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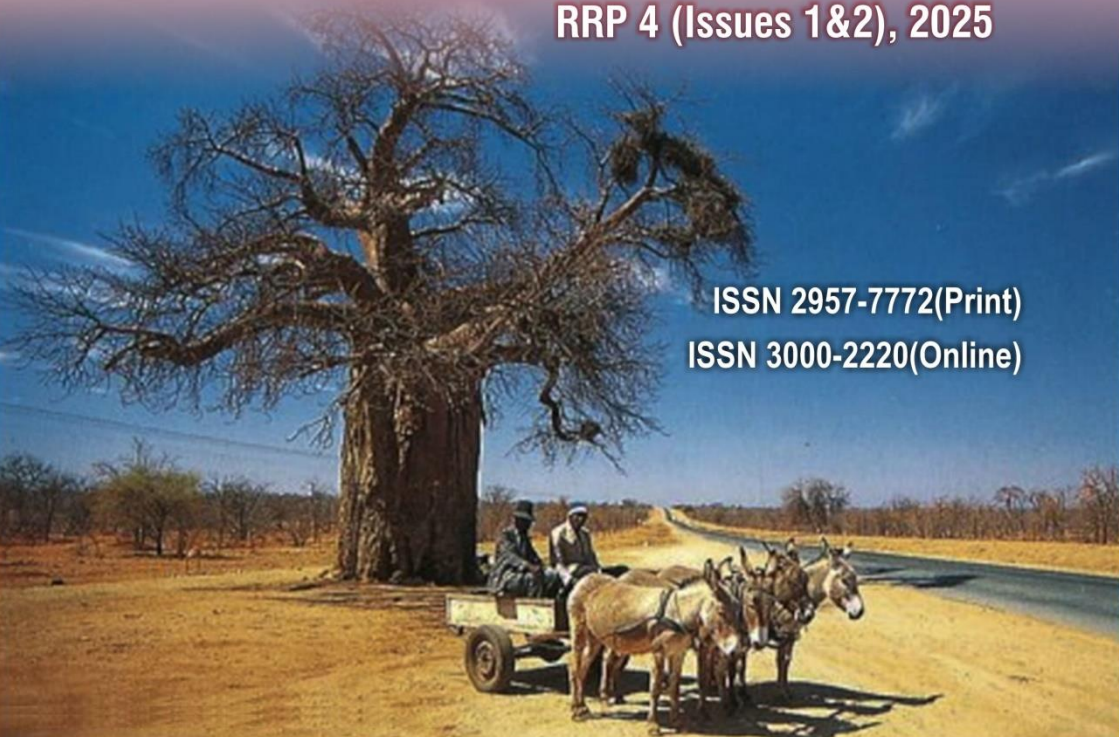

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About the Journal

JOURNAL PURPOSE

The purpose of the *Review of Rural Resilience Praxis is* to provide a forum for disaster risk mitigation, adaptation and preparedness.

CONTRIBUTION AND READERSHIP

Sociologists, demographers, psychologists, development experts, planners, social workers, social engineers, economists, among others whose focus is that of rural resilience.

JOURNAL SPECIFICATIONS

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SCOPE AND FOCUS

As much as the urban territory is increasing by each day, the rural economy, especially in many developing countries, still retains a great proportion of the extractive and accommodation industry. Retaining some space as rural remains critical given the sectors role in providing ecosystem services to both wildlife and humanity. In this light, rural resilience as practice beckons for critical studies especially in the face of the ever-threatening extreme weather events and climate change that then impact on the livelihoods and lifestyles of the rural communities. Review of Rural Resilience Praxis (RRRP) comes in as a platform for critical engagement by scholars, practitioners and leaders as they seek to debate and proffer solutions of the rural sector and trying to champion the philosophy of the right to be rural. The issue of conviviality between the different constituencies of the sectors, compiled with the competing challenges of improving rural spaces while also making the conservation and preservation debates matter is the hallmark of this platform of criticality. The journal is produced bi-annually.

Guidelines for Authors for the Review of Rural Resilience Praxis

Articles must be original contributions, not previously published and should not be under consideration for publishing elsewhere.

Manuscript Submission: Articles submitted to the *Review of Rural Resilience Praxis* are reviewed using the double-blind peer review system. The author's name(s) must not be included in the main text or running heads and footers.

A total number of words: 5000-7000 words and set in 12-point font size width with 1.5 line spacing.
Language: British/UK English
Title: must capture the gist and scope of the article
Names of authors: beginning with the first name and ending with the surname
Affiliation of authors: must be footnoted, showing the department and institution or organisation.
Abstract: must be 200 words
Keywords: must be five or six containing words that are not in the title
Body: Where the authors are more than three, use *et al.,*
Italicise *et al.*, *ibid.,* words that are not English, not names of people or organisations, etc. When you use several authors confirming the same point, state the point and bracket them in one bracket and in ascending order of dates and alphabetically separated by semi-colon e.g. (Falkenmark, 1989, 1990; Reddy, 2002; Dagdeviren and Robertson, 2011; Jacobsen *et al.,* 2012).

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Rural-to-Rural Displacement and the Socioeconomic Fallout of Land Redistribution and Disaster Risk Reduction: Lessons from Tokwe-Mukosi

TSUNGAI MUKWASHI[1]

Abstract

The study examines the socioeconomic consequences of land redistribution and climate-induced displacement in the Tokwe-Mukosi region of Zimbabwe, concentrating on the 2014/15 flooding disaster and its repercussions. The research investigates how the convergence of coerced rural-to-rural displacements, insufficient disaster risk mitigation and contentious land redistribution policies intensifies vulnerability, poverty and social inequality among impacted households. The article employs desktop research to analyse the experiences of displaced rural communities, emphasising the obstacles they encounter in reconstructing livelihoods, obtaining resources and assimilating into new settlements. The analysis demonstrates that fragmented policies, insufficient stakeholder coordination and restricted community involvement in decision-making impede sustainable adaptation to climate-induced risks. The study places the Tokwe-Mukosi case within broader debates on climate resilience, social justice and land reform, highlighting the urgent need for inclusive, forward-looking strategies that centre the rights, voices and long-term resilience of marginalised rural communities in displacement and land redistribution efforts. The study calls for setting aside land for temporary or transitional use after disasters as part of reducing risk in rural areas. The study contributes to policy discussions on how to better connect land reform and climate adaptation to support fair and lasting development in rural Zimbabwe.

