



## ARTICLE

# Applying the Entitlement Approach to Understand Food Security Dynamics in South Africa

Mfundo Mandla Masuku <sup>1\*</sup> , Zinhle Mthembu <sup>2</sup> , Mbongeni Shadrack Sithole <sup>3</sup>

<sup>1</sup> Discipline of Development Studies, University of KwaZulu-Natal, Durban 4000, South Africa

<sup>2</sup> Department of Anthropology and Development Studies, University of Zululand, KwaDlangezwa 3886, South Africa

<sup>3</sup> Department of Social Work, University of the Western Cape, Cape Town 7535, South Africa

## ABSTRACT

This paper applies Amartya Sen's entitlement approach as a lens for analysing food security within the South African democratic context. Based on multiple disciplinary perspectives and an entitlement approach as a lens, the paper examines how the country's political and economic structures influence individuals' capability to access food and secure entitlements in a post-apartheid society. A systematic literature review was conducted across six electronic databases to locate peer-reviewed English-language literature published between 1981 and 2022. Despite South Africa's political and economic developments, individuals in households continue to struggle to meet their basic needs. This limitation, particularly the lack of access to quality food, is mainly attributed to persistent unequal distribution and control over services, assets and resources. The paper argues that South Africa's neoliberal democratic orientation often reduces food insecurity to an individual peril rather than a social phenomenon, which subsequently overlooks the broader structural and social dimensions. The paper concludes that a state has a role to address the food insecurity challenge by implementing context-specific, micro-level interventions that enhance individuals' access to food as a social right. The paper advocates for an inclusive approach in designing and implementing interventions intended to enhance food security at the household level.

**Keywords:** Democracy; Food Security; Food Accessibility; Entitlement Theory; Social Development

### \*CORRESPONDING AUTHOR:

Mfundo Mandla Masuku, Discipline of Development Studies, University of KwaZulu-Natal, Durban 4000, South Africa;  
Email: Masukum@ukzn.ac.za

### ARTICLE INFO

Received: 25 March 2025 | Revised: 21 April 2025 | Accepted: 31 July 2025 | Published Online: 27 January 2026  
DOI: <https://doi.org/10.36956/rwae.v7i1.1900>

### CITATION

Masuku, M.M., Mthembu, Z., Sithole, M.S., 2026. Applying the Entitlement Approach to Understand Food Security Dynamics in South Africa. *Research on World Agricultural Economy*. 7(1): 495–508. DOI: <https://doi.org/10.36956/rwae.v7i1.1900>

### COPYRIGHT

Copyright © 2026 by the author(s). Published by Nan Yang Academy of Sciences Pte. Ltd. This is an open access article under the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License (<https://creativecommons.org/licenses/by-nc/4.0/>).

# 1. Introduction

Sen Amartya's contributions were instrumental in bringing a multidimensional conception of entitlements to the forefront of the discourse on food security, with its interest in advancing the analysis of food security. Food security as an interdisciplinary field involves several stakeholders across various institutional settings, such as policy development, researchers and practitioners, all of whom have profound influence in shaping our understanding and actions in addressing gaps in this discourse. While there are remarkable provisions of human rights protection and poverty eradication strategies in place worldwide, a substantial population, particularly in developing countries, is still hard hit by food insecurity. Household food insecurity, characterised by ongoing social and health impacts, is among the major public health issues in Africa<sup>[1]</sup>. Literature suggests that despite South Africa's political and economic development since 1994, individuals and households continue to face adverse challenges in meeting their basic needs, particularly access to food<sup>[2-4]</sup>. A survey conducted by the Human Sciences Research Council (HSRC) on "Attitudes to Race, Human Rights and Equality" estimated that 63.5% of South African households are food insecure, representing approximately 12 million households or about 38.6 million individuals who face inadequate access to food<sup>[5,6]</sup>. Furthermore, 20% of households reported moderate to severe hunger, while only 36.5% were classified as food secure<sup>[5]</sup>.

According to the FAO<sup>[7]</sup>, food security exists when people have 'physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and preferences for an active and healthy life.' This paper argues that the right to food should be viewed as an entitlement, enabling individuals to be free from hunger, based on the premise that society has sufficient economic and institutional resources to ensure universal access to quality and nutritious food<sup>[8]</sup>. Furthermore, the paper offers some important insights that despite South Africa's Constitution, which explicitly recognises access to food as a fundamental right, the reality indicates that the majority are still not enjoying this right fully. Sen's articulation of the entitlement approach describes food security as implying the shift of focus from

mere general availability of food to access to food by individuals and households<sup>[4]</sup>. Unsurprisingly, extensive research highlights that what and how we eat is largely shaped by the socio-economic, political, and cultural dimensions of the food system<sup>[9]</sup>. This underscores the need to view the food value chain as a multidimensional construct. Although an in-depth analysis of South Africa's fiscal capacity to support expanded social protection measures is beyond the scope of this paper, there is growing support for the implementation of initiatives such as a Basic Income Grant (BIG). While its feasibility under current economic constraints remains debatable, its constitutional and moral legitimacy is increasingly acknowledged.

While its feasibility under the current fiscal capacity is debatable and uncertain, there is a view that the South African government's eminent move to adopt the BIG has both constitutional and ethical significance this confirms that food insecurity is more pronounced and severe in democratic contexts, where people's entitlements are curtailed by persistent poverty, limited income, inequality and access to and ownership of productive resources, thus posing a threat to the very values and principles of democracy<sup>[10]</sup>. The paper posits that entitlements are critical for strengthening an individual's capability, what a person is able to do or become, in order to prevent and mitigate susceptibility to food insecurity.

The analysis presented in this paper is, to a greater extent, grounded in the philosophical orientations of Development Studies and Social Work-two disciplines that, as Midgley<sup>[11]</sup> notes, are particularly relevant to the pursuit of social development. Based on more or less related philosophical assumptions, the two disciplines serve to provide a descriptive potency on food security and access to healthy food. The paper demonstrates the value of a multidisciplinary approach in enhancing the understanding of entitlements as a people-centred mechanism for improving food access through basic services.

# 2. Methodology

The study's aim was achieved through a systematic literature review<sup>[12]</sup>, with Zotero employed to efficiently organize, manage, and cite the retrieved articles.

