

Research Article

Codifying Human Security: Achieving Social Justice in an Age of Climate Crisis

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Abstract

Many countries in sub-Saharan Africa are yet to translate constitutional guarantees of socio-economic and environmental rights into climate-resilient and socially just policies that are both. Most fiscal and sectoral frameworks privilege macroeconomic stability and elite interests, often at the expense of inclusive growth, food security, environmental protection, and human security. Reliance on rain-fed agriculture, extractive industries, and policy incoherence in sectors such as agriculture, land use, and energy leaves communities vulnerable to climate shocks. Emerging opportunities in carbon finance hold promise; however, weak regulation, limited institutional capacity, and the risks of elite capture pose serious obstacles. Through a doctrinal and analytical review of constitutional law, judicial cases, policy documents, and recent developments in social justice (including carbon market initiatives), this article argues for a constitutionally grounded and rights-based model of human security and social justice. Such a model would embed transparency, public participation, and equity in social justice policies, including environmental justice. Focusing on the environmental justice dimension of social justice, the central thesis is that climate change serves as a threat multiplier, undermining the right to adequate food and nutrition, and thereby deepening human insecurity and systemic vulnerability. To achieve climate justice, food sovereignty, and sustainable development, all right-bearers — including states, corporations, and individuals — must be held accountable and must exercise their duties responsibly and sustainably. The contributions are twofold: first, analytically diagnosing the structural, legal, and institutional disconnects undermining human security and social justice in a changing climate; and second, recommending socio-economic policy reforms grounded in constitutional rights, transparency, institutional coherence, and participatory governance to achieve human security and social justice.

Keywords

ARMS Strategy, Carbon Credits, Climate Justice, Constitutional Governance, Food Security

1. Introduction

Sub-Saharan African countries have been labelled as the most vulnerable to the adverse effects of climate change [1]. Yet vulnerability is compounded not only by geography or resource endowments, but by governance choices. Constitutional provisions in countries such as Malawi, Kenya, and

South Africa guarantee environmental protection and socio-economic rights; however, economic policy has historically prioritised macroeconomic orthodoxy, extraction, and elite benefits over inclusive, sustainable development [2].

Economic policy frameworks in most countries in the

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Received: 30 October 2025; **Accepted:** 21 November 2025; **Published:** 22 July 2026



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region are constrained by entrenched structural and institutional weaknesses that undermine the realisation of constitutionally guaranteed socio-economic rights [3, 4]. The existing fiscal and sectoral policies prioritise macroeconomic stability and elite interests, often at the expense of inclusive growth, environmental sustainability, and human security.

Taking Malawi as an example, Section 7 of the Constitution mandates the government to initiate policies and legislation that “embody the express wishes of the people.” However, Malawi’s socio-economic policies are often developed in opaque processes dominated by central technocrats and external advisors, with minimal engagement of civil society, marginalised communities, or local government. Such an approach contravenes Section 7 of the Constitution, which promotes participatory governance, and undermines the legitimacy of public policy [5]. It is no wonder that the resultant policies often fail to promote the welfare and development of citizens.

Despite constitutional mandates for the rights to food, adequate nutrition, health, environmental protection, and development, economic governance has failed to systematically integrate climate resilience, food justice (including security and sovereignty), and equitable resource distribution into its core policy objectives [6]. Climate change, which exacerbates poverty, food insecurity, and forced displacement, remains insufficiently addressed within key policy sectors, including agriculture, energy, and land use.

Section 8 of Malawi’s Constitution requires that parliament enact laws that “reflect the interests of all the people of Malawi” through parliamentarians who represent the citizens in the legislative process. In contrast, citizens are rarely consulted during the formulation and implementation of economic policies. Consultations are typically limited to public forums and stakeholder engagements, rather than community-based processes that genuinely incorporate grassroots perspectives.

Being one of the poorest regions in the world, the burden of climate harms disproportionately affects most sub-Saharan African countries [7]. For example, Malawi’s reliance on rain-fed subsistence agriculture and Zambia’s extractive industries leaves both rural and urban populations acutely vulnerable to climate-induced shocks. Policy incoherence, particularly in sectors such as agriculture, mining, and infrastructure development, erodes pathways to sustainable development, inter-generational equity, and human security.

This discussion examines the disparity between states’ social justice policies and their constitutional responsibilities. Specifically, the paper critically examines the extent to which climate justice policies align with constitutional mandates. These constitutional provisions, such as in Malawian Constitution Section 13 (b)(c) and (d) on nutrition, health, and environment, respectively and Section 30 (2) on the right to development including basic resources and food, among others; Section 42 (right to clean and healthy environment) and Section 43 (right to food of acceptable quality) in the Kenyan

Constitution, and Sections 24 (right to clean environment) and 27 (right to health care, food, clean water, and social security) of the South African Constitution, establish normative and binding obligations that can and should guide economic, environmental, and development policy in those countries. Although in a cursory manner, the paper also demonstrates how other key policies, particularly those related to agriculture, energy, and mining, disadvantage the very people who should benefit from them [8].

Using a doctrinal and analytical methodology, this paper critically examines how countries in the sub-Saharan region have reached a policy precipice and proposes reforms to align their economic governance with climate justice, social justice, and human security [9]. The central thesis is that climate change undermines the right to adequate food and nutrition, thereby deepening human insecurity and enhancing systemic vulnerability. To achieve climate justice, food sovereignty, and sustainable development, all right-bearers — including states, corporations, and individuals — must be held accountable and must exercise their duties responsibly and sustainably.

The discussion begins by examining the relevant constitutional provisions in selected countries that underscore the government’s duty to enact people-centred laws and formulate citizen-centric policies [10, 11]. It then interrogates the constitutionality and efficacy of economic policy frameworks in mitigating climate change and safeguarding human security, including food security, sovereignty, and justice. The discussion also assesses the alignment of current policies with constitutional provisions such as those on people-centred governance, inclusive policymaking, and balanced economic development and environmental stewardship.

The discussion advances an integrated governance framework—the Accountability, Responsibility, Monitoring, and Sustainability (ARMS) model—as a strategic mechanism for operationalising social justice and human security in the context of the contemporary climate crisis. This framework not only reinforces accountability among duty-bearers and promotes responsible decision-making but also institutionalises systematic monitoring and evaluation processes that ensure policies are grounded in principles of equity, resilience, and sustainability. The paper concludes that climate-responsive, participatory, and rights-based socio-economic governance, including a constitutional approach to human security, is essential to achieving human security and social justice obligations.

1.1. Carbon Market Initiatives Conundrum as a Case Study

Taking carbon financing in Malawi as a case study, this paper highlights that most Sub-Saharan African countries have not fully leveraged emerging climate finance mechanisms such as carbon credits, which offer both environmental and economic benefits [12]. Although the example is specific to

Malawi, it is highly applicable to other sub-Saharan African countries. Properly regulated carbon credit schemes—particularly those linked to afforestation, conservation agriculture, and clean energy transitions—can serve as critical tools for climate mitigation and revenue generation. However, the current regulatory vacuum, lack of technical capacity, and limited institutional coordination risk turning carbon markets into vehicles for elite capture rather than inclusive development. The failure to embed carbon market policy within a constitutional framework of transparency, equity, and public participation reflects broader governance challenges [13].