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Keywords: *land reform, climate change, climate justice, vulnerability, land rights, livelihoods*

INTRODUCTION

The land redistribution programme in Zimbabwe, referred to as the Fast Track Land Reform Programme, was implemented in 2000. The initiative sought to re-allocate land from white commercial farmers to black Zimbabweans. This aimed to rectify historical injustices and foster economic empowerment (Bhanye *et al.*, 2024). In Zimbabwe, as in the entirety of Africa, land is a contentious issue due to its significant value and its role as a means of production, power and dominance among various social classes (Ntsebese, 2006). The Government's acquisition of land from white farmers resulted in the resettlement of beneficiaries on the acquired land, with the expectation of support for agricultural production (World Bank, 2024). Thomas (2023) states that land redistribution in Zimbabwe must be seen in light of the country's colonial past, as well as the new forms of control brought about by wealthy countries and the international organisations they influence. This includes the World Bank and the International Monetary Fund (IMF).

The Tokwe-Mukosi Dam in Masvingo was built to support irrigation, produce hydroelectric power and control floods as part of rural development plans (Chazireni and Chigonda, 2018). However, the 2014 floods forced the community to relocate — first to Chingwizi and later to Nuanetsi Ranch — amid much controversy. The community faced a mix of challenges from development, land policies and climate-related displacement. Estimates of those displaced vary. Nhodo *et al.* (2021) report that about 6 000 people were relocated to Chingwizi from Tokwe-Mukosi, while Zikhali (2018) notes that over 20 000 were affected by flooding. Regardless of the exact figure, the disaster caused rural-to-rural displacement and triggered a humanitarian crisis. Many families lost their livelihoods, went hungry, lacked shelter and had limited access to healthcare and education (Mavhinga, 2015).

The 2014 Tokwe-Mukosi Dam displacements in Zimbabwe exposed major weaknesses in land redistribution policies, especially in helping people cope

with social, economic and climate-related challenges. This study uses the Tokwe-Mukosi case to explore how these policies impact and may continue to impact the lives and livelihoods of displaced rural communities. Since the floods happened during land redistribution, it raises a key question: why was this process not used to support and strengthen the resilience of those displaced? The aim of the study is to understand whether land policies helps or harms people's ability to recover, adapt and build economic resilience after being moved from one rural area to another.

A desktop study approach was used to gather data. This involved reviewing existing literature, government and non-governmental organisation (NGO) reports, media articles and other secondary sources. This was to understand the experiences of displaced communities and assess socioeconomic indicators such as income levels, access to services and employment. Findings from this case study contributes to building a framework for understanding how displaced rural communities can become economically and environmentally resilient. These insights can help guide policy-makers in designing land and development policies that are more people-centred and better prepared for future crises.

CONCEPTUAL FRAMEWORK

The conceptual framework (Figure 1) highlights how climate change and inadequate policies (e.g., land redistribution and disaster risk reduction) can lead to displacement, resulting in the loss of livelihoods and increased vulnerability due to climate and economic shocks. In contrast, development efforts that ensure access to land, stakeholder support, Free, Prior and Informed Consent (FPIC) and adequate policies can reduce vulnerabilities and foster sustainable rural development. These positive interventions build climate and economic resilience which, in turn, helps mitigate displacement and its effects. The framework emphasises the importance of inclusive, well-planned development in countering the negative cycle triggered by climate-induced displacement.

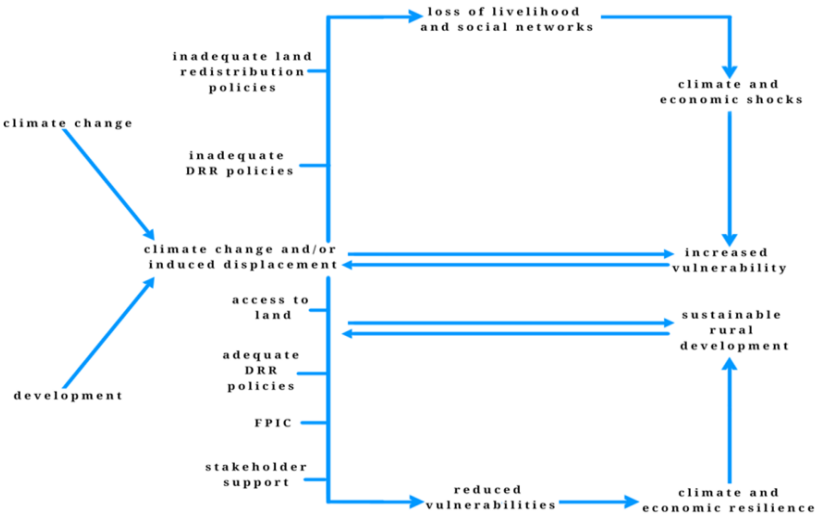

Figure 1: *Conceptual Framework: Building Socioeconomic and Climate Resilience in Displaced Rural Communities*

Access to land, adequate disaster risk reduction (DRR) measures, FPIC and stakeholder support are critical for building resilience. If these are properly implemented, communities are more likely to recover and adapt. However, implementation requires an inclusive, participatory approach that involves local voices and long-term planning. This may be achieved by supporting community-led strategies, ensuring fair access to resources and building infrastructure that can withstand climate impacts. As Reyes-García *et al.* (2024) note, although communities try to adapt, their actions are often limited by economic, political and cultural challenges. To overcome these barriers, long-term disaster risk reduction should be community-based and equity-focused (Nepomoceno and Carniatto, 2023). The framework shows a pathway to sustainable development by connecting land access, disaster preparedness and inclusive governance to stronger resilience and fewer negative impacts from displacement.

Building strong, resilient communities requires broad participation in climate mitigation and resilience efforts (Aldunce *et al.*, 2016). This may entail bringing in government departments, NGOs, local communities and

international donors. While international partners can provide funding and technical support, lasting solutions should come from the ground up. Communities directly affected by disasters or any development, understand their own needs best and should lead in shaping the responses.

LITERATURE REVIEW

In rural areas, most people depend on farming for their survival. However, climate change is making life harder for them by reducing crop yields and increasing farming costs, which leads to food insecurity (Mebratu *et al.*, 2023). When land redistribution policies ignore people's rights or fail to clearly define who owns what, it can lead to serious issues like rising poverty and community conflicts. Having secure access to land is essential for rural households, not just for farming but for protecting their right to food and income (Food and Agriculture Organisation, 2010). How well communities recover from displacement depends on their ability to rebuild and adapt to new climate and environmental conditions. By improving land access and involving communities in decision-making, vulnerability can be reduced and the creation of sustainable rural communities may be achieved.