An extensive search was conducted across multiple electronic databases, including Google Scholar, SAGE Journals, ScienceDirect, Sabinet, Scopus and JSTOR. Institutional reports, working papers, theses, and dissertations were also included. This comprehensive search was conducted to identify relevant articles previously published between 1981 and 2022. The decision for choosing this specific period is based on the year (1981) when entitlement approach was coined by Amartya Sen and what

has been done in the area of the study by other authors who have critically explained this approach in relation to food security in sub-Saharan Africa. Keywords differed across search engines for the relevant articles identified. In addition, reference lists of studies identified from the initial search were used to retrieve additional relevant studies. Inclusion and exclusion criteria were developed to select the most relevant articles for the final review, see **Table 1** below:

**Table 1.** Inclusion/Exclusion Criteria.

Category	Inclusion Criteria	Exclusion Criteria
<b>Timeframe</b>	Studies published between 1981–2022 (to capture Sen’s foundational work to recent trends).	Studies predating 1981 (unless seminal, e.g., Sen 1981).
<b>Geography</b>	Focus on Sub-Saharan Africa (SSA), especially South Africa, Zimbabwe and Malawi.	Studies outside SSA or with no regional relevance.
<b>Language</b>	English-language publications.	Non-English studies (due to translation constraints).
<b>Publication Type</b>	Peer-reviewed journal articles, authoritative grey literature (e.g., FAO, UNDP reports).	Opinion pieces, non-peer-reviewed blogs, or predatory journal articles.
<b>Thematic Focus</b>	Food security, entitlement theory, social protection, and sustainable livelihoods.	Off-topic (e.g., judicial processes, aquaculture-only studies).
<b>Methodology</b>	Empirical studies, theoretical critiques, or policy analyses with clear methodology.	Studies lacking methodological rigor (e.g., no data/analysis, anecdotal evidence).
<b>Accessibility</b>	Full text available through institutional subscriptions/ open access.	Paywalled articles with no accessible copies.

The inclusion criteria for papers were the originality of the research and the presence of the elements of the entitlement approach within sub-Saharan Africa. All papers related to the study were considered in this review. Studies that addressed food security in sub-Saharan Africa, specifically South Africa, through the lens of the entitlement approach were eligible for inclusion. The study quality was assessed using the Critical Appraisal Skills Program (CASP) and key principles of research rigor to ensure methodological soundness<sup>[13]</sup>. CASP serves as a vital tool in evidence-based practice, helping to eliminate low-quality studies that could compromise validity while identifying the strengths and limitations of included research<sup>[14]</sup>. The CASP tool was applied during the full-text assessment phase to assess qualitative studies in terms of rigour and transferability, and quantitative studies for reliability and minimisation of bias. Four core criteria guided the ap-

praisal process: sampling (representativeness), data collection (methodological appropriateness), analysis (interpretive rigor), and trustworthiness (encompassing reliability/dependability and validity/credibility)<sup>[14]</sup>. To refine the process, Masuku (author) independently pilot-tested the framework on two sample articles, after which the team (Sithole and Mthembu) collectively revised the appraisal form to align with study objectives and inclusion/exclusion criteria. This involved an iterative refinement process, where database searches were conducted, results evaluated, and adjustments made to optimize selection. Regular online discussions ensured consensus in abstracting the remaining articles, resolving discrepancies, and maintaining consistency throughout the review, ultimately enhancing the credibility and reliability of the systematic review. The results of the article selection are presented in **Table 2** below.

**Table 2.** Systematic Literature Search Results.

Database	Search Terms	Total Results	Peer-Reviewed	Excluded	Selected for Full-Text Review (Final Included)
Google Scholar	("food security" OR "entitlement theory" AND ("Sub-Saharan Africa" OR "South Africa"))	150	138	113	27
SAGE Journals	("social development" OR "food policy") AND ("South Africa")	16	16	8	8
ScienceDirect	("sustainable livelihoods" OR "food systems") AND ("drought resilience")	14	14	5	5
Sabinet	("food insecurity" OR "social protection") AND ("Southern Africa")	132	114	100	17
JSTOR	("Amartya Sen" OR "entitlement approach") AND ("famine")	25	22	12	10
Scopus	("food security" AND "policy intervention") AND ("Sub-Saharan Africa")	32	19	14	5
<b>Total</b>	-	<b>369</b>	<b>323</b>	<b>256</b>	<b>63</b>

As shown in **Table 2**, the results of the search yielded 369 articles, of which 118 duplicates and articles with irrelevant scope were removed, 8 were opinion pieces with non-Sub-Saharan Africa focus, 9 articles lacked methodological rigor; 100 articles were not peer-reviewed and also considered as outdated since were pre-2000, 12 articles were more theoretical without empirical data with relevant scope and 16 articles were narrow sectoral focus (e.g., Aquaculture). This means that of the 323 articles assessed for eligibility, 256 were excluded due to the reasons mentioned above and also as a result of not being published in accredited sources and articles not available in full text (requiring purchasing). This left 63 articles being selected for the final review. Findings were synthesized using a thematic analysis after articles were revisited multiple times. The findings based on the review of the existing studies published are presented below.

### 3. Findings and Discussion

This section provides a thorough overview of the entitlement approach as a theoretical lens to explain and master food security in a democratic environment.

#### 3.1. The Interdisciplinary Approach and Food Security

The convergence of Development Studies and Social work in explaining food (in)security may be evi-

dent in relation to the hunger faced by communities. For instance, the Community Childhood Hunger Identification Project (CCHIP) index defines "hunger as the mental and physical condition arising from not eating enough food because of insufficient economic resources within the household or community."<sup>[3]</sup> Furthermore, Karunasagar and Karunasagar<sup>[15]</sup> concur with this view and assert that it is imperative to apply interdisciplinary approaches to issues of food security. Considering the two disciplines' contributions in this paper, it suffices to acknowledge that the theory and policy debate on food security is a cross-cutting topic. While the two disciplines emerge from different philosophical orientations, they tend to share some commonalities on issues of human development and empowerment. While the issue of food goes beyond the two disciplines, their orientation did provide a sufficient parameter, particularly in the area of socio-economic level. For instance, in addressing Sustainable Development Goals, particularly goals 1 and 2 on "no poverty" and "zero hunger", the two disciplines tend to draw on common ground, in one way or another<sup>[16]</sup>. Furthermore, food security is a phenomenon characterised by complexity. Therefore, one of the unique elements in this paper was to capitalise on the strengths of the two disciplines in explaining the individual's deprivations and particularly the lack of access to food in the democratic South African context.

The phenomenon of food security remains at the epicentre of Development Studies, with limited focus on it in Social Work. Despite Social Work's long history

of acknowledgement and application of systems theory and ecological perspectives in analysing the person-in-environment configuration<sup>[17]</sup>, the discipline rarely directly acknowledges food security in a more comprehensive way. As Boetto<sup>[18]</sup> alludes, in the context of an accelerating global environmental crisis, with a consequent threat to the ecology upon which life on Earth depends, it is imperative to reposition Social Work as an ecologically responsible profession. It is on this basis that the discussion on food security alongside Development Studies became imperative. It is also worth noting that the two disciplines under discussion are diverse but related disciplines, with community development as their common dimension.