The choice of the carbon market initiatives conundrum as a case study is deliberate, not because it exemplifies the direct physical impacts of climate threats such as flooding or biodiversity loss, but because it illuminates the institutional, normative, and distributive dimensions of human (in) security in the governance of climate action [14]. While phenomena like floods or ecosystem degradation reveal the tangible and immediate consequences of climatic shifts, the carbon market exposes the political economy of climate governance—how policy instruments and financial architectures designed to address climate change can, paradoxically, either reproduce or exacerbate existing patterns of social and environmental injustice [15].

Conceived as a mechanism for climate finance and mitigation, the carbon market operates within a global system characterised by structural asymmetries of power, representation, and benefit distribution [16]. Its implementation determines not only who profits from carbon revenues but also who absorbs the socio-environmental costs of offset projects and whose voices are silenced in the process. Consequently, carbon markets provide a compelling analytical lens for interrogating how climate governance regimes—through their legal, economic, and procedural designs—mediate the nexus between human security and social justice. They underscore the need for constitutional accountability and distributive equity to ensure that market-based climate solutions advance, rather than undermine, the human security of those most vulnerable to the climate crisis [17].

1.2. Constitutionalism and the Human Security Paradigm in the Climate Era

The climate crisis has laid bare the inadequacy of traditional, state-centric conceptions of security that prioritise territorial sovereignty and regime stability over the well-being of people and the integrity of ecosystems [18]. As the boundaries between environmental degradation, socio-economic vulnerability, and political instability blur, the very notion of security must be re-imagined. A constitutional approach to human security extends the scope of protection beyond the state to encompass individuals and communities whose livelihoods, dignity, and survival are imperilled by climate-induced disruptions [19].

Constitutionalism, in this context, serves as both a

normative compass and an institutional safeguard, anchoring human and environmental protection in the language of rights, duties, and accountability [20]. By framing climate change as simultaneously a human and a constitutional challenge, this paper advances a framework for constitutionalising human security, embedding the protection of people and the planet within constitutional values, governance structures, and justifiable guarantees that promote equity, social justice, and sustainable peace [21]. Such an approach recognises that safeguarding human security in the Anthropocene is not ancillary to constitutionalism but central to its evolving purpose relating to secure life, liberty, and dignity within the ecological limits of the Earth system [22].

2. Conceptualising Social Justice: Normative Foundations and Policy Implications

The constitutional foundations of social justice establish the fundamental legal and institutional framework within which a country's economy is organised, regulated, and developed. Rooted in the supreme law of the land, these foundations delineate the roles and responsibilities of key state organs in socio-economic decision-making, ensure checks and balances, and safeguard the principles of accountability, transparency, and the rule of law. The constitution defines the powers of the executive, legislature, and judiciary in economic affairs, while also enshrining the rights of individuals and the private sector. These foundational principles seek to ensure that socio-economic governance is not only effective and efficient but also equitable and just [23].

2.1. Defining Social Justice

Social justice, broadly defined, refers to the equitable distribution of resources, opportunities, and privileges within a society. At its core, it interrogates the legitimacy of social arrangements: who gets what, when, and how—and by what processes those distributions are determined. In support of this view, in *State v. President of the Republic of Malawi & Others; Ex parte: Malawi Law Society*, the High Court of Malawi emphasised that the government has a constitutional duty to prioritise the welfare of the people, particularly in resource allocation and development planning [24]. Similarly, in *State v. President of Malawi & Others ex parte Malawi Law Society*, the Court held that executive discretion in matters of governance must not be exercised arbitrarily but in accordance with constitutional values and the public interest [25].

The Constitution of South Africa is a textbook example of the embodiment of the notion of social justice. In the South African Constitution, Section 24 provides for environmental rights and sustainability, Section 27 guarantees the right to food, water, healthcare, and social security, and Section 28 secures the welfare and basic needs of children. Together, these

provisions form the constitutional architecture for human and ecological wellbeing in South Africa, advancing the project of “transformative constitutionalism”, which embeds social justice, environmental protection, and human dignity as mutually reinforcing objectives [26].

As a normative ideal and a policy imperative, social justice embodies multiple interdependent dimensions—economic, racial and ethnic, gender, and environmental—each requiring distinct theoretical and institutional responses [27]. For example, in Malawi, Section 7 of the Constitution explicitly mandates the government to promote the welfare and development of its citizens by enacting policies that embody the express wishes of the people. Section 7 mandates people-centred governance and emphasises a governance framework rooted in public interest and accountability. However, the persistent poverty and underdevelopment in Malawi call into question whether this constitutional obligation is being met. This entails both procedural and substantive obligations—not only must policies be legally sound, but they must also be socially responsive and participatory [28].

(i) Economic Justice

Economic justice concerns the fairness of economic structures and the distribution of wealth, income, and opportunity. It focuses not only on poverty alleviation but also on the underlying mechanisms that generate inequality, including market liberalisation, fiscal regimes, and access to productive assets. In Malawi, for example, Section 13 (n) of the Constitution requires the government to strike a balance between wealth creation and equitable distribution through a market-driven economy, while ensuring long-term investment in health, economic growth, and social development.

According to Amartya Sen’s capability approach, economic justice entails expanding individuals’ substantive freedoms to lead lives they value [29]. Recent scholarship stresses that distributive fairness must be complemented by procedural inclusion and institutional reform to address systemic inequalities in taxation, labour markets, and social protection. The Organisation for Economic Co-operation and Development (OECD) similarly emphasises redistributive policy instruments—such as progressive taxation, social protection floors, and inclusive education—as necessary to mitigate structural disadvantage and intergenerational poverty traps [30].

(ii) Racial and Ethnic Justice

Racial and ethnic justice addresses persistent inequities faced by marginalised communities. It extends beyond individual prejudice to confront systemic and institutionalised discrimination that reproduces racialised inequalities in employment, housing, health, and education. Critical race theory and intersectionality have reinvigorated debates on how racism interacts with class and geography to shape life outcomes [31]. Moreover, emerging evidence from social work and public-health scholarship underscores that environmental and racial injustices often co-occur, with marginalised racial groups disproportionately exposed to environmental hazards and deprivation [32]. Achieving racial and ethnic justice, therefore,

requires robust anti-discrimination legislation, affirmative measures, institutional transformation, and empowerment of historically marginalised communities [33].

(iii) Gender Justice

Gender justice entails the pursuit of equality and fairness for individuals of all genders, recognising that gender is both a social and structural determinant of opportunity. It calls for both *formal equality*—equal legal rights—and *substantive equality*—measures addressing entrenched social norms, unpaid care burdens, wage gaps, and gender-based violence [34]. Feminist theorists have recently linked gender justice to climate justice, arguing that women’s experiences and leadership are integral to sustainable adaptation [35]. Likewise, Pamukcu and Harris contend that achieving a “just transition” in the context of decarbonisation and green economies must be grounded in gender-responsive, participatory policy making [36]. Policy responses thus demand structural transformation, including the redistribution of care responsibilities, promotion of economic autonomy, and mainstreaming of gender perspectives in environmental governance.

