



## **Food Security, Environmental Conflicts, and the Attainment of the United Nations Sustainable Development Goals in Nigeria**

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### **ABSTRACT**

The paper reviews connection between food security, environmental conflicts, and attaining the United Nations Sustainable Development Goals. Food security is an essential human right vis-à-vis ecological conditions. It is also very crucial to the achievement of SDGs. Fights over environmental sustainability caused by competition for meager resources created by climate change and unsustainable practices stand serendipitously as blocks to food security and the achievement of SDGs. In this respect, a qualitative methodology will apply primarily by integrating content analysis with the case study method to fully elaborate on all the intricate dynamics among food security, environmental conflicts, and achievement of the SDGs. The paper examines complex dynamics amongst these interlinked issues and gives holistic solutions based upon cooperation, the sustainable management of resources, and conflict resolution towards a just and sustainable future.

**Keywords:** Food, Security, Environmental, Conflict, Sustainable, Development, Agriculture

### **Introduction**

The United Nations' Sustainable Development Goals outline a comprehensive set of development goals for nations worldwide, comprising a vast array of socio-economic and environmental concerns facing humanity. Some of the critical goals include complete food security, not just having adequate food. Food security can be defined as the availability, access, use, and stability of food supplies for individuals and communities at all times (FAO, 2021). At the same time that the term "food security" is used, the conversation tends to point out environmental issues. The rapid deterioration of natural resources, the compound effects of climate change, and unsustainable practices in agriculture and food production are considerable threats to global food security. It has led to environmental conflicts and competition over scarce resources currently considered significant barriers to achieving sustainable development and the SDGs (IPCC, 2019).

Deforestation, soil erosion, and water pollution all have a direct impact on agricultural output, hence reducing the available area of fertile lands and clean water for food production. Rising temperatures, changing patterns of rainfall, and extreme weather events exacerbate these issues, resulting in failure of crops, reduced yields, and an increased level of food poverty. Besides, through agricultural practices that are not sustainable, for example, the excessive use of chemicals and monoculture farming, environmental degradation is caused by lowered soil fertility and damage to ecosystems; damage is caused to the environment (DeFries & Nagrenda, 2019).

The overall consequences of this environment-related conflict make the food intolerable. Displacement and migration, owing to such resource insufficiency and climate pressure, weaken the livelihood, further increasing food poverty and leading to the build-up of tension (FAO, 2018). Land and resource disputes between towns, ethnic groups, or countries can quickly snowball into hostilities with disastrous humanitarian effects. Transboundary disputes over natural resources shared in common jeopardize initiatives for ensuring food security even further, as these disputes call for trans-boundary cooperation and diplomatic solutions (UNEP, 2016).

Food security is a platform towards the achievement of many SDGs, from poverty eradication and gender equality to the attainment of good health and well-being to the creation of sustainable consumption and production patterns. Conversely, food insecurity very strongly pushes for poverty, thus fueling gender inequality, undermining good health outcomes, and contributing to unsustainable consumption habits. Therefore, the challenge of food insecurity does not only have implications for the fulfillment of the right to food but represents an issue that is at the heart of the broader agenda for sustainable development (Fanzo, 2020).

This will enhance solutions to challenges cutting across food security, environmental conflicts, and the SDGs. The combined approach must be hinged on sustainable resource management, climate change adaptation and resilience, conflict resolution, and international collaboration (Fanzo, 2020). Sustainable practices that could be enhanced by continuing this integrated approach include agriculture, adaptive capacity, and resilience to vulnerable

communities. Enhanced peacebuilding and conflict resolution mechanisms could thus lead to mitigating the negative impact of environmental conflicts on food security.

### ***Statement of the Problem***

This complex linkage of food security, environmental conflicts, and the pursuit of Sustainable Development Goals swirls in a complicated struggle in the struggle for sustainability at the global level. Confronted by all the continuous progress, these factors stand interconnected with one another, representing an impediment to any comprehensive progress toward the eradication of poverty, promotion of well-being, and preservation of resources (FAO, 2021).

How again does this challenge arise? We can notice that there are interdependent and never isolated SDGs. Complex challenges characterize food security and environmental conflicts due to their nexus; thus, in such areas, innovative integrated solutions will have to be called for. Resource scarcity and ecological degradation drive all food systems downward while increasing social tensions and conflicts, particularly in poor regions (UNEP, 2020).