### 3.2. Food Security and Legislative Context

The Constitution of South Africa, 1996 is regarded as a 'much heralded document, which creates the possibilities for human development and empowerment, by embracing the classic range of civil and political rights found in the International Bill of Human Rights as well as a panoply of socio-economic and cultural rights<sup>[19]</sup>. Section 27 (1) (b) of the Constitution of the Republic of South Africa<sup>[2]</sup> provides that everyone has the right to have access to sufficient food and water. The paper explores the context in which food security—specifically access to food—occurs, based on the legislative provisions and the socio-economic circumstances applicable in South Africa. The policy agenda as applicable through national policies adopted by South Africa's democratic government tends to revolve around three main issues, namely, land reform, job creation and economic reorganisation<sup>[20]</sup>. Furthermore, it became apparent that welfare policy became 'market (economically) rather than development (socially) driven, especially once the Reconstruction and Development Programme (RDP) gave way to the more conventional Growth, Employment and Redistribution (GEAR) strategy'<sup>[20]</sup>. On the other hand, the National Development Plan 2030<sup>[8]</sup>, is of the view that to 'eradicate food insecurity and reduce poverty and inequality, the economy must grow faster and in ways that benefit all South Africans'. Together with the three policy provisions, food security could be viewed as one of the common elements contained in the South African

Constitution (1996)<sup>[2]</sup>, which Botha<sup>[21]</sup> describes as 'a power map and a substantive foundation'. The Constitution of the Republic of South Africa is often globally praised for its constitutionality and key in this view<sup>[21]</sup>, as Nienaber<sup>[22]</sup> says, it was for the first time in its history that South Africa's citizens had their rights guaranteed by a Bill of Rights. 'The South African Constitution guarantees a host of rights as part of an effort to design a post-apartheid social system based on equality'<sup>[23]</sup>. Zink<sup>[24]</sup> describes democracy as effective only insofar as people make good use of it, with relevant institutions perceived as the key to the realisation of democracy. Within the context of a democratic society, capitalist states tend to put rules and institutions in place to regulate the ownership of some resources and acquisition of others through exchange<sup>[25]</sup>. Fundamental in such states is their emphasis on food ownership as one of the most primitive property rights, with rules and institutions put in place to govern this right. It is on a similar basis that the South African state has an obligation to devise measures to provide food or resources to acquire food directly to those who are unable to make use of existing access to food. Kurniawan<sup>[26]</sup> describes starvation, famine, unemployment, inequality and food insecurity as related development issues that affect society. Sen's stance on food security remains essential in organising the discussion on how to understand and deal with food security and poverty<sup>[27]</sup>, despite the years since the introduction of the entitlement theory.

### 3.3. Food Security and Social Development

The primary goal of social development is to improve the quality of life for all people through harmonisation of economic development<sup>[28,29]</sup>. Key in social development is not only the significance of integration of social and economic circumstances, but also the recognition of human rights of not only individuals and families, but also that of communities as well. In relation to the South African context, the country's democratic era, characterised by the adoption of the developmental approach, started to place emphasis on elevating the social and economic circumstances of its citizens. South Africa is unique in that, following the end of apartheid, the developmental approach to social welfare was adopted as

national government policy in 1997<sup>[30]</sup>. As a developmental state, with its mid-position between the institutional and welfare state, South Africa is viewed as unique. It is, therefore, crucial to remark that the explanatory assertions about the socio-economic circumstances of food security do not purport to provide insight into the overall economic activity applicable in the country<sup>[31]</sup>.

### 3.4. Amartya Sen's Entitlement Approach in Relation to Food Security

The entitlement approach is undoubtedly one of the fundamental perspectives in the area of food security and gained popularity through Amartya Sen. It gained prominence due to its unique focus on the mechanisms by which individuals access food, rather than on aggregate food availability alone<sup>[32–34]</sup>. While alternative frameworks such as the human capability approach have contributed valuable insights, particularly concerning individual well-being and freedoms, they face significant limitations in the context of food security analysis. Stats SA<sup>[6]</sup>, reflects that the proportion of households in South Africa that experienced moderate to severe food insecurity was estimated at 15,8% in 2019, 16,2% in 2022, and 19,7% in 2023.

This has proven particularly valuable in empirical contexts such as Ethiopia, South Africa, and other food-insecure regions, where failures in entitlement, rather than in aggregate food supply, often drive hunger<sup>[34,35]</sup>. A cross-sectional survey conducted in Limpopo found that over two-thirds of surveyed households were food insecure, with 31.8% experiencing hunger. This rate was higher than the national average of 26.0% and the provincial average of 30.8%, indicating a significant localised food insecurity challenge<sup>[36]</sup>.

For example, the COVID-19 pandemic illustrated how lockdowns and economic disruptions resulted in widespread failures of own-labour and trade-based entitlements, leaving informal workers and small-scale farmers without sufficient means to access food<sup>[37,38]</sup>. Furthermore, gender-based disparities in food access, highlighted in feminist critiques of food security, reveal how institutional structures and intra-household dynamics influence the effectiveness of transfer-based entitlements<sup>[39–43]</sup>.

In addition, research has shown that the entitlement framework allows for integration with ecological and institutional dimensions of food security. Literature reflects that entitlement failures are increasingly linked to climate vulnerability and institutional fragility<sup>[41]</sup>. Likewise, community-based perspectives, such as those presented by Kaiser<sup>[41]</sup>, support the notion that food security should not only be analysed at the individual level but also through social structures and systems of access and redistribution—areas well-captured by Sen's approach but overlooked in capability-based analyses<sup>[44]</sup>. In his book, Sen<sup>[44]</sup> describes entitlements as the collection of alternative commodities that a person in society can command by utilising the entirety of rights and opportunities that he or she faces. This includes any asset or claim—whether food or non-food items—that can be converted into food through production, exchange, labour, or transfers. The entitlement approach, first introduced in *Poverty and Famines*<sup>[32]</sup>, represents a shift away from food availability decline (FAD) explanations, emphasising instead how individuals' ability to access food is shaped by institutional, economic, and legal arrangements. It has become a central analytical tool in examining poverty and food insecurity, particularly in democratic or market-based contexts where access to food is mediated through ownership rights and market transactions<sup>[24,43]</sup>. Food may be available at the national level, but socio-economic and institutional barriers prevent vulnerable households from converting their endowments into adequate food. This distinction is further supported by empirical findings from countries like Ethiopia and South Africa, where high levels of food production coexist with persistent household-level food insecurity due to exclusion from labour markets, rising input costs, and limited access to land or credit<sup>[44,45]</sup>.