(iv) Environmental Justice

Environmental justice extends the principles of fairness and inclusion into the ecological domain [37]. It demands that all people, regardless of race, gender, or income, enjoy equal protection from environmental harm and have equitable access to environmental goods, such as clean air, safe water, and green spaces. The evolving literature highlights how climate change disproportionately burdens vulnerable populations, making environmental justice a crucial component of global sustainability [38]. Moreover, recent studies emphasise intersectional approaches that integrate race, gender, and class into environmental governance, arguing that justice must encompass both distributive and procedural elements—who benefits, who bears costs, and who participates in decision-making [39, 30].

In Malawi, for example, Section 13 (d) of the Constitution affirms environmental protection and sustainable use of natural resources as national policy. Section 13 (n) of the Constitution requires balanced economic development and environmental stewardship. However, monetary policy often prioritises short-term fiscal targets over long-term socio-economic transformation [40]. Contemporary monetary policy frameworks must increasingly integrate climate-related considerations, recognising that weather-induced shocks have significantly undermined the effectiveness and transmission of monetary policy [41].

These disruptions manifest through multiple channels—from food supply-driven inflationary pressures precipitated by recurrent droughts and floods, to output contractions and energy supply instabilities stemming from adverse climatic effects on hydroelectric generation. In this context, a climate-informed monetary strategy is not merely desirable but imperative for safeguarding macroeconomic stability and ensuring the resilience of economic systems in an era of heightened environmental volatility.

The Environment Management Act (EMA) in Malawi gives

substantive effect to constitutional policy principles, including duties to protect and manage the environment, conserve natural resources, and allow individuals to seek legal remedy for environmental harms. In *Export Processing Zones Authority (EPZA) and 10 Others v National Environment Management Authority (NEMA) and 3 Others*, the Kenyan judiciary has given effect to constitutional and legislative norms to hold executive decisions accountable on ecological grounds [42].

2.2. Synthesis and Policy Imperatives

Taken together, these four dimensions demonstrate that social justice encompasses not only redistribution but also recognition, participation, and ecological sustainability. As Sánchez-García and colleagues note, achieving justice in one domain requires coordinated progress across others: economic, gender, racial, and environmental injustices are mutually reinforcing. Similarly, Deivanayagam and others argue that addressing climate and racial inequities jointly produces co-benefits for health and social cohesion [43]. In policy terms, a comprehensive social-justice agenda should encompass:

- 1) Redistribution, through progressive taxation, universal basic services, and inclusive access to education and health [44, 30].
- 2) Recognition, by institutionalising anti-discrimination frameworks and empowering marginalised groups to claim their rights [45].
- 3) Participation, by embedding procedural justice in governance and ensuring meaningful inclusion of disadvantaged populations in decision-making [46].
- 4) Sustainability, by aligning climate adaptation and environmental protection policies with equity and human-rights principles [47, 48].

The pursuit of social justice requires reimagining governance to reconcile economic growth with human dignity, ecological balance, and intergenerational equity. It is only by embedding justice across all policy domains that societies can create inclusive futures in which every individual has the capability and opportunity to thrive. The African Court on Human and Peoples' Rights in *African Commission on Human and Peoples' Rights v Republic of Kenya* [49] emphasised the state's obligation to ensure equitable benefit-sharing and economic participation of affected communities (African Commission, 2019). Similarly, the UN Committee on Economic, Social and Cultural Rights (CESCR) General Comment No. 24 underscores the obligation of states to ensure that economic reforms, including those arising from structural adjustment programmes or fiscal austerity, do not compromise basic socio-economic rights [50].

In the Advisory Opinion on the *Obligations of States in respect of Climate Change*, the International Court of Justice (ICJ) emphasised that the human right to a clean, healthy, and sustainable environment is essential for the enjoyment of other human rights [51]. The ICJ emphasised that States have a positive legal obligation to protect human health from climate-

related threats. The opinion provides a legal foundation for holding States accountable for their role in climate change and underscores the integral connection between environmental protection and the enjoyment of human rights. Inspired by the ICJ's opinion, this discussion focuses on the environmental justice dimension of social justice, which impacts the right to adequate food and nutrition—a right that underpins other fundamental rights, such as the right to life, health, well-being, and dignity.

However, this discussion focuses on the environmental justice dimension of social justice, particularly its implications for the right to adequate food and nutrition—a cornerstone of human security and sustainable development. The right to food is more than a matter of subsistence; it is a foundational human right whose realisation underpins the enjoyment of other interdependent rights, including the rights to life, health, well-being, and human dignity [52]. As recent scholarship emphasises, food and nutrition security cannot be achieved without addressing the structural and environmental injustices that shape access to land, water, and ecological resources [53].

The environmental justice perspective thus situates hunger and malnutrition within broader systems of inequality, highlighting how marginalised communities—particularly in climate-vulnerable regions—bear disproportionate burdens of environmental degradation, resource depletion, and climate-induced food insecurity [54]. As the Food and Agriculture Organisation (FAO) notes, safeguarding the right to adequate food also entails guaranteeing a healthy environment, since the two rights are mutually reinforcing [55]. Ensuring environmental justice, therefore, requires not only equitable access to natural resources but also the integration of climate adaptation and ecological sustainability into governance frameworks. In this sense, the denial of adequate food and nutrition represents more than material deprivation; it is a structural injustice that perpetuates vulnerability and exclusion—undermining the very essence of social justice and human dignity.

3. Human Security as a Theoretical Lens for Social Justice

The concept of human security provides a powerful conceptual framework for bridging the domains of social justice and climate justice. In echo of Amartya Sen's formulation that “the real measure of national prosperity is the extent to which people are free from fear, want, and indignity,” human-security theory centres the individual and community rather than the state as its primary referent of concern [29]. Where traditional security approaches focus on territorial integrity or military threats, human security foregrounds the protection and empowerment of individuals, as well as the safeguards for their livelihood, dignity, and rights [56].

Thus, human security provides a transformative and human-centred framework through which social justice can be meaningfully pursued in an age of accelerating climate

disruption [57]. In contrast to orthodox security paradigms that privilege state sovereignty, territorial integrity, and military preparedness, the human security approach repositions the individual and community as the referent of security. Human security seeks to confront the structural vulnerabilities—poverty, inequality, exclusion, and ecological degradation—that imperil human dignity and collective survival [58]. By interlinking freedom from fear, freedom from want, and freedom to live in dignity, human security expands the terrain of justice to include both distributive equity and ecological integrity as prerequisites for sustainable peace [59].

