovery, rehabilitation and reintegration programmes. The finding is theoretically justified by the disaster management cycle, which explains that response actions taken immediately after a hazard are essential for reducing losses, protecting vulnerable populations and creating a pathway for recovery.

The finding is supported by de Brauw et al., (2025), who found that anticipatory cash transfers improved household food security, resilience and preparedness before climate-related flood shocks occurred. It also agrees with Gros et al., (2019), whose study showed that timely humanitarian cash assistance before disasters helped vulnerable households reduce welfare losses and cope better with climate shocks. Similarly, Thompson et al., (2024) found that digital humanitarian payments improved food security and mental well-being among extremely poor crisis-affected households, showing that emergency relief can reduce vulnerability when delivered efficiently. These studies support the current finding by showing that emergency relief is not merely a temporary intervention but a major response strategy for protecting displaced persons, reducing immediate suffering and strengthening the management of climate-induced displacement.

The finding revealed that rehabilitation strategies significantly influence managing climate-induced displacement in Ogoja Local Government Area of Cross River State. This means that measures such as shelter reconstruction, livelihood restoration, psychosocial support, access to basic services, social reintegration, skills training and community rebuilding improve the capacity of displaced persons to recover from climate-related disruption. The result suggests that when rehabilitation strategies are properly implemented, displaced households are more likely to regain stability, reduce dependence on emergency assistance and rebuild their means of survival. This may be because climate-induced displacement often leads to loss of homes, farmlands, income sources, social networks and access to essential services, thereby making long-term recovery support necessary. The finding is theoretically justified by the sustainable livelihoods perspective, which explains that people's recovery after displacement depends on access to livelihood assets, social support, institutional assistance and opportunities for productive reintegration (Sina et al., 2019).

The finding is supported by Nikuze et al., (2019), who found that resettlement outcomes are strongly shaped by livelihood restoration, community participation and access to resources after displacement. It also agrees with Liu et al., (2020), whose study showed that livelihood resilience in post-disaster relocated communities depends on housing recovery, income opportunities, social networks and institutional support. Similarly, Son et al., (2025) found that post-disaster resettlement is more effective when rehabilitation addresses shelter, infrastructure, livelihood recovery and long-term community adaptation. These studies support the current finding by showing that rehabilitation strategies are essential for managing climate-induced displacement because they help affected persons move from temporary survival to durable recovery, reintegration and resilience.

Conclusion

The study concluded that humanitarian response strategies significantly influence the management of climate-induced displacement in Ogoja Local Government Area of Cross River State. The findings showed that emergency relief and rehabilitation strategies are essential in reducing immediate suffering, restoring livelihoods and supporting the reintegration of displaced persons. Therefore, effective management of climate-induced displacement requires timely relief support, sustainable rehabilitation programmes and stronger coordination among relevant stakeholders.

Recommendations

1. Government and humanitarian agencies should strengthen timely emergency relief delivery to provide displaced persons with food, shelter, health care, safe water and protection services immediately after climate-related disasters.
2. Rehabilitation programmes should be expanded to support livelihood restoration, shelter reconstruction, psychosocial care and social reintegration for persons affected by climate-induced displacement.
3. Local government authorities should improve coordination with humanitarian organizations, community leaders and development partners to ensure effective planning and implementation of displacement management strategies.