Reaching sustainable rural communities requires looking at the sustainable development path through the lens of United Nations Sustainable Development Goals (SDGs) (United Nations, 2025). SDGs 1, 2, 11, 13, 16 and 17 link poverty reduction, climate action, land access, participatory systems and collaboration in development. The conceptual framework considers sustainable rural development in the context of land redistribution, climate resilience and displacement, ensuring equitable access to land, protecting ecosystems and supporting long-term livelihoods. It addresses historical land injustices and empowers marginalised groups through secure tenure and inclusive governance. Climate resilience is fostered through adaptive land use, community-led planning and infrastructure that can withstand environmental shocks. By promoting justice, partnerships and inclusive development, sustainable development reduces vulnerabilities and builds resilient, equitable rural futures.

Rural development should improve the well-being of rural communities (Bebbington, 2001). However, "development" may mean different things to

different people, depending on their cultural values, needs and aspirations. As Filiberto Penados highlights, it is essential to understand and respect local perspectives to avoid imposing external ideas of progress that may not align with community priorities (IFAD, 2022). Too often, development projects overlook indigenous knowledge and social structures, leading to unintended harm or resistance. Rethinking rural development means prioritising what strengthens community resilience, rather than what fits planners' predefined models of growth and resilience. Approaches should be grounded in locally driven solutions that enhance adaptive capacity, social cohesion and environmental sustainability. Differing interpretations of development directly influence how land policies are crafted and implemented, often determining who gets to participate and benefit. Without genuine community engagement, such policies risk reinforcing exclusion or triggering resistance, especially when they clash with traditional land use systems and cultural norms.

UNDERSTANDING RURAL-TO-RURAL DISPLACEMENT

Rural-to-rural displacement happens when people are forced or choose to move from one rural area to another. This can be due to natural disasters, land disputes, government projects, or the promise of better opportunities (Agbonlahor and Phillip, 2015). Forced displacement often removes people from their homes and ways of making a living, sometimes without proper help or compensation (George and Adelaja, 2021). This can damage local economies, put pressure on host communities and create issues around land rights, food security and culture. These problems reveal deeper challenges in rural governance, inequality and environmental risks.

HISTORICAL ROOTS OF LAND INEQUALITY IN ZIMBABWE

In Zimbabwe, displacement is closely tied to the history of land reform. During colonial rule, laws like the Land Apportionment Act (1930) and the Land Tenure Act (1969) took fertile land from black Zimbabweans and gave it to white settlers (Msongelwa, 2023; Moyo, 2004). These laws created racial divisions in land ownership, pushing black people into less productive areas. Some wealthy black farmers were allowed land in Native Purchase Areas, but the system was unequal (Green and Nyandoro, 2023), as only a small number of relatively wealthy black Africans could afford to buy land. Most of the black population, who were poor and landless, were excluded from land

ownership opportunities (Moyo, 2005). Historical land inequality in Zimbabwe, rooted in colonial-era policies that pushed black communities onto less fertile land, left many rural households without secure access to productive resources. This lack of land ownership increases vulnerability by limiting livelihoods, deepening poverty and reducing the ability of rural communities to recover from development and/or climate-related shocks or displacement.

LAND REFORM AND THE FAST TRACK LAND REFORM PROGRAMME (FTLRP)

After independence in 1980, the Lancaster House Agreement limited land redistribution, only allowing land purchases from willing sellers (Kinsey, 1999; Chilunjika and Uwizeyimana, 2006). By 1997, only a small portion of land had been redistributed, causing frustration. This led to the Fast Track Land Reform Programme (FTLRP) in 2000. It aimed to quickly redistribute land to black Zimbabweans, but was rather marked by land invasions and farm seizures. Though it helped redistribute land to many landless Zimbabweans, aiming to address historical injustices in land ownership and increasing land access for some (Hanlon *et al.*, 2012), it also caused a sharp drop in agricultural production, food shortages and economic decline (Nyawo, 2014). Many new farmers lacked support, leading to low productivity (Scoones *et al.*, 2010). The absence of a clear policy for resettling people displaced by disasters during the FTLRP left many without secure land, basic services, or livelihood support. This increased their vulnerability by forcing them into unstable conditions with limited means to recover or adapt to future shocks.

ZIMBABWE'S DISASTER RISK PROFILE

Disaster risk in Zimbabwe is high due to both natural and human-made hazards, such as droughts, floods, cyclones and disease outbreaks (Manatsa *et al.*, 2010; Ingwani *et al.*, 2021). Drought is the most frequent and severe threat (Mavhura, 2025), consistently undermining food security and rural livelihoods. Floods and cyclones, such as Cyclone Idai in 2019, have caused widespread destruction, loss of life and displacement (Dembedza *et al*, 2023). Contributing factors like poor land use planning, deforestation and fragile infrastructure significantly increase community vulnerability. Limited financial resources, weak institutional capacity and over-reliance on donor

support continue to hinder effective disaster preparedness and response (Chikodzi *et al.*, 2024). Although Zimbabwe supports international agreements like the Sendai Framework for Disaster Risk Reduction (Mavhura and Aryal, 2024), it often struggles to put these strategies into action, especially at the local level where the risks are highest.

LEGAL AND POLICY FRAMEWORKS FOR DISASTER RISK REDUCTION

The main legal instrument for disaster management in Zimbabwe is the Civil Protection Act, Acts 5/1989, 3/1992, 22/2001. The Act established the Civil Protection Organisation, responsible for coordinating national disaster preparedness, response and recovery. Complementary frameworks, such as the 2017 Climate Policy, emphasise resilience-building to climate-related disasters (Mpande and Mudzindiko, 2019). DRR efforts include early warning systems through weather forecasting, community-based preparedness programmes (Meteorological Services Department, 2024) and integrated water resource management to curb flood risks (Global Centre of Adaptation, 2022).

However, implementation is hindered by limited funding, a shortage of skilled personnel and poor inter-agency coordination (Mavhura, 2017). Many interventions remain reactive rather than proactive, increasing community vulnerability. Strengthening collaboration with international partners like UNDRR, FAO and SADC could enhance technical and financial capacity (Aldunce *et al.*, 2016; Coetzee *et al.*, 2023) making collaboration an important part for sustainable development. Equally vital is community empowerment and mainstreaming DRR into all sectors of development (Ma *et al.*, 2023; Gupta *et al.*, 2024). Effective DRR should go beyond planning. It should involve local participation to ensure context-specific, responsive action during disasters.