The approach emphasises that food ownership is one of the most primitive property rights and that in every society, there are rules and institutions that govern this right. In capitalist states, these rules and institutions concern the regulation of ownership of some resources and the acquisition of others through exchange<sup>[25]</sup>. This makes the entitlement approach especially useful for analysing the intersection between food insecurity and institutional fragility. Recent stud-

ies during the COVID-19 pandemic, for example, have shown how lockdowns and employment disruptions eroded own-labour and trade-based entitlements, particularly for informal workers, subsistence producers, and women<sup>[36,40]</sup>. Smith et al.<sup>[46]</sup> argue that a person's entitlement is ingrained in his or her endowment, which is the collection of resources that is converted through production and trade into food or commodities that can be exchanged for food. These endowments determine their capacity to engage in socially sanctioned exchanges or production activities that result in food acquisition. In environments characterised by high inequality and weak institutional protection, individuals may face entitlement failures even when food is physically available. Four types of entitlements offer a robust analytical structure for understanding the dynamics of food insecurity across diverse social and economic settings. For instance, as highlighted by Kaiser<sup>[41]</sup>, these entitlements are increasingly undermined by environmental degradation, climate change, and weakened governance, further illustrating the utility of Sen's framework in contemporary food systems analysis.

### 3.5. Trade-Based Entitlement

While food security requires that nutritious and sufficient food is available to all at all times, market access and purchasing power are decisive in determining whether people can obtain it. Food and beverage inflation is reported to have risen to 4.0% annually in April 2025, up from 2.7% in March, contributing to lower affordability for vulnerable households<sup>[36]</sup>. Access to enough food demands that the food be available all the time, but it is also important to recognise that availability does not guarantee access<sup>[47]</sup>. Sen's entitlement theory distinguishes between physical access (proximity to markets) and economic access (having the resources and legal right to purchase food), noting that both are necessary to ensure food security<sup>[32,37,44]</sup>. However, food may be available in markets, yet people may lack the purchasing power to purchase basic commodities such as food<sup>[48,49]</sup>. The entitlement approach focuses on people's capability to obtain food through legitimate social channels, such as trade-based entitlement, and emphasises how people can do this<sup>[50]</sup>. A significant example

is that people may bring their assets (both tangible and intangible) to the market to trade for cash or food. Tangibles include household assets, such as gold, land, equipment and livestock that can be sold, as well as crops, firewood and charcoal. Intangibles refer to knowledge and skills, labour power, or membership of a particular community<sup>[51]</sup>. However, this becomes a challenge when there is an oversupply, which will lead the price of commodities to collapse and drastically reduce the terms for trade. This is known as the terms of trade scissors movement, in which rising food prices and falling asset prices result in a collapse in trade-based entitlement to food<sup>[52-55]</sup>.

Recurrent floods and droughts in Malawi diminished crop yields and reduced the exchange value of agricultural assets, while simultaneously pushing up food prices, thereby eroding households' ability to purchase food even in functioning markets<sup>[37]</sup>. Similar failures have occurred in South Africa, where COVID-19 movement restrictions severely disrupted informal food trade and access to markets, especially in rural and low-income urban communities<sup>[38]</sup>. The July 2021 civil unrest further compounded this, as looting and road blockages disrupted supply chains, limited deliveries of essential goods, and contributed to food price spikes in affected provinces. These disruptions expose the structural vulnerabilities of food systems that are heavily dependent on market access and mobility.

Reliance on international trade as a food security strategy is also fraught with risk. While food imports may offset local production deficits, they are only viable if a country has access to foreign exchange and if global supply chains remain functional. In many low-income countries, these conditions are not guaranteed. Literature<sup>[56-60]</sup> highlights how structural dependency on global markets leaves developing countries exposed to price volatility and external shocks, which can destabilise national food systems and exacerbate inequality.

### 3.6. Production-Based Entitlement

This entitlement is particularly significant for small-scale farmers who rely on agricultural production to secure food for their households and communities. However, many such farmers face substantial chal-

lenges, including limited access to land, unreliable irrigation systems, and poor harvests—all of which undermine food security efforts, especially in rural areas. These vulnerabilities are exacerbated by climate-related shocks such as droughts and floods, economic downturns, and inflation, which collectively hinder consistent food production. Improving access to essential inputs—such as seeds, fertilisers, water, tools, and credit—is critical for reducing crop losses and enhancing resilience to such shocks<sup>[34,57,58]</sup>. Chronic food insecurity in Southern Africa is primarily caused by a lack of access to essential inputs such as land, water, fertilizer, seeds, credit, and labour<sup>[45,58]</sup>. Learning from other developing countries in terms of policy response, the ‘Starter Pack’ programme, started by the Malawian government in 1998, gave each of the country’s 2.8 million farmers a package containing enough fertiliser, maize, and bean seeds to plant 0.1 hectares. The Starter Pack programme was established on the tenet that supporting food production is more economically advantageous and long-lasting than supporting food consumption through food aid<sup>[38,59]</sup>. Many initiatives align with broader calls for building adaptive and resilient food systems, especially in the context of climate change and institutional fragility<sup>[45]</sup>. Furthermore, ensuring food production capacity requires supportive institutions that integrate gender equity and local knowledge, as highlighted in recent COVID-19 responses that exposed how structural inequalities limit access to both resources and decision-making in food systems<sup>[38,40]</sup>. The food system approach focuses on household entitlement or financial stability. While food production remains a critical component of agricultural livelihoods, it is often influenced by factors beyond meeting nutritional needs, such as market incentives and land use patterns<sup>[60]</sup>. In South Africa, structural barriers such as land fragmentation, environmental degradation, and declining agricultural productivity have undermined the ability of vulnerable rural households to secure food through their own production entitlement<sup>[61–64]</sup>. Contrary to this pattern, a case study conducted in the Eastern Cape and Free State provinces found that growing maize and vegetable production in homestead backyard gardens increased the levels of food security<sup>[63]</sup>. However, the broader food

system remains deeply unequal. While some households produce surplus food, others face chronic production-based entitlement failure due to inadequate access to land, labour, inputs, and markets<sup>[38,47]</sup>. These disparities were further exposed during the COVID-19 pandemic, when although agriculture was largely exempt from lockdowns, many smallholder farmers still struggled to access markets and maintain production due to mobility restrictions and economic pressures<sup>[38,39]</sup>. Rising input costs—exacerbated by long-term inflation trends since the 1970s—continue to erode profitability, even for commercial agriculture<sup>[51,65–68]</sup>.

Internationally, conflict and war have also played a role in undermining food production systems, such as in Ethiopia, Angola, Mozambique, and Cambodia, where landmines and violence destroyed farmland and disrupted rural livelihoods<sup>[51]</sup>. Addressing these multifaceted constraints requires inclusive and context-specific policy interventions. Scholars increasingly advocate for democratized, community-driven approaches to food governance—emphasizing food sovereignty, social equity, and institutional reform—to empower marginalized producers and enhance resilience in the face of systemic shocks<sup>[39,43]</sup>.