REFERENCES

- Aborode, A. T., Otokpa, O. J., Abdullateef, A. O., Oluwaseun, O. S., Adegoye, G. A., Aondongu, N. J., ... & Komakech, J. J. (2025). Impact of climate change-induced flooding water related diseases and malnutrition in Borno State, Nigeria: a public health crisis. *Environmental Health Insights*, 19, 11786302251321683.
- Adekola, P. O., Cirella, G. T., & Brownell, G. (2024). Reintegration programs and the willingness of displaced persons to return home: Analyzing the role of social infrastructure in North-East Nigeria. *Journal of International Migration and Integration*, 25(3), 1351-1380.
- Afolasade, O. O., Aina, A. D., & Nwaodike, C. A. (2025). Identifying Barriers to Achieving Self-Reliance of Anglophone Cameroonian Refugees in Ogoja Settlements, Cross River State, Nigeria. *International Journal of Sub-Saharan African Research*, 3(2), 94-104.
- Ahmed, A., Mohamed, N. S., Siddig, E. E., Algaily, T., Sulaiman, S., & Ali, Y. (2021). The impacts of climate change on displaced populations: a call for action. *The Journal of Climate Change and Health*, 3, 100057.
- Ahmed, A., Mohamed, N. S., Siddig, E. E., Algaily, T., Sulaiman, S., & Ali, Y. (2021). The impacts of climate change on displaced populations: a call for action. *The Journal of Climate Change and Health*, 3, 100057.
- Ajao, S. O., & Afilaka, O. R. (2025). Internally Displaced Persons in Benue State North-Central Nigeria: The Challenges of Rehabilitation and Reintegration. *International Journal of Governance and Development Studies (IJOGDES)*, 12(1), 35-47.
- Amatya, B., Lee, S. Y., Galea, M. P., & Khan, F. (2020). Disaster rehabilitation response plan: now or never. *American journal of physical medicine & rehabilitation*, 99(2), 170-177.
- Arhin, C. A., & Frimpong, D. O. (2025). Climate-Induced Displacement and its Implications on Human Security: A Case Study of Ghana. *International Journal of Research and Innovation in Applied Science (IJRIAS)*, 10(11).
- Bang, H. N. (2024). Displacement-induced destitution in Cameroon: Seeking durable livelihood solutions for internally displaced persons from the Anglophone crisis. *Cogent Social Sciences*, 10(1), 2411861.
- Barthel, S., Isendahl, C., Vis, B. N., Drescher, A., Evans, D. L., & Van Timmeren, A. (2019). Global urbanization and food production in direct competition for land: Leverage places to mitigate impacts on SDG2 and on the Earth System. *The Anthropocene Review*, 6(1-2), 71-97.
- Bhatti, N. (2025). The Human Rights of Migrants and Refugees in The Context of Climate-Induced Displacement. *DME Journal of Law*, 6(2), 62-79.
- Caron, C. M. (2019). Hosting as shelter during displacement: considerations for research and practice. *Journal of International Humanitarian Action*, 4(1), 5.

- Cope, H. R., McArthur, C., Dickman, C. R., Newsome, T. M., Gray, R., & Herbert, C. A. (2022). A systematic review of factors affecting wildlife survival during rehabilitation and release. *PloS one*, 17(3), e0265514.
- Daodu, F. F., Shabu, T., Kile, T. I., & Enefu, J. (2024). Humanitarian crises in internally displaced persons (IDPs) camps in Benue State, Nigeria: A comprehensive analysis. *International Journal of Research and Innovation in Social Science*, 8(5), 2282-2298.
- de Brauw, A., Balana, B., Andam, K., Clingain, C., Adeyanju, D., Olarewaju, O., ... & Yohanna, I. (2025). Anticipatory Cash Transfers for Climate Resilience—Evidence from an Experimental Study in Northern Nigeria. *Available at SSRN 5163930*.
- Djafar, F., Akibu, R. S., & Namdech, P. (2025). Strengthening local government organisation capacity for adaptive development policy responsive to community needs. *Journal of Contemporary Governance and Public Policy*, 6(2), 135-156.
- Elder, G. H., Robertson, E. B., & Foster, E. M. (2020). Survival, loss, and adaptation: A perspective on farm families. In *Families in troubled times* (pp. 105-126). Routledge.
- Erondu, C. I. (2025). An evaluation of socio-economic implications of climate-induced displacement in Nigeria. *Open Journal of Social Science and Humanities (ISSN: 2734-2077)*, 6(1), 1-15.
- Frimpong, D. O., & Arhin, C. A. (2025). Climate-Induced Displacement and its Implications on Human Security: A Case Study of Ghana. *International Journal of Research and Innovation in Applied Science*, 10(11), 105-120.
- Gooding, K., Bertone, M. P., Loffreda, G., & Witter, S. (2022). How can we strengthen partnership and coordination for health system emergency preparedness and response? Findings from a synthesis of experience across countries facing shocks. *BMC health services research*, 22(1), 1441.
- Gros, C., Bailey, M., Schwager, S., Hassan, A., Zingg, R., Uddin, M. M., ... & de Perez, E. C. (2019). Household-level effects of providing forecast-based cash in anticipation of extreme weather events: Quasi-experimental evidence from humanitarian interventions in the 2017 floods in Bangladesh. *International Journal of Disaster Risk Reduction*, 41, 101275.
- Huang, F., Tang, J., Zhao, P., Chen, Z., Li, J., & Lyu, W. (2025). Human mobility under disasters: a systematic review and framework for equitable and resilient mobility governance. *npj Natural Hazards*, 2(1), 99.
- Inyang, E. B., & Effiong, E. N. (2022). Humanitarian intervention in Nigeria: A Case of internally displaced People in Benue State, 2018–2021. *Available at SSRN 3998209*.