LINKING LAND REDISTRIBUTION TO DISASTER RESILIENCE

Land redistribution can support DRR by relocating people to safer areas and encouraging sustainable land use and farming practices (Mehmet and Yorucu, 2024). However, when the needs of disaster-displaced communities are overlooked, they may be resettled in areas that are unsafe or lack basic services. Poorly planned relocations can result in "secondary displacement" or

the loss of cultural identity, as seen in the Chingwizi case (The New Humanitarian, 2004). Such outcomes not only undermine recovery efforts, but also deepen the trauma experienced by displaced communities. In addition, tensions may arise between relocated and host populations over limited land, water and resources, further straining social cohesion. Linking land redistribution to disaster resilience helps ensure that rural communities have secure access to safe, productive land. When land is fairly distributed and supported with proper planning, communities are better able to rebuild, adapt and recover from disasters.

THE ROLE OF FPIC AND COMMUNITY PARTICIPATION

Effective land reform and disaster response require active community participation to ensure that interventions align with local needs and realities. The principle of FPIC, recognised under international law (UN, 2016), guarantees that affected communities have a meaningful voice in decisions that impact their land, resources and livelihoods. FPIC promotes trust, fairness and accountability, helping to prevent conflict and build local ownership of projects. It also ensures that development and disaster planning are not imposed top-down but are shaped by those most affected. When applied properly, FPIC can lead to more sustainable, inclusive and culturally appropriate outcomes. By respecting community participation, development becomes more inclusive and sustainable, helping rural populations build resilience to climate change and other shocks.

STUDY DESIGN AND METHODOLOGY

The study employs a desktop research methodology, leveraging secondary data to analyse the socioeconomic impacts of land redistribution and climate resilience in the context of the Tokwe-Mukosi displacements. No date restriction was applied as historical data was needed to answer the land question. A qualitative research approach is adopted to explore the complexities surrounding the Tokwe-Mukosi displacements. Secondary data were collected from academic literature, government, NGO and civil society reports. Media, such as newspaper articles, were also used.

A case study methodology is used. The Tokwe-Mukosi flooding disaster was purposefully chosen for rural-to-rural displacement due to its relevance, as the

disaster triggered large-scale displacement of rural communities, with affected populations relocated to Chingwizi and other rural areas. A thematic analysis approach is employed to identify and interpret patterns within the collected data such as contextual analysis, socioeconomic impact assessment and climate resilience analysis. In conducting desktop research, it is imperative to uphold ethical standards; thus, the integrity and credibility of sources is considered. The assessment and veracity of online content were also considered, particularly when using information from websites or unverified sources. There was recognition of sources, prevention of plagiarism and regard for intellectual property.

Nonetheless, limitations exist as dependence on accessible secondary data may lead to omissions of firsthand accounts or unpublished insights. To address these limitations, future research could incorporate primary data collection through interviews, focus groups, or field observations to capture firsthand experiences and local perspectives. Expanding the study to include multiple case studies also improves generalisability and allows for deeper comparative analysis. Findings are context-dependent and may not be universally applicable to other instances of land redistribution and climate resilience. However, lessons from Tokwe-Mukosi do have broader implications for other regions experiencing rural-to-rural displacement due to disasters. The insights can inform disaster management, rural development and land reform policies in similar contexts across Africa and beyond.

FINDINGS

THE CASE OF TOKWE-MUKOSI

The Tokwe-Mukosi Dam disaster illustrates the complex and far-reaching consequences of rural-to-rural displacement, shedding light on critical shortcomings in disaster preparedness, land redistribution and policy implementation. Emergency displacement leads to deteriorating living conditions, disrupted livelihoods and increased food insecurity. Governance failures and policy gaps, made worse by power imbalances, undermine effective response mechanisms and erode community trust. Inadequate housing, poor infrastructure and limited-service delivery further strains social cohesion, with women and youth bearing the brunt of these challenges.

The Tokwe-Mukosi Dam was intended to support agricultural development in Masvingo Province by ensuring year-round irrigation, improving food security, generating hydroelectric energy (Kuhudzai, 2022) and reducing downstream flood risks (Chazireni and Chigonda, 2018). Despite initial proposals dating back to the 1960s, construction began in earnest only in 1998, prioritising dam wall completion, irrigation infrastructure and community resettlement (Mukwashi, 2024). While these aims were development-focused, the benefits were undermined by poor planning, particularly for displaced communities, revealing a lack of alignment between infrastructure goals and social safeguards.

EMERGENCY DISPLACEMENT AND LIVING CONDITIONS

Heavy rains compromised the dam's structure, prompting an urgent, unplanned evacuation of upstream and downstream communities (Mucherera and Spiegel, 2021). Families were relocated with minimal warning and few belongings to makeshift camps in Chingwizi (Mukwashi, 2019). Many lived in overcrowded tents with poor sanitation, limited healthcare and inadequate shelter, exposing them to disease and hardship (Mavhinga, 2015). These poor conditions were worsened by the absence of a clear compensation and resettlement strategy, which prolonged displacement and heightened grievances. While it was necessary and commendable to evacuate households from the floods and move them to safety, relocating them to drought-prone areas exposed them to new risks, effectively shifting them from one form of vulnerability to another.

Despite the challenges, some NGOs such as the Red Cross and UNICEF provided critical humanitarian aid, including food, shelter and basic services, offering short-term relief (Mukwashi, 2024). Tarisayi (2018) highlights the role of traditional leaders, who supported community organisation and contributed to informal disaster mitigation, showing that community-based structures can offer adaptive strategies even in crisis. Recognising these forms of resilience helps create a more balanced picture of the response. These local and external efforts indicate the importance of combining grassroots knowledge with institutional support to strengthen future disaster preparedness and recovery. Policy-makers failed to effectively integrate policy

design with community input, resulting in solutions that did not address the actual needs and conditions on the ground.

POLICY GAPS, GOVERNANCE FAILURES AND THE POWER IMBALANCE

The Civil Protection Unit led the relocation process, but limited resources, bureaucratic delays and poor coordination slowed progress. This raises questions, as posed by Mavhura (2021), about whether the Civil Protection authorities were adequately prepared. Zikhali (2018) refers to the situation as a "power contest", a dynamic in which NGOs and state actors, rather than communities, held most decision-making power. Displaced families became passive recipients of aid, unable to influence their own futures. Hove (2016) refers to these communities as “state victims”, dependent on a fragmented response system that failed to uphold their rights and dignity.