Sen<sup>[44]</sup> argued that it is crucial to make a distinction between (i) food production as a source of revenue and entitlement and (ii) food production as a source of supply of the essential good food. This distinction is critical in the African context, where prioritizing food production strengthens producers’ ability to access food through their own labor and assets, rather than relying solely on market exchange. In this regard, food production not only contributes to household consumption but also supports employment and livelihoods, particularly in rural communities. This dual impact of reduced production on both economic entitlements and physical food access is evident in many African regions where smallholder farmers face persistent challenges in accessing essential inputs, land, and reliable markets<sup>[47,58]</sup>. The vulnerability of production-based entitlements is further magnified by climate change and environmental degradation, which strain local capacities to sustain agricultural output<sup>[43]</sup>. Research also shows that investing in local food production through targeted input sup-



port, such as Malawi's Starter Pack programme, can help strengthen entitlements by enabling farmers to produce food for both household use and sale<sup>[35,59]</sup>. Moreover, inclusive institutions and democratic governance structures play support a critical role in reinforcing food producers' entitlements. Studies show that when policies provide smallholder farmers with equitable access to resources and decision-making power, food security outcomes improve<sup>[51]</sup>.

### 3.7. Own-Labour Entitlement

In market economies, food insecurity may result from a person's inability to access employment or receive fair compensation. Sen<sup>[33]</sup> identifies two forms of dysfunction in this context: 'pull failure', where individuals lose the ability to purchase food due to falling wages or job loss, and 'exchange entitlement failure', which occurs when market or production conditions prevent labour from translating into food access.

Statistics South Africa<sup>[6]</sup>, reflects that the national unemployment rate reached 32.9% in the first quarter of 2024, while youth unemployment extended to an alarming 59.6%. This insight highlights the structural weaknesses in the labour market and underlines the critical link between unemployment, underemployment, and food insecurity.

The COVID-19 pandemic illustrated the fragility of own-labour entitlements. Lockdown measures disrupted employment, particularly in the informal sector, where many rural and urban poor depend on precarious jobs and small businesses for food access<sup>[38]</sup>. Women were disproportionately affected, not only losing income but also bearing increased unpaid care work, further limiting their ability to convert labour into food<sup>[39,40]</sup>. These disruptions intensified food insecurity by undermining both wage-based and self-employment-based entitlements.

Public works projects in South Africa are designed to provide farmers with an alternate source of food (food-for-work) or income (cash-for-work) to help smooth out their consumption if their harvests fail<sup>[35]</sup>. A well-known employment-based safety net is the Maharashtra Employment Guarantee Scheme (EGS), which is a large-scale public works scheme designed to make

employment readily available within a short distance<sup>[35]</sup>. Large-scale employment generation was critical in averting famine in the early 1970s and has since provided employment opportunities for households living below the poverty line<sup>[48]</sup>.

Rising input costs, weak labour protections, and inflation—longstanding challenges in South Africa's rural economy—limit the real value of wages and erode the purchasing power of labour<sup>[49,50]</sup>. Jenkins and Scanlan<sup>[62]</sup> further argue that without inclusive democratic institutions, policies often fail to prioritize vulnerable workers, leaving them without meaningful access to social protection<sup>[51]</sup>.

### 3.8. Inheritance and Transfer of Entitlement

This entitlement is critical in supporting those who are unable to secure food through production or labour, particularly in times of economic or environmental crisis. Muzerengi et al.<sup>[48]</sup> observe that surplus food, once harvested, is often redistributed within communities through informal support systems, reinforcing social safety nets. However, the effectiveness of these entitlements depends heavily on the stability of formal and informal transfer mechanisms.

Empirical research has demonstrated that targeted emergency food assistance, when effectively implemented, plays a significant role in protecting vulnerable households from deeper levels of food insecurity. In Ethiopia, public food transfers were found to reduce household vulnerability by stabilising consumption and safeguarding productive assets during times of food stress<sup>[36,54]</sup>. They also emphasise the significance of food assistance in regulating consumption and safeguarding assets among households experiencing food stress<sup>[41,48]</sup>.

Recent studies have highlighted that food transfers may be more nutritionally beneficial than equivalent cash transfers, particularly when women are the primary recipients, as they are more likely to prioritise household food needs<sup>[41]</sup>. This aligns with evidence from literature<sup>[39,63]</sup>, which underlines the gendered dynamics of food access and stresses the importance of women's roles in food distribution, particularly

in times of crisis. However, reliance on inheritance is increasingly precarious in fragile contexts. Different scholars<sup>[64,65]</sup> warn that the collapse of informal support systems and delayed emergency responses can lead to food availability decline (FAD), exacerbating hunger and eroding resilience. This concern is especially relevant in regions affected by climate change or conflict, where institutional capacities are often weakest.

To strengthen inheritance and transfer entitlements, researchers argue for integrating these mechanisms into broader community food security and social protection frameworks. This includes embedding transfers within inclusive and participatory systems that are responsive to local needs and gender dynamics<sup>[44]</sup>.

## 4. Conclusion

The paper concludes that using an interdisciplinary approach with different ways in which entitlement is analysed in South Africa over its resources as a means of correcting historical imbalances and ensuring that resource wealth benefits all citizens. The evidence indicated that the South African Government has formulated a range of strategies including policies to improve exchange entitlements by creating opportunities as the principal remedy to address structural causes of food insecurity and strengthening market competition. In order to achieve entitlement as the means of eliminating food insecurity, various institutions need to be responsible for the formulation of policies and programmes relating to the elimination of food insecurity in South Africa and worldwide.

This paper confirms that everyone is entitled to the assets they possess; however, not every individual respects entitlement as a rule of life. Furthermore, entitlement falls short in addressing the apparent violations of the fundamental right to life and overlooks the significance of property rights being exercised institutionally rather than solely individually. The study affirms that there is evidence that problems have been on the increase, with the state allocating limited and temporary resources to mitigate food insecurity. On the other hand, principles of entitlements impose a legal obligation on the government to meet criteria in law such as social se-

curity to address a lack of basic rights such as food insecurity as a result of a lack of entitlement.

Therefore, a balanced approach to design and implement interventions aimed at enhancing food security at the household level is required.

## Author Contributions

M.M.M. was responsible for all aspects of the paper's development, from conceptualization. All authors were responsible for designing the methodology to identify suitable studies via databases and registers, data extraction, and finalization. All authors contributed to the article and approved the submitted version.

## Funding

This work received no funding.

## Institutional Review Board Statement

Not Applicable.

## Informed Consent Statement

Not Applicable.