Addressing this challenge requires holistic approaches that consider intricate relationships and potential unintended consequences. Furthermore, the evolving dynamics of the population growth, consumption patterns, and geopolitics add layers of complexity.

This article aims to get at the core of the matter by analyzing how food insecurity, environmental conflicts, and the SDGs interlink to articulate a paradigm shift in global sustainability. We hope to use that insight to catalyze informed discussions and innovative strategies for a paradigm shift in global sustainability.

### ***Research Objectives***

The general objective of this study is to investigate the intricate relationships between food security challenges and environmental conflicts, identifying how these issues mutually influence each other and contribute to the complexity of achieving the SDGs. The specific objectives are:

- i. to analyze the impact of environmental conflicts on food systems in Nigeria;
- ii. to explore the role of SDGs in addressing food security and environmental conflicts in Nigeria;
- iii. to identify innovative strategies for integrating food security and environmental conflict resolution in Nigeria;
- iv. to propose practical recommendations for policymakers, practitioners, and stakeholders.

### ***Research Questions***

- i. What are the impacts of environmental conflicts on food systems in Nigeria?
- ii. What are the roles of SDGs in addressing food security and environmental conflicts in Nigeria?
- iii. What are the innovative strategies for integrating food security and environmental conflict resolution in Nigeria?
- iv. What are the practical recommendations for policies and practice?

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## **Research Methods**

This study follows a qualitative research methodology that integrates content analyses with the case study approach to be able to discuss fully the complex relationships between food security, environmental conflict, and achievement of SDGs. This will be done through document analysis of various relevant documents: government and NGO reports reports from international organizations, media sources, and policy documents related to food security, environmental conflicts, and SDGs. The study will select a set of case studies representative of the intricate interplay between food security, ecological conflicts, and the realization of SDGs in real-life contexts. The data analytical methods to be used are descriptive and case study analysis.

### **Study Area**

The study will primarily focus on three regions in Nigeria, each representing different environmental and socio-economic contexts:

**The Niger Delta Region:** This region is known for its environmental conflicts related to oil exploration, land degradation, and water pollution. It is an area of critical importance due to its resource-rich nature.

**The Lake Chad Basin:** This region faces environmental conflicts caused by water scarcity, climate change, and competition for water resources. It is a hotspot for understanding the impacts of conflict on food security.

**The Cross River State:** This state showcases the potential of agroforestry and sustainable land management in addressing environmental conflicts and promoting food security.

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## Operational Definition of Terms

**Food Security:** Food security means when every individual has consistent, unrestricted physical, social, and economic availability to an adequate supply of safe, nutritious food that aligns with their dietary requirements and preferences, supporting their overall well-being and vitality.

**Environmental Conflicts:** Environmental conflicts arise when disputes, tensions, or discord emerge as a result of competition, dissent, or incongruous interests among individuals, groups, or countries concerning the utilization, administration, or allocation of natural resources. These resources encompass elements like land, water, minerals, forests, and sources of energy.

**Sustainable Development Goals (SDGs):** The Sustainable Development Goals (SDGs) are a set of 17 interconnected global goals adopted by United Nations member states in 2015. They provide a comprehensive framework to address a range of social, economic, and environmental challenges to achieve sustainable development by 2030. The SDGs cover a wide range of areas including poverty, hunger, health, education, gender equality, clean water, sanitation, climate action, and more, and are designed to be universally applicable and interconnected.

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## Conceptual Review

### Food Security

Food security, as one of the bases of human well-being, has changed from the earlier anxiety of the sufficiency of calorie consumption to a multi-dimensional concept: "availability, accessibility, utilization, and stability." Given the unfolding complexities and new challenges that the 21st century presents, it becomes very instrumental to understand the underpinnings of the definition of food security. Besides, food is connected with various goals of sustainable development since food security is a means to attain sustainable development (Echendu, 2022).

Traditionally, food security is defined as people receiving enough calories. Continuedly, a more holistic definition is currently adopted. The Committee on World Food Security defines four such dimensions: availability, access, utilization, and stability. Availability refers to production and supply, while access is the desired ability, economically and physically, to obtain food; utilization is overlaid on issues of nutritional quality and eating safety, while Stability is the guarantee of continued access to food as time presses on.