Land redistribution and disaster management policies overlapped without coordination, complicating efforts to resettle affected populations. Zimbabwe's FTLRP transformed land ownership across the country, but did not allocate land specifically for disaster-displaced people. This created tension between existing beneficiaries and newcomers and made it difficult for authorities to assign secure land for relocation. Without proactive land-use planning that integrates DRR, such overlaps can lead to policy failure and conflict (Mansor *et al.*, 2014). Policy misalignment, some policies focusing solely on land and others only on disasters, creates critical gaps during disaster events, especially when access to land is essential for reducing vulnerability and supporting recovery.

LIVELIHOOD DISRUPTION AND FOOD INSECURITY

The loss of arable land, livestock and housing created long-term food insecurity and economic hardship. In Chingwizi, displaced farmers received smaller plots of land, often with poorer soil and no irrigation. Without access to land or the re-allocation of adequate hectares, livelihoods are disrupted and food insecurity becomes more likely, ultimately increasing the vulnerability of affected communities. For example, Sonia, a former resident of Tokwe-Mukosi, had seven hectares in Tokwe-Mukosi, but received only one hectare in Chingwizi (Muronzi, 2024). The inability to farm or access sufficient water led many to adopt alternative livelihoods. Some community members began

selling handmade grass brooms *(mitsvairo)* or engaged in temporary labour *(maricho)* on other people's farms (Mukwashi, 2024). These strategies, while showing some form of resilience, also reflect the scale of economic decline.

HOUSING AND INFRASTRUCTURE CHALLENGES

Poor housing and lack of basic infrastructure like clean water, roads and health facilities, increase community vulnerability by limiting their ability to cope with and recover from disasters. Most displaced families lost their permanent homes and were forced to live in temporary structures. Before the floods, 97% of households lived in brick houses with either zinc or grass-thatched roofs. After displacement, 83% lived in makeshift mud and pole huts, often due to a lack of money, thatching grass, or water for brickmaking (*ibid.*). The shortage of safe drinking water, poor sanitation and the absence of schools and health clinics made the situation worse (ReliefWeb, 2014). Delayed and inadequate compensation further prevented many families from rebuilding their lives (Muronzi, 2024).

SOCIAL IMPACTS AND COMMUNITY COHESION

Displacement fractured long-standing social and family structures. Shared cultural practices and mutual support systems weakened, while economic pressures forced some family members to seek work outside the household, causing separation (Ermisch and Mulder, 2018). Community cohesion strengthens resilience by fostering mutual support, collective action and shared resources, enabling communities to better withstand and recover from shocks and stresses. Nhodo and Ojong (2023) note that displaced communities form Tokwe-Mukosi continued to rely on existing local institutions for protection while also forming new ones to improve resilience, despite limited state support. These efforts reflect a form of community-led adaptation and coping, which deserves greater recognition in policy design.

GENDERED AND GENERATIONAL IMPACTS

The effects of displacement were not felt equally. Women and youth, already among the most vulnerable groups, experienced added hardship due to inadequate services, overcrowding and the erosion of support networks (IOM, 2024). The lack of access to education and income-generating opportunities has had lasting impacts on this population, deepening cycles of poverty and

dependence. These challenges have limited their ability to participate in recovery efforts or influence decisions that affect their future, further marginalising them in rebuilding processes.

DISCUSSION: LONG-TERM CONSEQUENCES AND REFLECTION

The extreme weather event that triggered the Tokwe-Mukosi crisis highlights the vulnerability of rural communities to natural disasters, which are intensifying with climate change. Weak disaster planning such as insufficient flood management, can result in large-scale involuntary displacement (Kumar *et al.*, 2024). Historical injustices and political legacies of land dispossession, coupled with uneven land redistribution, have compounded these vulnerabilities. Land remains a critical asset closely tied to capital, economic opportunity and social mobility (Christophers, 2016). Access to land enables rural communities to farm, build homes, or run businesses, forming the foundation for income generation, financial security and improved living standards. Without land, displaced populations lose both their economic base and the opportunity to break the cycle of poverty. While economic discourse increasingly considers climate change, there remains a pressing need for collaboration among governments, private sectors and civil society to better understand how economic growth strategies intersect with climate resilience and equitable land access (Thomas, 2024). Cross-sectoral cooperation is essential to advancing both environmental sustainability and socio-economic justice.

The Tokwe-Mukosi disaster paints a clear picture of how poorly managed displacement and resettlement can make life even harder for already vulnerable communities. Families were moved from fertile ancestral land to dry, less productive areas in Chingwizi, which made it difficult to grow food and increased poverty and hunger (Mukwashi, 2019). The move also weakened social ties, strained local infrastructure and disrupted livelihoods (Mudefi *et al.*, 2024). The government offered temporary land, but people were not properly involved in the planning, which created mistrust and frustration (Mavhinga, 2015). Without a people-centred and well-organised resettlement plan, many felt ignored and struggled to recover.

Resettlement was not handled well. Families were moved to places without proper housing, schools, clean water, or healthcare. On top of losing their homes and land, they had to live in very difficult conditions, which caused stress and emotional pain. When communities are not involved in planning, the help they receive often does not meet their real needs. In this case, people did not know how dry and unproductive the new land would be and some wanted to return to their original homes, which were now underwater due to the flood (Mukwashi, 2024). A better resettlement process should have included community groups to make sure their voices were heard and their needs met (Nhodo and Ojong, 2023).

If proper community consultations had taken place, local knowledge could have helped shape better resettlement plans that were more suitable and practical. This would have made it easier for people to adjust to their new environment. Climate-smart solutions, like agroecological farming or strong infrastructure that can handle extreme weather, could have supported recovery and helped families rebuild their lives (Zenda and Rudolph, 2024). These local strategies may be able to reduce suffering, allowing for a more respectful and quicker recovery. Too often, consultations are treated as a tick-box' exercise, where people are called "stakeholders" but not given real power to influence decisions (IHRB, 2022). This weakens their ability to make choices about their own futures. In the Tokwe-Mukosi case, not involving people in key decisions made them more vulnerable to future disasters and unable to plan properly. This shows how important it is to connect land reform with climate adaptation and to make sure affected people are truly included in every step.

The lack of transitional land or shelter may have contributed to community and household vulnerability. Families were rushed into overcrowded camps with too few toilets, not enough clean water and no proper living space (Rohwerder, 2016). These camps became places of suffering, with no jobs and poor conditions, which led to growing anger and frustration (Mudefi *et al.*, 2024). Transitional land offers more than just shelter. It gives people the space and support they need to recover and rebuild. Including this kind of support in DRR plans is key to helping communities move from emergency aid to long-term solutions. With proper planning, community involvement and climate-

smart thinking, a disaster like Tokwe-Mukosi could be turned into a chance to build stronger, fairer and more sustainable rural communities (Mahanty and McDermott, 2013).