Viewed through this lens, human security can serve as an integrative framework, linking human rights, climate justice, and sustainable development, thereby foregrounding governance coherence in pursuit of equitable transformation. Climate justice, from this vantage, is not simply about greenhouse-gas emissions or conservation per se; it encompasses questions of redistributive justice, intergenerational equity, and the right to sustainable livelihoods [60].

Vulnerability in this framing is not only a function of geography or resource endowment but is also shaped by governance choices and institutional design. The failure to embed climate resilience into core socio-economic development policy constitutes a form of governance incoherence that undermines human security. For example, agricultural policy may prioritise yield maximisation without due regard for soil health or climate adaptation; mining policy may privilege short-term revenue over ecological restoration; infrastructure policy may sideline rigorous environmental impact assessment; and energy policy may expand supply without integrating renewable pathways or climate-risk mitigation. Such sectoral, siloed approaches fragment governance efforts, weaken protective systems and thus violate not only policy coherence but the spirit of rights-based human security guarantees [61].

In turn, a human-security informed governance framework demands a shift from sectoral policy to systemic governance—moving from isolated initiatives to a more integrated climate governance architecture. This means (a) designing policy so that human safety, dignity and resilience are front and centre, (b) ensuring that adaptation and mitigation strategies are embedded in the social and economic policy space, and (c) realigning institutional structures so that they respond to interconnected risks rather than conventional functional boundaries. In doing so, the human security lens clarifies how social justice and climate justice are deeply interwoven: securing livelihoods, protecting rights, enabling participation, and building resilience are as essential to justice as are redistribution and ecological stewardship.

The climate crisis magnifies every dimension of human insecurity [62]. Rising sea levels and advancing desertification displace populations, eroding cultural heritage and ancestral identity as homelands become uninhabitable [63]. Intensifying heatwaves, floods, and water scarcity undermine public health and hygiene, fueling outbreaks of vector- and waterborne diseases such as cholera and malaria. Shifting rainfall

patterns and declining soil fertility pose a significant threat to food sovereignty and livelihoods, particularly among subsistence farmers whose survival depends on fragile ecosystems. These cascading impacts disproportionately burden women, children, and economically marginalised groups, entrenching pre-existing inequalities and social exclusion [64].

Viewed through the prism of human security, climate change is not merely an environmental or developmental challenge but a profound question of justice [65]. It compels a re-conceptualisation of constitutional values—dignity, equality, and the right to life—as living principles that bind states to protect both people and planet. In doing so, the human security paradigm bridges climate justice and social justice, affirming that the protection of humanity's ecological foundations is integral to the constitutional promise of human flourishing [66].

4. Climate Change as a Threat Multiplier to Human Security

Climate change is not merely an environmental or developmental concern—it constitutes a profound threat to human security, undermining the state's capacity to ensure the well-being, dignity, and survival of its citizens. The manifestations of climate change in sub-Saharan Africa are neither distant nor abstract; they are immediate, material, and deeply human, affecting food systems, public health, shelter, and political stability. As such, climate change must be understood as a multi-dimensional governance and constitutional challenge, not only an ecological one. Left unaddressed, its cumulative effects threaten to erode national cohesion, intensify inequality, and destabilise fragile gains in peacebuilding and development [67–69].

4.1. Agricultural Dependency and Food Insecurity

Malawi's vulnerability to climate change is rooted in its structural dependency on rain-fed agriculture, which employs more than 80 percent of the population. This reliance exposes rural livelihoods to erratic weather patterns, including delayed rainfall, prolonged dry spells, and flash floods. Recent climate shocks—such as Cyclone Ana (2022) and Cyclone Freddy (2023)—devastated agricultural output and critical infrastructure across Malawi, Mozambique, and Zimbabwe [70].

Declining maize yields and crop failures are directly linked to rainfall variability and temperature extremes, which shorten planting cycles and reduce harvests. In the absence of irrigation infrastructure, climate insurance, and adaptive technologies, smallholder farmers remain locked in a cycle of vulnerability and poverty. The effects are gendered: women-headed households and children are disproportionately affected by recurrent food insecurity [71]. This highlights the need for climate-resilient livelihoods and social protection frameworks.

4.2. Displacement, Urban Vulnerability, and Social Fragility

Climate-induced displacement has emerged as an under-recognised human security crisis in Malawi and the broader region. Recurrent flooding has destroyed homes, schools, and healthcare facilities, forcing thousands into displacement each year. Many relocate to urban centres, where they often occupy informal and hazard-prone settlements, lacking access to water, sanitation, and health services [72].

Urban vulnerability is further exacerbated by rapid population growth and inadequate urban planning. Informal settlements situated on flood plains and riverbanks are increasingly exposed to floods, heatwaves, and disease outbreaks. These dynamics deepen social fragility and may escalate urban resource conflicts, particularly as climate migration continues to reshape demographic and political landscapes [73]. Without proactive climate-sensitive urban governance and durable relocation strategies, cities risk becoming epicentres of chronic vulnerability.

4.3. Climate-Sensitive Health Impacts

Beyond displacement and food insecurity, climate change poses a direct threat to public health. Changing climatic patterns have altered the transmission dynamics of vector- and water-borne diseases. Malaria incidence is expanding into previously low-risk zones due to rising temperatures and increased precipitation. Similarly, the 2023 cholera outbreak in Malawi, which closely followed major floods, demonstrated the link between climatic disasters, contaminated water sources, and health crises [74].

In addition, nutritional insecurity driven by declining agricultural productivity has worsened malnutrition, particularly stunting and wasting among children under five. These health outcomes intersect with weak healthcare systems, limited access to clean water, and poverty, compounding systemic vulnerability [75]. The health dimension of climate change thus represents not only a development issue but also a question of human rights and governance accountability.

4.4. Climate Change as a Threat Multiplier and Governance Challenge

Climate change serves as a threat multiplier, amplifying existing structural stressors—such as poverty, land degradation, demographic pressures, and institutional weakness. It magnifies grievances, undermines social cohesion, and in fragile contexts, can catalyse political instability [76, 77].

This framing compels a shift from viewing climate change as a technical or environmental issue to recognising it as a national security and governance imperative. The state's capacity—or failure—to prepare for and respond to climate shocks through disaster management, adaptive planning, and inclusive policy becomes a determinant of legitimacy and state

resilience. A rights-based, justice-oriented approach to adaptation is therefore essential to prevent environmental degradation from translating into human insecurity [66].

4.5. Climate Injustice: Catalysts for Human Insecurity and the Vulnerability of the Polity

The discourse on climate change must transcend ecological degradation or carbon metrics to embrace its human and political dimensions. It is a lived crisis that touches the core of human well-being—food, water, health, shelter, and security. Theorists of climate justice argue that justice must encompass not only distribution but also participation, recognition, and accountability [78]. This framework aligns with human security theory, which transcends state-centric paradigms to prioritise protecting livelihoods, rights, and dignity in the face of climate stress [79, 80].

4.6. Human Security and the Lived Reality of Climate Risk

In Malawi and similar contexts, climate change manifests as a daily assault on livelihoods and dignity. Over 80 per cent of the population depends on climate-sensitive agriculture, making communities acutely vulnerable to droughts, floods, and cyclones [81]. These “slow-onset disasters” trigger food insecurity, displacement, and erosion of social safety nets—undermining long-term development and peacebuilding [82].