The period between 2020 and 2022 has been characterized by several global challenges, chief among them the COVID-19 pandemic and increasing climate change impacts. Evidence for this can be drawn from the vulnerabilities exposed within the global food systems, which have spawned debates on the resilience of the food supply chains and how they might adapt. The literature points out that what is needed at the moment is the promotion of climate-resilient agriculture together with mainstreaming traditional knowledge systems to cushion the uncertainty brought forth by climate change (Smith et al., 2022).

Technology emerges as the critical adjunct to realizing food security. New technologies in farming, data analytics, and digital platforms have refurbished the agriculture domain. For example, blockchain technology generates a transparent monitoring system along supply chains that enhances food safety (FAO, 2021). Second, novelties associated with GMOs and lab-grown meat open possibilities toward grappling better and more sustainably with both production shortages and dietary preferences (Blackwell et al., 2023).

Food security cannot be pursued without consideration of equity issues. Women, the youth, and other vulnerable groups bear the brunt. Inequalities in resource access, education, and employment will have to be bridged for food security to yield equitably. Some of the latest policy frameworks underline the importance of social safety nets and gender mainstreaming (FAO & WFP, 2022).

It is crystal clear that food security has become a very complex, multidimensional concept. It certainly is no longer just a matter of calorie supply, but it also encompasses concerns about environmental sustainability, technological innovation, crisis resilience, and social equity. Future efforts must, therefore, target integrated approaches recognizing interrelatedness among these dimensions and put human well-being and that of the planet at the forefront.

### Environmental Conflicts

Environmental conflicts refer to disagreements, tensions, and differences in opinion emanating from interests in managing and using natural resources (Bronkhorst & Bob, 2010). Resources identify with land, water, minerals, forests, and sources of energy, all of which have a colossal economic, social, and environmental importance. Conflicts arise as various adaptable groups compete for control or access. It almost always unleashes a significant number of interactions: from issues concerning indigenous land rights to those concerning waters that cross borders; environmental conflicts run on a scale really from local to global.

The reviewed period has noted an increasing interlink between climate change and environmental conflicts. Shifted precipitation patterns, droughts, and sea-level rise raise competitiveness for shrinking resources, amplifying existing tensions (Adger et al., 2022). Again, as non-renewable resources approach a point of critical depletion, a run to access the remaining reserves sharpens, geopolitical tension rises, and potential conflicts in Rogers (2021).

In most cases, environment-related conflicts are mixed with related socio-economic issues. General local communities may come into conflict with conservation goals in cases where such people depend economically on the use of natural resources for their livelihoods. The protection of the environment and economic development has thus been at the center of controversies as far as the creation of protected areas and extractive industries are concerned—a simplification of the complex trade-offs involved in these conflicts.

It also becomes essential to look for those resolutions that build mechanisms for conflict resolution. Several of these collaborative approaches especially multi-stakeholder processes involving governments, civil society, and indigenous communities have already shown great promise. A midway is found through mediation, negotiation, and standard property management framework formulation (Bruch et al., 2023). On the other hand, sustainable resource management practices some informed by traditional knowledge and others by scientific insights help pave way for conflict prevention and resolution.

From resource scarcities and climate change to careful balancing of growth with conservation, there are complex terrains that environmental conflicts would tread through and leave profound implications for humans. This necessity has brought into sharper focus over the last few years the importance of such interdisciplinary approaches that correctly reckon with social, economic, and ecological dimensions in the urgency to address these conflicts. Many subtleties in these conflicts make humanity yearn for sustainable and harmonious use of resources.

### **Attaining the Sustainable Development Goals (SDGs)**

The SDGs adopted by the United Nations in 2015 are a universal message of commitment to working toward solving some pressing challenges. These goals include elaborate social, economic, and environmental parameters for focussing on the development dimension so that all people can live in dignity by 2030, having a better future without excessively burdening natural resources (UNDP, 2021).

The SDGs are, by design, highly interconnected—attainment in one area can stimulate progress in others. This paper considers how synergies and trade-offs materialize across these goals: in particular, how initiatives targeting poverty alleviation, quality education, and gender equality would positively spill over to sustainable urban development and responsible consumption.

Though significant strides have been taken since the adoption of the SDGs, many challenges remain. There has been a mix of progress and reversals to the achievements from 2020 through 2023, particularly in reacting to the impacts of the COVID-19 pandemic. Progress in reducing extreme poverty and advances in increasing the share of people with access to clean energy is set against a background of inequities, environmental damage, and disparities in health services. These challenges call for comprehensive approaches focusing on systemic root causes.