CONCLUSION AND RECOMMENDATIONS

The Tokwe-Mukosi displacements reveal how poor planning and lack of community involvement in land redistribution can worsen the challenges faced by rural communities after a disaster. While land redistribution has the potential to support recovery and build resilience, this can happen only if people are given fair access to land, support to rebuild their livelihoods and a voice in the process. Linking DRR with land policies is essential. Resettlement should not only respond to immediate danger, but also support long-term recovery, climate adaptation and economic stability. This case provides important lessons for creating policies that balance economic resilience through land, environmental and economic resilience.

To effectively support displaced communities, Zimbabwe must adopt comprehensive resettlement policies that ensure fair access to land and provide long-term support. These policies should guarantee secure land ownership, access to clean water and permanent housing, enabling families not just to relocate, but to rebuild their lives with dignity. A transparent land allocation process involving local leaders, civil society and displaced communities, is essential to reduce corruption, promote fairness and build trust between citizens and the government.

Emergency response strategies should include transitional land and shelter equipped with basic infrastructure such as clean water, sanitation and health services. This temporary support acts as a bridge between immediate relief and long-term recovery. Simultaneously, livelihood restoration must be prioritised through the distribution of agricultural tools, seeds and training in sustainable farming methods. Improving access to markets and developing alternative income-generating opportunities for non-farming households are also critical for economic recovery.

Successful resettlement depends on more than just land; it must be paired with investments in infrastructure like roads, schools, health centres and water

systems. These services are vital for creating liveable communities and fostering long-term resilience. Social and cultural continuity should be protected by relocating families in groups where possible. This helps in maintaining support networks and strengthening community cohesion.

Inclusive and participatory planning is key. The government must implement FPIC in all resettlement and development projects to ensure that affected communities are active participants from the beginning. Monitoring and evaluation mechanisms should be established to assess outcomes and guide improvements based on community feedback. Finally, resource mobilisation through partnerships with international organisations and NGOs will provide the necessary funding for relocation, climate adaptation and livelihood support, ensuring a coordinated and sustainable approach to development.

REFERENCES

Agbonlahor, M.U. Phillip, D.O.A. (2015). Deciding to Settle: Rural-Rural Migration and Agricultural Labour Supply in Southwest Nigeria, *The Journal of Developing Areas, 49*(1), 267-284. Available online: https://www.jstor.org/stable/24241293

Aldunce, P. *et al.* (2016). Stakeholder Participation in Building Resilience to Disasters in a Changing Climate, *Environmental Hazards, 15*(1), 58-73. https://doi.org/10.1080/17477891.2015.1134427

Bebbington, A. (2001) Development: Rural Development Strategies. In: Smelser, N.J. and Baltes, P.B. (eds.) I*nternational Encyclopedia of the Social and Behavioral Sciences,* 3578—3583. Oxford: Pergamon, . https://doi.org/10.1016/b0-08-043076-7/03345-3

Bhanye, J. *et al.* (2024). Implications of Peri-Urban Land Reform Programmes on Urban Land Markets: A Case Study of Harare, Zimbabwe, *Humanities and Social Sciences Communications, 11*(1). https://doi.org/10.1057/s41599-024-03500-9

Chazireni, E. Chigonda, T. (2018) The Socio-Economic Impacts of Dam Construction: Case of Tokwe Mukosi in Masvingo Province, Zimbabwe, Zenodo. https://doi.org/10.5281/zenodo.1410616

Chikodzi, D., Mubvuma, M.T. Mavodyo, E. (2024). Climate Disaster Risk Reduction in Rural Southern Africa, In: *Sustainable Development Goals Series,* 65-81. https://doi.org/10.1007/978-3-031-73600-1_5

Chilunjika, A. Uwizeyimana, D. (2006). Shifts in the Zimbabwean Land Reform Discourse from 1980 to the Present. *African Journal of Public Affairs.* Available online: https://repository.up.ac.za/bitstream/handle/2263/58168/chilunjika_shifts_2015.pdf

Christophers, B. (2016) For Real: Land as Capital and Commodity, *Transactions of the Institute of British Geographers, 41*(2), 134-148. https://doi.org/10.1111/tran.12111

Civil Protection Act. Acts 5/1989, 3/1992, 22/2001 - Climate Change Laws of the World. Available online: https://climate-laws.org/document/civil-protection-act_cab9. Accessed: 27 March 2025.

Coetzee, C. *et al.* (2023) Financing Disaster Risk Reduction: Exploring the Opportunities, Challenges and Threats within the Southern African Development Community Region, *International Journal of Disaster Risk Science, 14*(3), 398-412. https://doi.org/10.1007/s13753-023-00499-6

Dembedza, V.P. *et al.* (2023). The Relationship between Climate Change Induced Natural Disasters and Selected Nutrition Outcomes: A Case of Cyclone Idai, Zimbabwe. *BMC Nutrition, 9*(19). https://doi.org/10.1186/S40795-023-00679-Z

Ermisch, J. Mulder, C.H. (2018). Migration versus Immobility and Ties to Parents, *European Journal of Population, 35*(3), 587-608. https://doi.org/10.1007/S10680-018-9494-0

Food and Agriculture Organisation (FAO) (2010). Statutory Recognition of Customary Land Rights in Africa: An Investigation into Best Practices for Law Making and Implementation. FAO Legislative Study 105. Available online: https://www.fao.org/4/i1945e/i1945e01.pdf

George, J. Adelaja, A. (2021). Forced Displacement and Agriculture: Implications for Host Communities, *Sustainability, 13*(10), 5728. https://doi.org/10.3390/Su13105728

Global Centre of Adaptation (2022). Water Resources Management, Floods and Disaster Risk Management. Available online: https://gca.org/wp-content/uploads/2022/07/06_wtw_14855_gca_2021_sect2_water_v5.pdf

Green, E. Nyandoro, M. (2023). Property Rights and Labour Relations: Explaining the Relative Success of Native Purchase Area Farmers in Southern Rhodesia, 1930-1965, *Journal of Southern African Studies, 49*(5-6), 889-906. https://doi.org/10.1080/03057070.2023.2325326

Gupta, A.K., Nair, S.S. Dhyani, S. (2024). Mainstreaming Disaster Risk Reduction in EIA/SEA for Climate and Disaster Resilient Development, In: Disaster Resilience and Green Growth, 437-455. https://doi.org/10.1007/978-981-99-4105-6_21

Hanlon, J., Manjengwa, J. Smart, T. (2012). *Zimbabwe Takes Back its Land.* Sterling, VA: Kumarian Press.