Urban vulnerability mirrors rural precarity. Poorly serviced settlements face heightened risks of flooding, heat stress, and disease outbreaks, deepening the intersection of climate, inequality, and gendered marginalisation. Women, children, and persons with disabilities often bear the heaviest burdens, revealing the intersectional nature of climate vulnerability [83].

Unplanned climate-induced migration is reshaping Malawi's socio-political fabric. Migrants from climate-stressed areas often enter informal labour markets with limited protections, straining already fragile urban economies. Without anticipatory governance and equitable adaptation, these pressures risk eroding trust in state institutions and fueling social unrest.

In this light, climate change is best understood as a systemic governance challenge—a multiplier of inequality that corrodes state legitimacy and weakens the social contract. Its unequal impacts reinforce the imperative for a justice-centred climate policy grounded in inclusion, accountability, and constitutional principles.

4.7. Constitutional Potential and Policy Failure

Malawi's Constitution provides a progressive framework for environmental stewardship, social justice, and intergenerational equity. It guarantees the right to development, the sustainable use of natural resources, and the protection of the

environment for present and future generations. Yet, climate and economic policies seldom align with these constitutional obligations. Policy priorities remain anchored in short-term macroeconomic stabilisation rather than structural transformation or climate resilience [84].

This disconnect between constitutional ideals and policy execution reflects governance failure. Environmental agencies often operate underfunded and with weak mandates; inter-ministerial coordination remains fragmented. Moreover, elite capture and regulatory asymmetries skew the distribution of climate finance and adaptation resources. Unless transparent oversight and participatory mechanisms are institutionalised, emerging instruments such as carbon markets may exacerbate inequality and disenfranchise vulnerable communities [85].

4.8. Power Asymmetries and the Risk of Exclusion

The growing political economy of climate action presents both opportunities and risks. Without strong legal and institutional safeguards, those with access to land, capital, and political networks are more likely to benefit from climate investments—through carbon credit schemes, green energy projects, or conservation financing—while smallholders and marginalised groups remain excluded [86].

To prevent climate adaptation from replicating historical inequities, Malawi must democratize access to climate finance and empower local actors in the design, implementation, and monitoring of adaptation projects. Climate justice, therefore, must evolve from a rhetorical aspiration into a constitutional and humanitarian imperative—one that ensures environmental sustainability, human dignity, and intergenerational fairness [66].

5. Case Study: The Carbon Market Initiatives Conundrum

The growing interest in carbon markets marks a critical inflexion point in the global climate-policy landscape—and in the fiscal strategies of many low-income countries. In Malawi, for example, the 2025/26 national budget highlighted the government's commitment to carbon finance, announcing the registration of forty-seven carbon developers across various sectors, including agriculture, energy, sustainable forestry, and waste management [87]. These initiatives are projected to generate approximately 5.9 million carbon credits, with potential revenues reaching US\$60 million. By contrast, in the Malawian 2024/25 fiscal year, carbon-credit trading—mainly through REDD+ and community-based forestry initiatives—generated roughly US\$10.3 million, signalling growing momentum toward leveraging carbon markets for sustainable development [88].

Such developments demonstrate an emerging political

consensus that carbon markets offer both economic opportunity and environmental leverage. Malawi's ongoing efforts to develop a national framework under Article 6 of the Paris Agreement, which facilitates both voluntary and compliance markets, illustrate this ambition [89]. However, these opportunities are tempered by governance risks. Many carbon projects operate outside formal oversight, and the enabling legal and regulatory frameworks remain incomplete [90]. Revenues from carbon levies or environmental taxes are sometimes absorbed into the consolidated national account rather than being earmarked for climate action [91]. Without institutional safeguards, carbon markets risk evolving into mechanisms of elite capture rather than instruments of climate justice.

5.1. Governance and Regulatory Fragility

Despite visible activity in carbon project development, the regulatory environment remains weak. Although a draft Carbon Trading Framework and related Article 6 instruments are in progress, they are not yet fully operational. Consequently, numerous projects operate without adequate oversight, raising concerns about transparency, environmental integrity, and social accountability. The absence of a national carbon registry and independent verification systems also increases the risk of double-counting, non-additionality, and carbon leakage—problems that have undermined market credibility elsewhere [92].

While Malawi provides a useful contextual lens for examining climate-related fiscal dynamics, the challenge of weak budgetary governance in managing carbon revenues is not unique to Malawi. In many developing economies, carbon-related revenues risk fungibility, as they are often absorbed into general treasury accounts rather than being ring-fenced for environmental protection or equitable local benefit-sharing (World Bank, 2019). This pattern highlights a broader structural issue in public financial management across low- and middle-income countries, where institutional and accountability gaps can undermine the developmental impact of climate-finance inflows [91]. This practice undermines public confidence and weakens institutional legitimacy. Unless fiscal and ecological governance mechanisms are reinforced, carbon markets risk reproducing the same inequities that have historically characterised natural resource management in Africa.

5.2. Climate Justice and Structural Trade-offs

Integrating carbon markets into national climate strategies entails significant structural trade-offs. While carbon trading offers much-needed fiscal inflows and access to international finance, it also risks deepening inequality if designed without adequate safeguards. Evidence from across Africa shows that carbon offset initiatives frequently privilege carbon efficiency over community well-being, marginalising smallholders, women, and Indigenous groups [93].

Governments must therefore avoid adopting carbon market

models that prioritise expediency over equity. For low-income economies, the tension between macroeconomic stabilisation and long-term resilience is particularly acute. Carbon finance should *complement* rather than replace public investment in transformative adaptation, agro-ecological innovation, and decentralised energy systems. Furthermore, land-based sequestration projects must not perpetuate land dispossession or exclusionary practices under the guise of climate mitigation [94].

5.3. International Obligations and Intergenerational Responsibility

Carbon market participation is not simply a domestic policy choice; international legal and normative frameworks shape it. Under the Paris Agreement, states are obliged through their Nationally Determined Contributions (NDCs) to pursue mitigation and adaptation consistent with principles of equity, transparency, and ambition [95]. Moreover, human rights obligations require that climate action uphold the rights of affected populations, including future generations [23].

Intergenerational justice must thus guide the architecture of carbon markets. Policymakers should ensure that short-term fiscal incentives do not jeopardise the ecological and social futures of younger generations. This demands participatory governance, enforceable benefit-sharing agreements, and strong environmental and social safeguards. Properly designed, carbon markets can become instruments for both emissions reduction and inclusive low-carbon development.

5.4. Missed Opportunities: The Carbon Credit Conundrum

Globally, carbon markets are recognised as a vital frontier for climate finance. Their annual value is projected to surpass US\$50 billion by 2030, potentially reaching the trillion-dollar threshold later in the century [96]. When governed equitably, these markets can generate multiple public goods—supporting afforestation, conservation agriculture, renewable energy, and local revenue generation.