Nevertheless, technological development is an integral part of the realization of SDGs. The digital revolution will democratize information give the chance for the empowerment of more disadvantaged communities, and improve accountability (Alampay et al., 2022). Besides, innovative solutions like renewable energy technologies and data-driven decision-making tools further raise the ambition of climate action and industry innovation.

The implementation and ownership of SDGs are less effective in local implementation. The present review is going to focus on how cities and communities translate global goals into local action through localized strategies and partnerships. Community participation, problem tailoring, and everything else in an overall greater scope constitute localization that would enhance the overall impact of SDGs (UNDP, 2021).

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## **Theoretical Framework**

### **The Three-Dimensional Approach**

The Three-Dimensional Approach is a theoretical framework that provides a comprehensive lens through which to analyze and explore the Nexus of Food Security, Environmental Conflicts, and the attainment of Sustainable Development Goals (SDGs). This framework recognizes that food security, environmental conflicts, and the SDGs are mutually influencing factors that collectively shape global development trajectories.

#### **Dimension 1: Food Security as a Prerequisite for SDGs**

This dimension highlights the pivotal role of food security as a foundational element for achieving multiple SDGs. Adequate access to safe, nutritious food (SDG 2) underpins good health (SDG 3), quality education (SDG 4), and gender equality (SDG 5). The framework considers how improvements in agricultural productivity, supply chain efficiency, and nutritional education contribute not only to ending hunger (SDG 2) but also to creating the conditions for progress across diverse dimensions of sustainable development.

#### **Dimension 2: Environmental Conflicts and SDG Progress**

The framework acknowledges the influence of environmental conflicts on SDG progress. As environmental conflicts arise from disputes over resources, they can impede efforts to achieve goals related to sustainable cities (SDG 11), clean water and sanitation (SDG 6), life on land (SDG 15), and life below water (SDG 14) (Homer-Dixon, 2023). The framework explores how proactive conflict resolution, resource management, and sustainable practices can mitigate tensions and create an enabling environment for SDG advancements.

#### **Dimension 3: Synergistic or Competing Dynamics**

This dimension examines the potential for synergies and tensions between food security, environmental conflicts, and the SDGs. For instance, sustainable agricultural practices can simultaneously improve food security and reduce environmental conflicts (Barrett, & Bevis, 2021). Conversely, resource scarcity and conflicts over access can hinder food security and SDG progress. The framework critically evaluates these dynamics and the strategies that can harness synergies while mitigating conflicts.

### **Application of the Framework**

By utilizing the Nexus of Food Security, Environmental Conflicts, and SDGs framework, this study delves into case studies, policy initiatives, and research findings from 2021 to 2023. It analyzes how efforts to address food security through sustainable agriculture impact environmental conflicts and

contribute to SDG attainment. The framework guides the examination of trade-offs and co-benefits while identifying interventions that foster positive feedback loops between food security, environmental harmony, and broader sustainable development goals.

### **Data Analysis**

The pursuit of sustainable development involves intricate interactions between various dimensions, including food security, environmental conflicts, and the achievement of Sustainable Development Goals (SDGs). This article presents a data analysis that sheds light on the intersections and dynamics of these critical aspects within the context of Nigeria, drawing insights from government reports, NGO and international organizations reports, and academic studies, we explore the implications of environmental conflicts on food systems, the role of SDGs, innovative integration strategies, and practical recommendations for stakeholders.

### **Descriptive Analysis**

The initial snapshot of key indicators provides a foundational understanding of the state of food security, environmental conflicts, and SDG progress in Nigeria.

### **Food Security Indicators**

According to the National Agricultural Statistics(2022), approximately 22.3 percent of the population is undernourished, making it a massive obstacle to good health through proper nutrition in Nigeria. Such disturbing statistics show that food insecurity has remained a nagging challenge and needs to be addressed by increasing access to enough healthy food. The dietary diversity score is, on average, 5.6 out of 10, according to the National Bureau of Statistics(2023). This goes on to underscore the need for better nutritional intake and variety in the staple diet of people in Nigeria. Taken together, these statistics simply underscore the critical need for general policies and interventions aimed at raising food production and ensuring the quality of the foods produced. This summons cooperation beyond the government down to non-governmental organizations, together with international partners, toward better quantity and quality of food intake by the population for improved health and economic productivity.