Hove, M. (2016). Tokwe-Mukosi, Zimbabwe. *Democracy and Security, 12*(3), 135-161. https://doi.org/10.2307/48602402

IFAD (2022). Why Free, Prior and Informed Consent is so Important for Indigenous Peoples. Available online: Https://www.ifad.org/en/w/explainers/ why-free-prior-and-informed-consent-is-so-important-for-indigenous-peoples

IHRB (2022). What is Free, Prior and Informed Consent (FPIC)? Available online: https://www.ihrb.org/resources/what-is-free-prior-and-informed-consent-fpic

Ingwani, E. *et al.* (2021). Impacts of Cyclone Idai on Human Settlements in Zimbabwe, In: *Sustainable Development Goals Series,* 177-192. https://doi.org/10.1007/978-3-030-74303-1_12

IOM (2024). Youth Migration as Climate Adaptation: The Chingwizi Experience. Available online: https://environmentalmigration.iom.int /blogs/youth-migration-climate-adaptation-chingwizi-experience. Accessed: 4 January 2025.

Kinsey, B.H. (1999). Land Reform, Growth and Equity: Emerging Evidence from Zimbabwe's Resettlement Program. *Journal of Southern African Studies, 25*(2), 173-196.

Kuhudzai, R.J. (2022). the Addition of Small Hydroelectric Power Plants to some of Zimbabwes Old Dams Finally Underway, Cleantechnica. Available online: https://cleantechnica.com/2022/08/15/the-addition-of-small-hydroelectric-power-plants-to-some-of-zimbabwes-old-dams-finally-underway/ Accessed: 27 March 2025.

Kumar, S., Ananad, A. Kumawat, S. (2024). Resettlement of Riverine Habitats due to Forced Displacement: A Case of Bhagalpur, Bihar, In: *Sustainable Development Goals Series,* 89-112. https://doi.org/ 10.1007/978-3-031-65683-5_6

Ma, C., Qirui, C. Lv, Y. (2023). "One Community at a Time": Promoting Community Resilience inin the Face of Natural Hazards and Public Health Challenges, *BMC Public Health, 23,* 2510. Available online: https://doi.org/10.1186/S12889-023-17458-X

Mahanty, S. Mcdermott, C.L. (2013). How Does "Free, Prior and Informed Consent" (FPIC) Impact Social Equity? Lessons from Mining and Forestry and their Implications for REDD+, *Land Use Policy, 35,* 406-416. https://doi.org/10.1016/J.Landusepol.2013.06.014

Manatsa, D. *et al.* (2010). Analysis of Multidimensional Aspects of Agricultural Droughts in Zimbabwe Using the Standardised Precipitation Index (SPI). T*heoretical and Applied Climatology, 102*(3-4), 287-305. https://doi.org/10.1007/S00704-010-0262-2

Mansor, A.A., Mohd, W. Elsawi, A.M. (2014). Policy Overlap Analysis to Avoid Policy Conflict in Policy-based Management Systems. Third International Conference on Advanced Information Technologies and Applications, *4*(11), 255-266. https://doi.org/10.5121/Csit.2014.41124

Mavhinga, D. (2015). Homeless, Landless and Destitute: Plight of Zimbabwe's Tokwe-Mukorsi Flood Victims. Human Rights Watch. Available online: https://www.hrw.org/report/2015/02/03/homeless-landless-and-destitute/plight-zimbabwes-tokwe-mukorsi-flood-victims

Mavhura, E. (2017). Disaster Risk Reduction Policy and Management in Zimbabwe. In: *Handbook of Disaster Risk Reduction and Management*, 589-612. https://doi.org/10.1142/9789813207950_0024

Mavhura, E. (2021) The 2014 Tokwe-Mukorsi Floods: Were the Civil Protection Authorities in Zimbabwe Prepared for the Disaster? *Journal of Flood Risk Management, 14*(2), E12687. Available online: https://doi.org/10.1111/Jfr3.12687

Mavhura, E., (2025). Why Do Riparian Communities Persist in Disaster-Prone Areas? Empirical Evidence from Mbire District, Zimbabwe. Environment. *Development and Sustainability, 27*, 4831-4847. https://doi.org/10.1007/S10668-023-04102-2.

Mavhura, E., Aryal, K.R. (2024). Assessing Progress in Reducing the Number of Disaster-affected People: Insights from Zimbabwe, Natural Hazards. https://doi.org/10.1007/S11069-024-06995-2

Mebratu, A. *et al.* (2023). Impacts of Climate-Smart Agricultural Practices on Farm Households' Climate Resilience and Vulnerability in Bale-Eco Region, Ethiopia. *Environment, Development and Sustainability*. https://doi.org/10.1007/S10668-023-03962-Y

Mehmet, O., Yorucu, V. (2024). Land in Economic Theory. In: F*rom Land Disputes to Sustainable Environmental Development,* 5-23. https://doi.org/10.1007/978-3-031-56560-1_2

Meteorological Services Department. (2024). Meteorological Services Department of Zimbabwe. Available online: https://www.preventionweb.net/organisation/meteorological-services-department-zimbabwe. Accessed: 2 January 2025.

Moyo, S. (2004). The Land and Agrarian Question in Zimbabwe. Paper Presented at the Conference on the Agrarian Constraint and Poverty Reduction. Available online: https://sarpn.org/documents/d0001097/p1211-moyo_dec2004.pdf (Accessed: 2 January 2025).

Moyo, S. (2005). The Land Question and Land Reform in Southern Africa, National Land Summit, Johannesburg, South Africa, July, 27-31.

Mpande, R., Mudzindiko, T. (2019). Zimbabwe National Climate Policy Report: A Scoping Study for a National Campaign on Agroecology for Climate Action. Available online: https://afsafrica.org/wp-content/uploads/2021/10/ncps-cli.-report-zimbabwe.pdf

Msongelwa, M. (2023). The Land Apportionment Act 1930. *the Sunday News*. Available online: https://www.sundaynews.co.zw/the-land-apportionment -act-1930/ Accessed: 2 January 2025.