Yet in most sub-Saharan African countries, the carbon-credit agenda remains fragmented, under-regulated, and vulnerable to elite capture [97]. Despite increased participation in mechanisms such as REDD+ and voluntary carbon markets, few states possess comprehensive constitutional or legal frameworks to guarantee transparency and equitable benefit-sharing [97]. As a result, carbon finance often fails to deliver tangible benefits for local communities or to advance inclusive development.

5.5. The Governance Gap: Carbon as a Policy Orphan

In Malawi, the carbon market remains characterised by institutional ambiguity and regulatory inertia. While the national

budget acknowledges the registration of forty-seven carbon developers and reports modest revenues from community forestry, the broader framework remains a “policy orphan”—detached from mainstream economic or climate policy planning [97]. Most African countries likewise lack enforceable Article 6 legislation to guide project approval, benefit-sharing, and verification. This vacuum enables opaque negotiations, weak enforcement of safeguards, and opportunities for rent-seeking by elites.

Research has shown that poorly governed carbon markets can enable “green grabs,” where land and natural resources are appropriated under the guise of offsetting with little benefit to local populations [98-101]. Moreover, fiscal proceeds from carbon credits, where collected, often lack traceability and are diverted into general revenue rather than being reinvested into adaptation or community resilience. This weakens public trust and discourages community participation, both of which are essential for sustainable ecosystem stewardship and emissions reduction.

5.6. Climate Justice, Rights, and Benefit-Sharing

For carbon finance to fulfil its potential in Malawi, it must be grounded in a rights-based approach that guarantees transparency, participation, and equity across the carbon value chain. This includes ensuring free, prior, and informed consent (FPIC) in project design; legally enforceable community benefit-sharing agreements; gender-sensitive inclusion; public registries for financial and environmental performance; and independent auditing of outcomes. Such an approach would align not only with international climate justice norms but also with Malawi’s constitutional commitments to fairness, sustainability, and community empowerment. Without such safeguards, carbon markets risk replicating historical asymmetries in natural resource governance—benefiting the few while marginalising the many.

5.7. Strategic Integration into National Development

To transcend policy fragmentation, carbon markets must be embedded within national climate and development planning, rather than treated as ad hoc or purely fiscal instruments. Integration with NDC targets, development priorities, and fiscal policy is essential. Institutional coordination among the ministries of finance, natural resources, local government, and climate change must be formalised through clear mandates and accountability frameworks.

International cooperation—particularly for capacity building in measurement, reporting, and verification (MRV), environmental and social impact assessment (ESIA), and institutional design—remains crucial. Nonetheless, the state bears the principal responsibility to ensure that carbon markets advance the public good and deliver equitable climate finance.

The challenge is not merely to trade carbon, but to transform governance so that carbon finance contributes to a just, resilient, and inclusive future.

The negative externalities of carbon markets—such as the displacement of local communities, restrictions on land use, or inequitable benefit-sharing—translate directly into human security vulnerabilities [102]. When forest-dependent communities lose access to traditional lands or resources under carbon credit schemes, their food security, cultural identity, and livelihood resilience are eroded [103]. These outcomes illustrate how poorly regulated climate finance mechanisms can deepen, rather than alleviate, human insecurity.

To constitutionalise human security is to embed safeguards that ensure that climate mitigation and adaptation measures respect human rights, equity, and environmental integrity [104]. This requires constitutional and legislative guarantees of participation, transparency, and fair benefit-sharing in climate-related investments. In this way, constitutionalism serves both as a normative compass and a regulatory framework that transforms human vulnerability into resilience by ensuring that responses to climate change promote, rather than undermine, social justice and sustainable development [2].

6. Towards Systemic and Socially Just Climate Governance in Sub-Saharan Africa

The intensifying climate crisis is not only an ecological or economic challenge—it is fundamentally a question of social justice. Sub-Saharan Africa, though contributing minimally to global greenhouse gas emissions, bears a disproportionate burden of climate impacts, including droughts, cyclones, and displacement. Addressing these injustices demands not incremental adaptation but a systemic transformation of governance that integrates justice, equity, and human rights into every dimension of development planning.

Climate governance in sub-Saharan Africa must therefore move beyond narrow environmental management to embrace climate justice as both a constitutional principle and a governance framework. This entails embedding environmental rights, equity, and participatory mechanisms into fiscal policy, legal systems, and institutional structures. It also requires states to guarantee that those most affected by climate impacts—women, youth, smallholder farmers, and Indigenous communities—are not merely beneficiaries of policy but co-authors of resilience.

From a human security perspective, climate justice is not merely a matter of equitable distribution; it is inherently transformative, aiming to address and rectify the structural inequalities and power asymmetries that underpin vulnerability to climate impacts [105]. Such transformation demands legal, economic, and political systems capable of aligning state action with the lived realities of the climate-vulnerable.

Codification and Institutionalising Human Security and

Climate Justice

SSA countries can draw inspiration from within the continent. Kenya's Constitution (Article 42) enshrines the right to a clean and healthy environment, and the *Climate Change Act* (2016) institutionalises inter-ministerial coordination and public participation. South Africa's Constitution (Section 24) makes environmental protection and sustainable development justiciable rights, enabling citizens to challenge environmentally harmful state decisions. Rwanda's 2011 Green Growth and Climate Resilience Strategy [106] integrates social inclusion and gender equity into national development priorities.

These examples illustrate how constitutionalisation of environmental rights can transform climate justice from a rhetorical ideal to a legally enforceable norm. However, the challenge remains translating these rights into practice. In many countries, climate-related decision-making remains elite-driven and technocratic, marginalising the very populations whose livelihoods depend on equitable and sustainable outcomes.

A socially just approach requires polycentric governance—a multi-level and participatory system where authority is shared among national, local, and community actors [107–109]. Such a framework not only enhances accountability but also ensures that climate policies reflect local priorities, traditional knowledge systems, and community consent, thereby enhancing legitimacy and effectiveness.

6.1. Bridging Social and Economic Dimensions of Climate Governance

The social and economic pillars of climate governance are deeply intertwined. Without justice, economic policies risk perpetuating vulnerability; without fiscal coherence, social rights remain aspirational. Sub-Saharan Africa's dominant growth model—driven by extraction, export dependence, and external financing—exacerbates ecological degradation and social inequality. A justice-oriented climate economy must therefore internalise ecological limits, redistribute benefits equitably, and prioritise resilience over growth maximization [110, 111].

Three dimensions define such governance transformation:

- a) **Redistributive Justice:** Climate finance and carbon revenues must directly benefit communities most exposed to climate risks. Mechanisms such as community-managed adaptation funds, transparent carbon registries, and locally governed benefit-sharing schemes should become standard practice. These instruments enhance fairness while building social trust and ownership of climate initiatives.
- b) **Procedural Justice:** Participation must be institutionalised, not tokenistic. States should operationalise Free, Prior, and Informed Consent (FPIC), public hearings, and environmental impact consultations as mandatory prerequisites for climate-related investments. Procedural fairness ensures that policies are informed by

plural knowledge systems and social realities rather than imposed through top-down technocracy.