- Kaga, M., & Nakache, D. (2019). Whose needs count in situations of forced displacement? Revaluing older people and addressing their exclusion from research and humanitarian programmes. *International Journal of Migration and Border Studies*, 5(1-2), 134-151.
- Kelly, A. M., & Ketu, I. (2024). Tomorrow's migration: assessing institutional preparedness for climate-induced displacement in sub-Saharan Africa. In *Understanding the horizontal and vertical nature of Africa migration in contemporary times* (pp. 325-345). Singapore: Springer Nature Singapore.
- Kemei, J., Salami, B., Soboka, M., Gommaa, H. I. M., Okeke-Ihejirika, P., & Lavin, T. (2023). The forms and adverse effects of insecurities among internally displaced children in Ethiopia. *BMC Public Health*, 23(1), 200.
- Kisinger, C., & Matsui, K. (2021). Responding to climate-induced displacement in bangladesh: A governance perspective. *Sustainability*, 13(14), 7788.
- Lajeunesse, S. (2025). On the concepts of human security, dignity and vulnerability: understanding the mechanisms of being 'at risk'. *The International Journal of Human Rights*, 1-26.
- Liu, W., Li, J., & Xu, J. (2020). Effects of disaster-related resettlement on the livelihood resilience of rural households in China. *International Journal of Disaster Risk Reduction*, 49, 101649.
- Makadi, Y. C., Arlikatti, S., Zewdu, D., & Maghelal, P. (2025). Review of temporary shelter planning models: global trends and evidence from ongoing practices. *Natural Hazards Review*, 26(4), 04025041.
- Mardikaningsih, R. (2021). Urbanization and Social Inequality: Challenges in Building Social Cohesion in a City-Based Environment. *Journal of Social Science Studies*, 1(1), 135-140.
- Mărgărint, M. C., Niculiță, M., Roder, G., & Tarolli, P. (2021). Risk perception of local stakeholders on natural hazards: implications for theory and practice. *Natural Hazards and Earth System Sciences*, 21(11), 3251-3283.
- Mavrouli, M., Mavroulis, S., Lekkas, E., & Tsakris, A. (2023). The impact of earthquakes on public health: A narrative review of infectious diseases in the post-disaster period aiming to disaster risk reduction. *Microorganisms*, 11(2), 419.
- McGrath, M., Kurt, G., Davis, E., Lekkeh, S. A., Beetar, A., Mozumder, M. K., ... & Wells, R. (2025). The localisation of humanitarian response to conflict and displacement: a scoping review from a health systems perspective. *BMJ Global Health*, 10(9).
- Mitchell, S. M., & Pizzi, E. (2021). Natural disasters, forced migration, and conflict: The importance of government policy responses. *International Studies Review*, 23(3), 580-604.