Mucherera, B., Spiegel, S. (2021). Forced Displacement: Critical Lessons in the Protracted Aftermath of a Flood Disaster. *Geojournal.* https://doi.org/10.1007/S10708-021-10471-W

Mudefi, E., Akpan, W., Kwizera, A.S. (2024). The Socio-Politics of (Re)Constructing Home in a Post-Displacement Context in Rural Zimbabwe. *Social Sciences and Humanities Open, 10*, 101110. https://doi.org/10.1016/J.Ssaho.2024.101110

Mukwashi, T. (2019). Diagnosing the 2014 Flood Disaster of Tokwe-Mukosi in Search of Sustainable Solutions. In: Chirisa, I. (ed.) *The Sustainability Ethic in the Management of the Physical, Infrastructural and Natural Resources of Zimbabwe*. Bamenda: Langaa RPCIG, 107-132. https://doi.org/10.2307/J.Ctvmd84s6.8

Mukwashi, T. (2024). *The Idiom of Development versus Disasters at Play in Zimbabwe: Reflections on the 2014/15 Tokwe-Mukosi Flooding Disaster*. Bindura: Zimbabwe Ezekiel Guti University Press.

Muronzi, C. (2024). “Life is Hell”: Zimbabwe Flood Survivors Lament Loss of Land, Livelihoods, Al Jazeera, 30 January. Available online: https://www.aljazeera.com/features/2024/1/30/zimbabwe-displaced-people-lament-losses. Accessed: 2 January 2025.

Nepomoceno, T.A.R., Carniatto, I. (2023). Correlations between Climate Resilience in Family Farming and Sustainable Rural Development, Ambio. https://doi.org/10.1007/s13280-023-01848-x

Ngulube, N.K., Tatano, H., Samaddar, S. (2024). Factors Impacting Participatory Post-disaster Relocation and Housing Reconstruction: The Case of Tsholotsho District, Zimbabwe, *International Journal of Disaster Risk Science*. https://doi.org/10.1007/S13753-024-00536-Y

Nhodo, L., Ojong, V.B. (2023). Dam Projects, Modernity and Forced Displacement: an Analysis of the Role of Local Institutions in Surviving Marginalisation among the Tokwe-Mukosi Displacees in Zimbabwe, In: Mhlanga, D. and Ndhlovu, E. (eds.) *Post-Independence Development in Africa*. Amsterdam: Springer. https://doi.org/10.1007/978-3-031-30541-2_14

Nhodo, L., Ojong, V.B., Chikoto, D. (2021). Ethical and Practical Reflections of Resident Anthropologists in Conflict Zones: Experiences from the Tokwe-Mukosi Dam Project and Displacement at Chingwizi, Zimbabwe. *The Oriental Anthropologist: A Bi-Annual International Journal of the Science of Man, 21*(1), 210-220. https://doi.org/10.1177/0972558x21994733

Ntsebeza, L. (2006). *Democracy Compromised: Chiefs and the Politics of Land in South Africa*. Cape Town: HSRC Press.

Nyawo, V.Z. (2014). Zimbabwe Post-Fast Track Land Reform Programme: The Different Experiences Coming Through. *International Journal of African Renaissance Studies - Multi-, Inter- and Transdisciplinarity, 9*(1), 36-49. https://doi.org/10.1080/18186874.2014.916858

Reliefweb (2014). 20,000 Relocated to Ruling Party Farm - Zimbabwe. Reliefweb. Available online: https://reliefweb.int/report/zimbabwe/20000-relocated-ruling-party-farm. Accessed: 4 January 2025.

Reliefweb. (2014). Zimbabwe: Floods Situation Report No. 3 (as of 28 Feb 2014) - Zimbabwe, Reliefweb. Available online: https://reliefweb.int/report/zimbabwe/zimbabwe-floods-situation-report-no-3-28-feb-2014. Accessed: 4 January 2025.

Reyes-García, V. *et al.* (2024). Local Studies Provide A Global Perspective of the Impacts of Climate Change on Indigenous Peoples and Local Communities. *Sustainable Earth Reviews, 7*(1). https://doi.org/10.1186/S42055-023-00063-6

Rohwerder, B. (2016). Transitional Shelter in Post-Disaster Contexts. Helpdesk Research Report. Available online: https://gsdrc.org/wp-content/uploads/2016/08/hdq1387.pdf (Accessed: 4 January 2025).

Scoones, I. *et al.* (2012). Livelihoods After Land Reform in Zimbabwe: Understanding Processes of Rural Differentiation. *Journal of Agrarian Change, 12*(4), 503-527. https://doi.org/10.1111/J.1471-0366.2012.00358.x

Tarisayi, K.S. (2018). Traditional Leadership and the Tokwe-Mukosi Induced Displacements: Finding the Missing Link, *Jàmbá: Journal of Disaster Risk Studies, 10*(1), 7. Available online: https://jamba.org.za/index.php/jamba/article/view/592/980. Accessed: 2 January 2025.

The New Humanitarian. (2004). Culture Under Threat - Special Report on the San Bushmen (II), the New Humanitarian. Available online: https://www.thenewhumanitarian.org/report/49005/botswana-culture-under-threat-special-report-san-bushmen-ii

Thomas, N.H. (2003). Land Reform in Zimbabwe. *Third World Quarterly, 24*(4), 691-712. https://doi.org/10.1080/0143659032000105821

Thomas, V. (2024). Growth Versus Climate: A Persistently False Dichotomy, In: *Sustainability and Climate,* 143-160. https://doi.org/10.1007/978-981-97-2769-8_7

United Nations (2025). The 17 Sustainable Development Goals. [Online] United Nations. Available online: https://sdgs.un.org/goals.

United Nations (2016). Free Prior and Informed Consent - An Indigenous Peoples' Right and A Good Practice for Local Communities - FAO. United Nations for Indigenous Peoples. Available online: https://www.un.org/development/desa/indigenouspeoples/publications/2016/10/free-prior-and-informed-consent-an-indigenous-peoples-right-and-a-good-practice-for-local-communities-fao/. Accessed: 27 March 2025..

World Bank. (2024). Zimbabwe - Land Reform Support Project. Available online: https://documents.worldbank.org/en/publication/documents-reports/documentdetail/376881468781554831/zimbabwe-land-reform-support-project. Accessed: 1 January 2025.

Zenda, M., Rudolph, M. (2024). A Systematic Review of Agroecology Strategies for Adapting to Climate Change Impacts on Smallholder Crop Farmers Livelihoods in South Africa. *Climate, 12*(3), 33. https://doi.org/10.3390/Cli12030033

Zikhali, W. (2018). Stakeholder Coordination in the Tokwe-Mukosi Disaster Responses in Masvingo Province, Zimbabwe. *Advances in Social Sciences Research Journal, 5*(8). https://doi.org/10.14738/Assrj.58.5057