- c) Restorative and Intergenerational Justice: Climate governance must account for historical injustices and safeguard the rights of future generations. This includes mechanisms to redress displacement, restore degraded ecosystems, and promote youth inclusion in green economy transitions. As Okereke and Coventry contend, intergenerational climate justice links ethics with governance, ensuring that present policies do not mortgage future well-being for short-term fiscal gains [112].

6.2. Operationalising Climate Justice through Governance Reform

Turning principles into practice requires embedding justice in institutional design and public finance systems. Climate budgeting and green fiscal rules should guide national expenditures, ensuring resources are allocated toward adaptation, renewable energy, and social protection. Parliaments and audit institutions must be empowered to review fiscal decisions through a *climate justice lens*, holding executives accountable for both environmental integrity and distributive equity [113].

Regional frameworks such as the African Union Climate Change and Resilient Development Strategy (2022–2032) provide a normative foundation for coherence. Yet implementation depends on domestic political will and institutional capacity. Governments must establish independent climate commissions with mandates to oversee policy integration, monitor equity outcomes, and ensure that climate finance—domestic or international—is deployed transparently and inclusively.

Moreover, a socially just climate transition requires aligning global mechanisms—such as Article 6 of the Paris Agreement and carbon markets—with local priorities [114]. Without enforceable safeguards, these instruments risk reproducing historical inequities through “green grabbing” and carbon colonialism [115]. Strong governance must therefore ensure that carbon finance serves as a vehicle for social transformation, not elite accumulation.

Adopting a Climate Justice Compact for Sub-Saharan Africa

Sub-Saharan Africa stands at a crossroads. The region’s vulnerability to climate change mirrors its potential to lead in defining a justice-centered model of governance. The creation of a Climate Justice Compact—anchored in shared responsibility among governments, civil society, and regional institutions—could reframe the climate agenda around equity, participation, and solidarity. Key priorities include:

- a) Mainstreaming climate justice into constitutional and development frameworks (e.g., AU Agenda 2063, national transformation strategies) [116].
- b) Institutionalising transparency and accountability in climate finance and carbon markets.
- c) Strengthening social protection systems that link adaptation with livelihoods and gender equity.

- d) Mobilising regional solidarity to negotiate fairer global climate finance terms.
- e) Investing in civic and youth capacities to sustain long-term climate democracy.

The pursuit of climate justice is not only a legal or moral imperative—it is a structural necessity for sustainable peace, resilience, and democratic renewal. By aligning governance with justice, and justice with ecological integrity, Sub-Saharan Africa can transform climate vulnerability into a platform for inclusive transformation.

7. The ARMS Framework: Realisation of Human Security and Social Justice Policies

A just and sustainable climate response requires more than infrastructure investment; it demands a paradigm shift towards human-centred adaptation, equity, and resilience. Policies must prioritise social protection mechanisms, support climate-resilient agriculture, and develop rights-based frameworks for internal displacement.

Climate justice must be understood as both a constitutional obligation and a humanitarian imperative—one that recognises the disproportionate burden borne by the poorest communities and future generations. For example, Malawi’s Vision 2063 offers a roadmap for inclusive and sustainable development, but its realisation depends on the mainstreaming of climate security across all levels of governance [117].

While General Comment 12 unpacked the right to adequate food and nutrition in terms of availability, accessibility, and adequacy, it presumes all conditions are equal. The General Comment neglects a critical and constant disruptor: climate change. Climate change disproportionately affects vulnerable populations, compromising their right to adequate food and nutrition. Climate change affects agricultural productivity, food availability, and accessibility, resulting in food insecurity and malnutrition [118]. Climate change exacerbates human insecurity by threatening livelihoods, health, and well-being. Similarly, General Comment 27 outlines states’ duties to respect, protect, and promote human rights, yet fails to articulate these duties through the lens of human security. This is further augmented by General Comments 15 and 25, which detail aspects of human security beyond food. Seen together, this necessitates a shift in our understanding — from rights in abstraction to rights under climate threat to achieve human rights.

Despite decades of progress in normative and legal advancements, global hunger persists. As scholars have rightly asked: why do we continue to fail in achieving Sustainable Development Goal (SDG) 2 — *Zero Hunger* — in a world marked by abundance? [119]. The paradox of persistent food insecurity amidst global surplus is neither a function of technical incapacity nor policy vacuum; it is, fundamentally, a crisis of implementation. Laws exist. Policies abound. Yet institutions repeatedly fall short in operationalising these

frameworks in ways that deliver justice to both people and the planet.

To move beyond this impasse, this discussion proposes the ARMS Framework — a tripartite strategy grounded in the interlinked imperatives of Accountability, Responsibility, Monitoring and Evaluation, and Sustainability— as a normative and operational tool for translating policy commitments into concrete action [120]. Each of these elements is drawn from and responsive to interdisciplinary scholarship and the lived realities of communities navigating the interwoven crises of hunger, climate change, and socio-economic marginalisation.

7.1. Accountability

Accountability must be reimagined beyond narrow legal compliance or state-centric models [121]. In the era of poly-centric governance, where private and transnational actors wield significant influence over food systems and environmental outcomes, accountability must encompass multi-actor regimes [122]. This includes not only state institutions but also agribusiness corporations, international financial institutions, and even consumers — all of whom act as “right-bearers” and “duty-holders” within the human rights ecosystem [123]. Tools such as environmental and human rights impact assessments, social audits, and participatory monitoring frameworks are increasingly being deployed to hold actors accountable at multiple scales [124].

For instance, in Kenya’s Climate Change Act (2016), the creation of County Climate Change Funds (CCCFs) institutionalised downward accountability by requiring local governments to report expenditures and project outcomes publicly [125, 126]. This participatory budgeting model ensures that adaptation funds reach marginalised communities, such as the pastoralist regions in Garissa and Turkana, where local committees verify expenditure and project effectiveness [127]. Such initiatives demonstrate how accountability mechanisms can transform abstract policy commitments into enforceable, community-owned processes.

7.2. Responsibility

Closely tied to accountability is the imperative of ethical responsibility [128]. This goes beyond formal obligations to include anticipatory and preventive governance, where decision-makers internalise the social and environmental costs of their policies and investments [129]. For example, climate-smart agricultural initiatives must not only mitigate emissions but also avoid reinforcing inequitable land tenure arrangements or gender hierarchies. A shift toward responsibility also requires embedding intergenerational justice into planning — a core principle in climate justice theory and practice [130].

In Ghana, for example, the “Planting for Food and Jobs” programme integrates responsibility into its design through gender-sensitive training and youth inclusion [131]. This reflects a deliberate policy effort to prevent the exclusionary

outcomes of earlier agricultural modernisation projects. By foregrounding responsibility, policymakers transform development initiatives from technical exercises into ethical and social commitments toward future generations [132].