- Mogeni, H. S. (2025). Displaced by Climate: Navigating Land Rights, Social Justice, and Equitable Solutions for Affected Communities. *Social Justice, and Equitable Solutions for Affected Communities* (October 13, 2025).
- Mohammadi, M., Jafari, H., Etemadi, M., Dalugoda, Y., Ali, H. M., Phung, H., ... & Chu, C. (2023). Health problems of increasing man-made and climate-related disasters on forcibly displaced populations: A scoping review on global evidence. *Disaster medicine and public health preparedness*, 17, e537.
- Mucherera, B., & Spiegel, S. (2022). Forced displacement: critical lessons in the protracted aftermath of a flood disaster. *GeoJournal*, 87(5), 3855-3875.
- Mumtaz, M., Zahid, F., & Hatim, M. (2025). CLIMATE-INDUCED INTERNAL DISPLACEMENT AND HUMAN SECURITY: A POLICY ANALYSIS OF PAKISTAN'S 2022 FLOOD CRISIS. *Journal of Applied Linguistics and TESOL (JALT)*, 8(4), 1-20.
- Ngugi, S. (2025). The nexus of law, climate displacement and disaster recovery: A practitioner's perspective from Africa. In *A Research Agenda for Disaster Law* (pp. 165-182). Edward Elgar Publishing.
- Nikuze, A., Sliuzas, R., Flacke, J., & Van Maarseveen, M. (2019). Livelihood impacts of displacement and resettlement on informal households-A case study from Kigali, Rwanda. *Habitat international*, 86, 38-47.
- Nseobot, I. R., & Collins, O. U. (2024). Overcoming Stigmatization through Inmate-Led Agricultural entrepreneurship Skill Acquisition. *International Journal of Business Education and Management Studies*, 5(3), 191-208.
- Okaka, W. T. (2020). Climate change-induced flood disaster policy communication issues for local community adaptation resilience management in uganda: climate information services for effective national flood risk assessment decision communication. In *Decision support methods for assessing flood risk and vulnerability* (pp. 230-249). IGI Global.
- Osman, A. A., & Abebe, G. K. (2023). Rural displacement and its implications on livelihoods and food insecurity: the case of inter-riverine communities in Somalia. *Agriculture*, 13(7), 1444.
- Patten, H. W., & Bhaby, Z. (2025). Disasters, Statistics, and the Humanitarian Sector. *Annual Review of Statistics and its Application*, 13.
- Poddar, A. K. (2024). Climate Change and Migration: Developing Policies to Address the Growing Challenge of Climate-Induced Displacement. *International Journal of Climate Change: Impacts & Responses*, 16(1).