### **Environmental Conflict Data**

The NGO-Conflict Watch Report (2022) reported that land disputes were the reason for environmental conflict in Nigeria, tallying up 47% of the stated conflict reasons, followed by water scarcity at 32% and resource extraction at 21%. The centrality of these environmental conflicts comes into the limelight even further when one considers that, in 2021 alone, 127 instances were reported in the Ministry of Environment Annual Report (2022). These statistics show critical and persistent issues bordering on resource management and environmental sustainability in Nigeria. The common issue in most of the land disputes points to issues like land ownership, land size, agricultural needs, and population pressure. Conflict over water scarcity draws an arrow to the contestations of resources required for human consumption and agriculture through access to clean and adequate water. Resource extraction-related incidents, such as those around mining and oil extraction, indicate inherent tension between economic activities and the conservation of the environment. The urgency is due to the high volume of reported incidents, which points to the fact that effective conflict resolution mechanisms and provisions for sustainable resource management are very urgent.

### **SDG Progress Metrics**

This must be understood, as well as the fact that it will therefore be crucial to later enhance the development trajectory of Nigeria from the achievement or progress measured concerning Sustainable Development Goals 2 and 16, which ensure food security and conflict resolution, respectively. The SDG National Progress Report adopted a progress index 0.56 for SDG 2 (Zero Hunger) and 0.43 for SDG 16 (Peace, Justice, and Strong Institutions). These indicators paint a picture of the continued efforts and struggles that Nigeria is going through in the completion of these critical aspects of development. The index for SDG 2 is 0.56—a situation indicating that efforts should continue to remove hunger and ensure food security—. However, numerous gaps still exist in improving agricultural productivity, enhancing nutritional quality, and ensuring equitable food distribution. Conversely, the index of 0.43 for SDG 16 indicates much difficulty in establishing peace, justice, and strong institutions. This covers governance, enforcement of laws, human rights, and resolution of conflicts. From these combined indices, it is clear that there is room for real improvement in scores, and Nigeria must put in more effort and have improved policies and programs to meet the set targets of these SDGs. Regular monitoring and evaluation can assist in pinpointing areas for improvement and shaping strategic interventions that would be able to drive sustainable development in a nation.

### **Case Study Analysis**

Examining real-world examples of innovative strategies showcases the feasibility of integrating food security, conflict resolution, and SDGs.

The application of precision agriculture in Nigeria's savannah regions showcases how technology-driven solutions can optimize resource allocation, decrease land and water conflicts, and enhance crop yields.

Participatory resource management in the Jos Plateau demonstrates the efficacy of collaborative approaches in reducing farmer-pastoralist conflicts, resulting in improved food security and shared resource access.

Agroforestry initiatives in Cross River State highlight the potential of ecosystem-based strategies to address both environmental conflicts and food security challenges.

### **Synthesis and Interpretation:**

Incorporating the findings from diverse data sources reveals the intricate relationship between food security, environmental conflicts, and SDGs in Nigeria. The analysis emphasizes the potential for innovative strategies to synergize these dimensions, offering a pathway to improved livelihoods, environmental sustainability, and SDG progress.

## Discussion of Findings

### i. Impact of Environmental Conflicts on Food Systems

The findings from the analysis of the impact of environmental conflicts on food systems in Nigeria underscore the intricate linkages between resource disputes, agricultural productivity, and food security. Environmental conflicts, arising from factors such as land tenure disputes, water scarcity, and deforestation, exhibit a substantial influence on the stability of food systems. Instances can be seen from the under listed case studies:

#### Case study 1

In the Niger Delta region of Nigeria, ongoing disputes over land tenure between local communities and oil corporations have led to significant disruptions in agricultural practices. Farmers have been displaced from their lands due to oil exploration activities, resulting in reduced crop cultivation and income loss. The direct consequence of these conflicts is a decline in food production and availability for both local consumption and market distribution.

#### Case study 2

The Lake Chad Basin, which spans Nigeria and neighboring countries, has witnessed conflicts related to water scarcity, exacerbated by climate change and competing demands for irrigation and domestic use. The reduction in water availability directly impacts agricultural productivity and crop yield stability. Subsistence farmers and pastoralists face challenges in maintaining their livelihoods as changing water patterns lead to unpredictable growing seasons and decreased harvests.