## Data Availability Statement

The original contributions presented in the study are included in the article/supplementary material; further inquiries can be directed to the corresponding author.

## Conflicts of Interest

The authors declare no conflict of interest.

## References

- [1] Masuku, M.M., Mthembu, Z., Mlambo, V.H., 2023. Gendered effects of land access and ownership on food security in rural settings in South Africa. *Frontiers in Sustainable Food Systems*. 7, 1–8.
- [2] South African Human Rights Commission, 2006.

- Reflections on Democracy and Human Rights: A Decade of the South African Constitution (Act 108 of 1996). Available from: [https://www.sahrc.org.za/home/21/files/Reports/Reflection%20of%20democracy%20and%20human%20rights\\_10%20year%20review\\_%20200.pdf](https://www.sahrc.org.za/home/21/files/Reports/Reflection%20of%20democracy%20and%20human%20rights_10%20year%20review_%20200.pdf) (cited 28 August 2024).
- [3] Rubin, O., 2009. The Entitlement Approach: A Case for Framework Development Rather than Demolition: A Comment on 'Entitlement Failure and Deprivation: A Critique of Sen's Famine Philosophy'. *The Journal of Development Studies*. 45(4), 621–640. DOI: <https://doi.org/10.1080/00220380802649947>
- [4] Labadarios, D., Mchiza, Z., Steyn, N.P., et al., 2011. Food security in South Africa: a review of national surveys. *Bulletin of the World Health Organization*. 89(12), 891–899. DOI: <https://doi.org/10.2471/BLT.11.089243>
- [5] Institute of Development Studies, 2024. World Food Day 2024: It's time to 'abnormalise' hunger in South Africa. Available from: <https://www.ids.ac.uk/opinions/world-food-day-2024-its-time-to-abnormalise-hunger-in-south-africa/> (cited 28 August 2024).
- [6] Statistics South Africa, 2025. Consumer Price Index, April 2025. Available from: <https://www.statssa.gov.za/publications/P0141/P0141April2025.pdf> (cited 28 August 2024).
- [7] Food and Agriculture Organization, 2011. The State of Food and Agriculture 2010–2011. Available from: <https://www.fao.org/4/i2050e/i2050e00.htm> (cited 28 August 2024).
- [8] Mbajiorgu, G., 2021. Sustainable Livelihoods and the Right of Access to Food: Achieving the National Development Plan 2030 Goals on Poverty Eradication. *Southern African Public Law*. 36(1). DOI: <https://doi.org/10.25159/2522-6800/8044>
- [9] García-Martín, M., Torralba, M., Quintas-Soriano, C., et al., 2021. Linking food systems and landscape sustainability in the Mediterranean region. *Landscape Ecology*. 36(8), 2259–2275. DOI: <https://doi.org/10.1007/s10980-020-01168-5>
- [10] Bojabotseha, T.P., 2011. Dualism and the social formation of South Africa. *African Journal of Hospitality, Tourism and Leisure*. 1(3), 1–8. Available from: [https://www.ajhtl.com/uploads/7/1/6/3/7163688/botshabotseha\\_tp\\_article\\_\\_1\\_1\\_3\\_.pdf](https://www.ajhtl.com/uploads/7/1/6/3/7163688/botshabotseha_tp_article__1_1_3_.pdf) (cited 28 August 2024).
- [11] Midgley, J., 2017. Social development and social protection: New opportunities and challenges. In: Patel, L., Midgley, J., Ulriksen, M. (Eds.). *Social Protection in Southern Africa*. Routledge: London, UK. pp. 2–12. DOI: <https://doi.org/10.4324/9781315087887-2>
- [12] Page, M.J., McKenzie, J.E., Bossuyt, P.M., et al., 2021. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ*. n71. DOI: <https://doi.org/10.1136/bmj.n71>
- [13] Long, H.A., French, D.P., Brooks, J.M., 2020. Optimising the value of the critical appraisal skills programme (CASP) tool for quality appraisal in qualitative evidence synthesis. *Research Methods in Medicine & Health Sciences*. 1(1), 31–42. DOI: <https://doi.org/10.1177/2632084320947559>
- [14] Porritt, K., Gomersall, J., Lockwood, C., 2014. JBI's Systematic Reviews: Study Selection and Critical Appraisal. *AJN, American Journal of Nursing*. 114(6), 47–52. DOI: <https://doi.org/10.1097/01.NAJ.0000450430.97383.64>
- [15] Karunasagar, I., Karunasagar, I., 2016. Challenges of Food Security—Need for Interdisciplinary Collaboration. *Procedia Food Science*. 6, 31–33. DOI: <https://doi.org/10.1016/j.profoo.2016.02.005>
- [16] Filho, W.L., Lovren, V.O., Will, M., et al., 2021. Poverty: A central barrier to the implementation of the UN Sustainable Development Goals. *Environmental Science & Policy*. 125, 96–104. DOI: <https://doi.org/10.1016/j.envsci.2021.08.020>
- [17] Payne, M., 2020. *Modern social work theory*, 5th ed. Bloomsbury Publishing: London, UK.
- [18] Boetto, H., 2017. An ecologically centred approach in social work: Towards transformative change [Doctoral Dissertation]. Charles Sturt University: New South Wales, Australia. Available from: [https://researchoutput.csu.edu.au/ws/portalfiles/portal/19151358/HBoetto\\_PhD\\_Thesis.pdf](https://researchoutput.csu.edu.au/ws/portalfiles/portal/19151358/HBoetto_PhD_Thesis.pdf) (cited 28 August 2024).
- [19] Andrews, P.E., 2006. The South African Judicial Appointments Process. *Osgoode Hall Law Journal*. 44(3), 565–572. DOI: <https://doi.org/10.60082/2817-5069.1288>
- [20] Gray, M., 2006. The progress of social development in South Africa. *International Journal of Social Welfare*. 15(s1). DOI: <https://doi.org/10.1111/j.1468-2397.2006.00445.x>
- [21] Botha, C.J., 2005. *Statutory interpretation: An introduction for students*. Juta and Company Ltd: Cape Town, South Africa. pp. 34–36.
- [22] Nienaber, A.G., 2001. The comprehensibility and accessibility of South Africa's Bill of Rights: an empirical study. *De Jure*. 34, 113.
- [23] Kaersvang, D., 2008. Equality courts in South Africa: legal access for the poor. *Journal of the International Institute*. 15(2). Available from: <http://hdl.handle.net/2027/spo.4750978.0015.203> (cited 28 August 2024).
- [24] Zink, J.J., 2015. Amartya Sen and the media. *Real-World Economics Review*. 72, 69–95. Available from: <https://www.paecon.net/PAEReview/i>