7.3. Monitoring and Evaluation

Monitoring and Evaluation (M&E) functions as the operational backbone of the ARMS Framework, translating normative commitments in accountability, responsibility, and sustainability into measurable action [133]. It encompasses the systematic collection, analysis, and reporting of data to track the implementation and impact of policies, programs, and interventions across various sectors, including agriculture, climate adaptation, and social protection. Effective M&E ensures that multi-actor accountability is verifiable, ethical responsibilities are observed, and sustainability objectives are being met over time. Participatory monitoring, community scorecards, and impact assessments are critical tools, enabling not only state actors but also local communities, civil society, and private sector participants to evaluate outcomes and provide feedback.

Empirical examples illustrate this operational logic in practice. In Malawi’s Social Support for Resilient Livelihoods Programme (2021–2028), community monitoring groups collaborate with district councils to track both quantitative and qualitative indicators—ranging from rainfall variability to household dietary diversity scores [134]. This approach ensures that adaptation measures remain context-responsive and that feedback from vulnerable groups directly informs the re-design of the project [135].

Similarly, Kenya’s National Drought Management Authority (NDMA) has institutionalised early warning systems that combine satellite data with community-based observations, enabling adaptive responses to food insecurity before crises escalate [136]. Thus, M&E, when participatory and iterative, functions not merely as a technocratic reporting exercise but as a process of co-production between policymakers and communities. It ensures that the ARMS Framework remains grounded in empirical realities, thereby being responsive to shifting climatic, socio-economic, and political contexts across Africa.

In operational terms, effective M&E under the ARMS Framework follows three key dimensions: diagnostic monitoring, which involves identifying gaps in policy translation through real-time, disaggregated data; adaptive evaluation, which consists of revising interventions based on community feedback and environmental change; and transformative learning, which involves embedding lessons from both successes and failures into institutional practice [137]. Thus, the ARMS Framework embeds robust M&E mechanisms to ensure adaptive learning, continuous improvement, and evidence-based decision-making, thereby operationalising its core principles of justice, equity, and resilience.

7.4. Sustainability

Finally, any effort to address hunger and climate injustice must be anchored in long-term ecological and human sustainability [138]. The concept of *sustainability* in this context is not merely about maintaining agricultural productivity but about securing food sovereignty, biodiversity, and community resilience in the face of planetary boundaries [139]. As scholars in political ecology and development studies note, sustainable practices must challenge the extractive logics of global agri-food systems and instead prioritise agro-ecological, culturally sensitive, and locally adaptive practices [140].

In practice, the sustainability component of the ARMS Framework is reflected in Africa's growing network of climate-smart villages, such as those in Nyando (Kenya) and Chikwawa (Malawi) [141]. (These initiatives operationalise sustainability through diversified farming systems, renewable energy integration, and community-based adaptation planning, demonstrating how long-term ecological resilience can coexist with social equity and local ownership.)

In realising social justice, the relevance of the ARMS Framework lies in its emphasis on interconnected processes that advance equitable and enduring outcomes. The framework underscores the urgency of: Multi-actor accountability, especially across sectors that have traditionally operated in silos — such as public policy, corporate governance, and civil society mobilisation; rights-based approaches in socio-economic development, climate policy, and humanitarian programming, where communities are not passive recipients but active agents of change; robust monitoring and evaluation mechanisms to track progress, ensure transparency, and inform adaptive learning across policy and practice; and sustainable transitions in agriculture, energy, and food systems that resist technocratic fixes in favour of transformative and inclusive structural change.

Thus, the ARMS Framework is not merely aspirational but demonstrably actionable. By integrating empirical practices from across the African continent, it provides a coherent and verifiable lens through which policymakers, scholars, and practitioners can assess gaps, design interventions, and evaluate outcomes in ways that prioritise justice, equity, and resilience.

8. Conclusion: Achieving Human Security, Social Justice, and Climate Justice

Countries in sub-Saharan Africa stand at a defining moment in their democratic and developmental trajectory. The confluence of intensifying climate shocks, structural economic vulnerability, and institutional fragmentation has exposed the limits of incrementalism. Yet, amidst this fragility lies a powerful opportunity: constitutional guarantees of environmental stewardship and human dignity, its rich ecological endowments, and recent policy shifts offer the foundations for transformative governance. As multiple studies now confirm,

unless climate justice is embedded into the core architecture of states' economic governance—laws, institutions, policies, and public accountability mechanisms—the sub-Saharan African countries will remain trapped in a cycle of reactive adaptation, fiscal strain, and deepening inequality [142, 143]. The transition needed is not technocratic—it is political, constitutional, humanitarian and human security issue.

Climate justice must be understood not merely as an environmental imperative, but as the protection of human dignity, the integrity of a country's future, and the human security compact between state and citizen. It demands that the economy serve both people and planet; that governance function not as control, but as stewardship [144]. By linking human security to constitutional principles, this article highlights that the climate crisis is not only an environmental or developmental challenge, but also a constitutional one [141]. Ensuring that climate policies, including market-based mechanisms, are grounded in justice, accountability, and inclusivity transforms human security from a rhetorical aspiration into a constitutional commitment. Only through this integration can states ensure that the pursuit of climate resilience does not sacrifice the rights, welfare, and dignity of the people it is meant to protect [145]. As Kofi Annan presciently noted: “Our biggest challenge in this new century is to take an idea that seems abstract—sustainable development—and turn it into a daily reality for all the world's people.”

In this light, the path from precipice to policy reform demands reimagining governance as a tool for intergenerational equity, social justice, and constitutional fidelity. This is not a utopian vision. Countries across the Global South have begun institutionalising climate budgeting, embedding resilience into legal frameworks, and leveraging climate finance for inclusive development [145, 146]. Each country must do the same—on its own terms, and with its own democratic values.

This requires a shift from growth-centric models to justice-oriented governance, where every policy decision is measured not only by its economic return, but by its contribution to resilience, equity, and sustainability. It means empowering local communities as co-governors of adaptation strategies; holding public institutions accountable for environmental neglect; and ensuring that the burdens and benefits of climate transitions are distributed fairly.

The climate crisis is not just an ecological issue, but also a constitutional and human security issue. The true test of the country's economic policy is not how fast it grows, but how equitably and sustainably its people survive and thrive in a climate-uncertain future. Climate justice is not an option—it is an obligation. To this end, the true test of any state's socio-economic development policy is not merely how fast it grows, but how equitably and sustainably it endures. Therefore, by reframing the pursuit of social rights, climate justice, and sustainable development through a human security lens, sub-Saharan African countries can chart a path toward a more just, resilient, and inclusive, people-centered future. Operationalising this vision requires adopting an integrated framework such

as the ARMS strategy, which emphasises *Accountability, Responsibility, Monitoring, and Sustainability*. This approach not only ensures that duty-bearers are held accountable and decision-makers act responsibly but also embeds systematic monitoring and evaluation mechanisms that anchor policies in equitable and sustainable practices.

Author Contributions

Dan Kuwali is the sole author. The author read and approved the final manuscript.

Conflicts of Interest

The author declares no conflicts of interest.

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