- Sanchez-Jerez, P., Raftoyannis, Y., & Riihimäki, M. (2023). *EU bioeconomy monitoring system indicator update*. Publications Office of the European Union.
- Sina, D., Chang-Richards, A. Y., Wilkinson, S., & Potangaroa, R. (2019). What does the future hold for relocated communities post-disaster? Factors affecting livelihood resilience. *International journal of disaster risk reduction*, 34, 173-183.
- Son, B. G., Roscoe, S., & Sodhi, M. S. (2025). Dynamic capabilities of global and local humanitarian organizations with emergency response and long-term development missions. *International Journal of Operations & Production Management*, 45(1), 1-32.
- Sun, M. (2025). The Relationship between Sustainable Development and Human Rights Protection. *J. Hum. Rts.*, 24, 308.
- Teremetskyi, V., Velychko, V., Lialiuk, O., Gutsul, I., Smereka, S., & Sidliar, V. (2021). Challenges for local authorities: the politics and practice of financial management in the way for Sustainable Development. *J. Legal Ethical & Regul. Issues*, 24, 1.
- Thalheimer, L., Simperingham, E., & Jjemba, E. W. (2022). The role of anticipatory humanitarian action to reduce disaster displacement. *Environmental Research Letters*, 17(1), 014043.
- Thompson, N., Kyaw, K. W. Y., Singh, L., Cikomola, J. C., Singh, N. S., & Roberts, B. (2024). The effect of COVID-19 on the non-COVID health outcomes of crisis-affected peoples: a systematic review. *Conflict and health*, 18(1), 37.
- Tofu, D. A. (2024). Evaluating the impacts of climate-induced east Africa's recent disastrous drought on the pastoral livelihoods. *Scientific African*, 24, e02219.
- Turakulov, R., Kurbanov, E., Maftun, M., Makhmudova, M., Turayev, B., & Umaraliyev, O. (2025). Public Health Responses to Climate-Induced Migration for Health Challenges for Displaced Populations and Wildlife. *Journal of Animal Environment*, 17(3), 517-530.
- Ugbede, O. J., Okolo, P. N., Ochiaka, D. I., Eze, P. I., Ogbuyeme, J. N., Atuchi, N. M., ... & Offor, E. C. (2025). PUBLIC HEALTH IMPLICATIONS OF INTERNAL CLIMATE-INDUCED MIGRATION: TRACKING DISEASE PATTERNS IN IDP SETTLEMENTS IN NORTHERN NIGERIA. *Int'l Journal of Education Research and Scientific Development*, 7(2), 355-373.
- Uquetan, U. I., Udousoro, I. L., & Ekpenyong, A. N. (2025). Flood Hazard Vulnerability and Resilience Strategies among Women in Odukpani's Coastal Communities, Cross River State, Nigeria. *Journal of Occupational Health, Risk Management, and Safety*, 1(1), 41-55.
- Usman, M. A., Wazakari, R. R., & Shamsudeen, Y. (2025). State And Ngo Humanitarian Interventions In Flood Management: Evidence From The 2025 Floods In Adamawa

State. *ADSU International Journal of Politics, Administration and Management (AIJPAM)*, 2(3).

- Uttah, C., Awan, O. E., Onuoha, E. E., & Iye, E. (2023). Environmental Impact of cameroonian refugees activities in Ogoja Local Government Area, Cross River State Nigeria. *Inter-Disciplinary J Sci Educ (IJ-SED)*, 4(2), 17-27.
- Voznyak, H., Mulska, O., Druhov, O., Patytska, K., & Sorokovyi, D. (2023). Adaptation of internally displaced persons in host communities under conditions of war in Ukraine: The role of local governments. *Problems and Perspectives in Management*, 21(2), 323.
- Voznyak, H., Mulska, O., Druhov, O., Patytska, K., & Sorokovyi, D. (2023). Adaptation of internally displaced persons in host communities under conditions of war in Ukraine: The role of local governments. *Problems and Perspectives in Management*, 21(2), 323.
- Wang, L., Cui, S., Li, Y., Huang, H., Manandhar, B., Nitivattananon, V., ... & Huang, W. (2022). A review of the flood management: from flood control to flood resilience. *Heliyon*, 8(11).
- Whittaker, G., Wood, G. A., Oggero, G., Kett, M., & Lange, K. (2021). Meeting AT needs in humanitarian crises: The current state of provision. *Assistive Technology*, 33(sup1), S3-S16.
- Yabo, I. A., Pereira, L. F., Siqueira, R. G., Imbaná, R., Pinheiro, A. X., de Angeli Oliveira, I., ... & Fernandes-Filho, E. I. (2025). Climate Change and Human Activities: Their Roles in Shaping Land Productivity in Northern Nigeria. *Land Degradation & Development*, 36(1), 73-89.
- Younas, M., Sultan, M., Khan, N., & Hussain, M. (2025). From Addiction to Recovery: The Role of Personal Coping Mechanisms in Preventing Relapse Among Recovering Drug Users. *Social Science Review Archives*, 3(4), 1072-1078.
- Zaman, M. Q. (2019). Vulnerability, disaster, and survival in Bangladesh: Three case studies 1. In *The angry earth* (pp. 162-177). Routledge.