- ssue72/Zink72.pdf (cited 28 August 2024).
- [25] Qudrat-I Elahi, K., 2006. Entitlement failure and deprivation: a critique of Sen's famine philosophy 1. *The Journal of Development Studies*. 42(4), 541–558. DOI: <https://doi.org/10.1080/00220380600680771>
- [26] Kurniawan, F.E., 2018. Food Sovereignty and The Paradox of Agricultural Development. *Journal of Indonesian Social Sciences and Humanities*. 8(1), 85–88. DOI: <https://doi.org/10.14203/jissh.v8i1.132>
- [27] Tungodden, B., 2001. A Balanced View of Development as Freedom. *Forum for Development Studies*. 28(2), 241–261. DOI: <https://doi.org/10.1080/08039410.2001.9666170>
- [28] Midgley, J.O., 1995. *Social development: The developmental perspective in social welfare*, 1st ed. SAGE Publications: London, UK. pp. 108–115.
- [29] Midgley, J., 2024. The theory and practice of developmental social work. In: Midgley, J., Conley, A. (Eds.). *Social Work and Social Development*. Oxford University Press: Oxford, UK. pp. 3–28.
- [30] Patel, L., Hochfeld, T., 2013. Developmental social work in South Africa: Translating policy into practice. *International Social Work*. 56(5), 690–704. DOI: <https://doi.org/10.1177/0020872812444481>
- [31] Jones, M., 2018. The march of governance and the actualities of failure: the case of economic development twenty years on. *International Social Science Journal*. 68(227–228), 25–41. DOI: <https://doi.org/10.1111/issj.12169>
- [32] Sen, A., 1981. *Poverty and Famines: An essay on entitlement and deprivation*. Clarendon Press: Oxford, UK. Available from: <https://gdsnet.org/Sen1982PovertyandFaminesBook.pdf> (cited 28 August 2024).
- [33] Sen, A., 1986. Food, economics and entitlements. Available from: <https://ageconsearch.umn.edu/record/295419/files/WP1.pdf> (cited 28 August 2024).
- [34] Quisumbing, A.R., 2003. Food Aid and Child Nutrition in Rural Ethiopia. *World Development*. 31(7), 1309–1324. DOI: [https://doi.org/10.1016/S0305-750X\(03\)00067-6](https://doi.org/10.1016/S0305-750X(03)00067-6)
- [35] Devereux, S., Béné, C., Hoddinott, J., 2020. Conceptualising COVID-19's impacts on household food security. *Food Security*. 12(4), 769–772. DOI: <https://doi.org/10.1007/s12571-020-01085-0>
- [36] Statistics South Africa, 2025. Food security in South Africa in 2019, 2022 and 2023: Evidence from the General Household Survey. Available from: <https://www.statssa.gov.za/publication/s/03-10-28/03-10-28.pdf> (cited 28 August 2024).
- [37] López Peláez, A., Aguilar-Tablada, M.V., Erro-Garcés, A., et al., 2022. Superdiversity and social policies in a complex society: Social challenges in the 21st century. *Current Sociology*. 70(2), 166–192. DOI: <https://doi.org/10.1177/0011392120983344>
- [38] Nyahunda, L., Chibvura, S., Tirivangasi, H.M., 2021. Social Work Practice: Accounting for Double Injustices Experienced by Women Under the Confluence of Covid-19 Pandemic and Climate Change Impacts in Nyanga, Zimbabwe. *Journal of Human Rights and Social Work*. 6(3), 213–224. DOI: <https://doi.org/10.1007/s41134-021-00170-4>
- [39] King, C., 2016. Food insecurity and housing instability in vulnerable families. *Review of Economics of the Household*. DOI: <https://doi.org/10.1007/s11150-016-9335-z>
- [40] Chiwona-Karltun, L., Amuakwa-Mensah, F., Wamala-Larsson, C., et al., 2021. COVID-19: From health crises to food security anxiety and policy implications. *Ambio*. 50(4), 794–811. DOI: <https://doi.org/10.1007/s13280-020-01481-y>
- [41] Kaiser, M., 2011. Food Security: An Ecological-Social Analysis to Promote Social Development. *Journal of Community Practice*. 19(1), 62–79. DOI: <https://doi.org/10.1080/10705422.2011.550261>
- [42] Sen, A., 1985. Rights and Capabilities. In: Honderich, T. (Ed.). *Morality and Objectivity (Routledge Revivals)*, 1st ed. Routledge: London, UK. p. 44.
- [43] Mazenda, A., Obi, A., Masiya, T., 2019. An analysis of BRICS food policies, strategies and trade in achieving zero hunger—lessons for South Africa. *Africa Insight*. 48(4), 142–160. Available from: [https://www.researchgate.net/publication/341600767\\_An\\_analysis\\_of\\_BRICS\\_Food\\_Policies\\_Strategies\\_and\\_Trade\\_in\\_Achieving\\_Zero\\_Hunger\\_Lessons\\_for\\_South\\_Africa](https://www.researchgate.net/publication/341600767_An_analysis_of_BRICS_Food_Policies_Strategies_and_Trade_in_Achieving_Zero_Hunger_Lessons_for_South_Africa) (cited 14 August 2024).
- [44] Devereux, S., 2006. Cash transfers and social protection. Available from: [https://www.researchgate.net/profile/Stephen-Devereux-2/publication/238597118\\_Cash\\_Transfers\\_and\\_Social\\_Protection/links/556d653808aefcb861d7f293/Cash-Transfers-and-Social-Protection.pdf](https://www.researchgate.net/profile/Stephen-Devereux-2/publication/238597118_Cash_Transfers_and_Social_Protection/links/556d653808aefcb861d7f293/Cash-Transfers-and-Social-Protection.pdf) (cited 4 July 2024).
- [45] Archibong, B., Coulibaly, B., Okonjo-Iweala, N., 2021. Washington Consensus Reforms and Lessons for Economic Performance in Sub-Saharan Africa. *Journal of Economic Perspectives*. 35(3), 133–156. DOI: <https://doi.org/10.1257/jep.35.3.133>
- [46] Smith, M., Pointing, J., Maxwell, S., et al., 1993. *Household food security: Concepts and definitions: An annotated bibliography*. Institute of Development Studies Brighton, Sussex: Brighton, UK. Available from: <https://socialprotection.gov.bd/wp-c>

- content/uploads/2017/06/IFAD-HH-Food-Security-Definitions.pdf (cited 17 June 2024).
- [47] Gore, C., 1993. Entitlement relations and 'unruly' social practices: A comment on the work of Amartya Sen. *Journal of Development Studies*. 29(3), 429–460. DOI: <https://doi.org/10.1080/00220389308422283>
- [48] Muzerengi, T., Khalema, E.N., Zivenge, E., 2021. The synergistic relationship between Amartya Sen entitlement theory and the systems theory in developing a food security implementation model in Matabeleland South Province, Zimbabwe. *Jambá Journal of Disaster Risk Studies*. 13(1). DOI: <https://doi.org/10.4102/jamba.v13i1.965>
- [49] Grolle, J., 2013. High-resolution mapping of rural poverty and famine vulnerability in the Sahel: a possible approach for the Republic of Niger. *Population and Environment*. 35(1), 68–97. DOI: <https://doi.org/10.1007/s11111-012-0180-6>
- [50] Nayak, P., 2000. Understanding the entitlement approach to famine. *Journal of Assam University*. 1, 60–65. Available from: [https://www.researchgate.net/publication/23745151\\_Understanding\\_the\\_Entitlement\\_Approach\\_to\\_Famine](https://www.researchgate.net/publication/23745151_Understanding_the_Entitlement_Approach_to_Famine) (cited 17 June 2024).
- [51] Pankhurst, A., Bevan, P., 2004. Hunger, poverty and famine in Ethiopia: Some evidence from twenty rural sites in Amhara, Tigray, Oromiya and SNNP regions. Available from: <https://wed-ethiopia.org/docs/working-paper1.pdf> (cited 29 June 2024).
- [52] Barrett, C.B., 2006. Food Aid's Intended and Unintended Consequences. *SSRN Electronic Journal*. DOI: <https://doi.org/10.2139/ssrn.1142286>
- [53] Cannon, T., 2002. Food security, food systems and livelihoods: Competing explanations of hunger. *Erde*. 133(4), 345–362. Available from: [https://www.researchgate.net/publication/284814012\\_Food\\_security\\_food\\_systems\\_and\\_livelihoods\\_Competing\\_explanations\\_of\\_hunger](https://www.researchgate.net/publication/284814012_Food_security_food_systems_and_livelihoods_Competing_explanations_of_hunger) (cited 23 June 2024).
- [54] Jenkins, J.C., Scanlan, S.J., 2001. Food Security in Less Developed Countries, 1970 to 1990. *American Sociological Review*. 66(5), 718–744. DOI: <https://doi.org/10.1177/000312240106600505>
- [55] Sen, A.K., 1988. Food entitlements and economic chains. *Sci Ethics Food*. pp. 58–70.
- [56] Sanga, U., Sidibé, A., Olabisi, L.S., 2021. Dynamic pathways of barriers and opportunities for food security and climate adaptation in Southern Mali. *World Development*. 148, 105663. DOI: <https://doi.org/10.1016/j.worlddev.2021.105663>
- [57] Kaminski, A.M., Kruijssen, F., Cole, S.M., et al., 2020. A review of inclusive business models and their application in aquaculture development. *Reviews in Aquaculture*. 12(3), 1881–1902. DOI: <https://doi.org/10.1111/raq.12415>
- [58] Ebhuoma, E.E., Donkor, F.K., Ebhuoma, O.O., et al., 2020. Subsistence farmers' differential vulnerability to drought in Mpumalanga province, South Africa: Under the political ecology spotlight. *Cogent Social Sciences*. 6(1), 1792155. DOI: <https://doi.org/10.1080/23311886.2020.1792155>
- [59] Sidhu, B.S., Sharda, R., Singh, S., 2021. Water footprint of crop production: A review. *Indian Journal of Ecology*. 48(2), 358–366. Available from: [https://www.researchgate.net/profile/Suraj-Singh-8/publication/351027473\\_Inherent\\_Vulnerability\\_Profiles\\_of\\_Agriculture\\_Sector\\_in\\_Temperate\\_Himalayan\\_Region\\_A\\_Preliminary\\_Assessment/links/613c363f4e1df271062ae239/Inherent-Vulnerability-Profiles-of-Agriculture-Sector-in-Temperate-Himalayan-Region-A-Preliminary-Assessment.pdf#page=42](https://www.researchgate.net/profile/Suraj-Singh-8/publication/351027473_Inherent_Vulnerability_Profiles_of_Agriculture_Sector_in_Temperate_Himalayan_Region_A_Preliminary_Assessment/links/613c363f4e1df271062ae239/Inherent-Vulnerability-Profiles-of-Agriculture-Sector-in-Temperate-Himalayan-Region-A-Preliminary-Assessment.pdf#page=42) (cited 23 July 2024).
- [60] Backeberg, G.R., Behl, R.K., Merbach, W., et al., 2009. Improving rural livelihoods with rainwater harvesting and conservation on communal crop-lands in South Africa: Opportunities and obstacles. Available from: <https://pt.ircwash.org/sites/default/files/Backeberg-2009-Improving.pdf> (cited 28 August 2024).
- [61] Kassier, W.E., Groenewald, J.A., 1990. The Agricultural Economy of South Africa. DOI: <https://doi.org/10.22004/AG.ECON.183486>
- [62] Jenkins, T.J., Bihn, E.A., Anderson, N.M., et al., 2016. Food Safety or Food Availability: Do We Have to Choose? *Food Protection Trends*. 36(1), 72–78.
- [63] Endale, D., 1995. Employment-Based Safety Nets: Exploring an Alternative Approach to Limit the Adverse Consequences of Recurrent Droughts in Ethiopia. p. 56. Available from: <https://www.wider.unu.edu/sites/default/files/WP118.pdf> (cited 23 July 2024).
- [64] Ramachandra, A., Abu Mansor, N.N., 2014. Sustainability of community engagement—in the hands of stakeholders? *Education + Training*. 56(7), 588–598. DOI: <https://doi.org/10.1108/ET-07-2014-0084>
- [65] Lascano Galarza, M.X., 2020. Resilience to Food Insecurity: Theory and Empirical Evidence from International Food Assistance in Malawi. *Journal of Agricultural Economics*. 71(3), 936–961. DOI: <https://doi.org/10.1111/1477-9552.12397>
- [66] Savage, A., Bambrick, H., Gallegos, D., 2020. From garden to store: local perspectives of changing food and nutrition security in a Pacific Island country. *Food Security*. 12(6), 1331–1348. DOI: <https://doi.org/10.1007/s12571-020-01053-8>
- [67] Statistics South Africa, 2024. Quarterly Labour Force Survey (QLFS): Q1 2024. Available from: <https://www.statssa.gov.za/publications/P0211/>

Presentation%20QLFS%20Q1%202024.pdf  
(cited 28 August 2024).

- [68] Tambe, B.A., Mabapa, N.S., Mbhatsani, H.V., et al.,  
2023. Household socio-economic determinants of

food security in Limpopo Province of South Africa:  
a cross sectional survey. *Agriculture & Food Security*. 12(1), 19. DOI: <https://doi.org/10.1186/s40066-023-00424-6> (cited 28 August 2024).