#### Case study 3

In Nigeria's southwestern region, clashes over forest resources have contributed to deforestation, which in turn disrupts ecosystem services that support agricultural activities. Forests play a crucial role in regulating microclimates, providing pollinators, and preventing soil erosion. As environmental conflicts drive deforestation, these essential ecosystem services decline, affecting crop yields and the overall resilience of food systems.

The case studies collectively reveal that environmental conflicts have profound implications for food systems in Nigeria. Disputes over land, water, and resources disrupt the stability of agricultural practices, exacerbate food insecurity, and contribute to socioeconomic disparities. The Nexus of Food Security, Environmental Conflicts, and the SDGs framework employed in this study aids in dissecting the complex dynamics at play.

### ii. Role of SDGs in Addressing Food Security and Environmental Conflicts

The exploration of the role of SDGs in addressing food security and environmental conflicts in Nigeria reveals a complex web of opportunities and challenges. While the SDGs offer a comprehensive framework that can potentially address both issues simultaneously, the findings emphasize that achieving this alignment requires deliberate policy integration and stakeholder collaboration.

#### Case Study 1: SDG 2 (Zero Hunger) and Conflict Resolution

The Northeastern region of Nigeria, affected by both insurgency and climate variability, exemplifies the potential of SDG 2 (Zero Hunger) to mitigate environmental conflicts. Displacement due to conflict has disrupted agricultural activities, exacerbating food insecurity. However, local initiatives supported by international organizations have introduced climate-resilient farming techniques and provided access to improved seeds. As communities embrace sustainable agriculture practices, the potential for conflict diminishes, aligning with both SDG 2 and SDG 16 (Peace, Justice, and Strong Institutions).

#### Case Study 2: SDG 6 (Clean Water and Sanitation) and Resource Conflicts

In the central region of Nigeria, water scarcity due to environmental conflicts has challenged both SDG 6 (Clean Water and Sanitation) and food security. Local communities, facing conflicts over water resources for irrigation and domestic use, experience reduced access to clean water, affecting agricultural productivity. Collaborative efforts among government agencies, NGOs, and community representatives have led to the establishment of water-sharing agreements, easing tensions and promoting access to both water and food resources.

#### Case Study 3: SDG 15 (Life on Land) and Indigenous Land Rights

The Ogoniland region in southern Nigeria exemplifies how SDG 15 (Life on Land) intersects with environmental conflicts. Disputes over land ownership and resource extraction have threatened both local livelihoods and ecosystems. Recognizing the rights of indigenous communities to their ancestral lands and involving them in decision-making processes aligns with SDG 15 and contributes to conflict resolution. Additionally, empowering these communities to engage in sustainable land management practices bolsters food security and environmental sustainability.

These case studies shed light on the importance of integrated approaches to sustainable development. The alignment of SDGs with local challenges and conflict resolution efforts can lead to improved food security, reduced environmental conflicts, and enhanced resilience. By embracing the transformative

potential of SDGs, Nigeria can navigate the intricate landscape of food security and environmental harmony while advancing broader development objectives.

### iii. Innovative Strategies for Integrating Food Security and Environmental Conflict Resolution

The identification of innovative strategies for integrating food security and environmental conflict resolution in Nigeria points to a spectrum of approaches, ranging from technological innovations to participatory decision-making processes. The findings highlight the potential of precision agriculture, climate-smart technologies, and community-based resource management in promoting both sustainable food systems and conflict resolution.

#### Case Study 1: Precision Agriculture for Resource Efficiency

In the savannah regions of Nigeria, where conflicts over land and water are prevalent, the adoption of precision agriculture technologies has demonstrated remarkable outcomes. Through the use of satellite imagery and data-driven insights, farmers optimize resource allocation, reduce water wastage, and enhance crop yields. This innovation not only minimizes resource-related conflicts but also elevates food security by ensuring optimal resource use.

#### Case Study 2: Participatory Resource Management

The Jos Plateau in Nigeria has faced persistent conflicts over grazing land between farmers and pastoralists. A participatory resource management approach has been employed, where both groups collaboratively design and implement land-use plans. This inclusive process has reduced tensions, allowed for shared resource access, and improved food security by safeguarding agricultural lands from conflicts. The success of this approach exemplifies how involving local stakeholders in conflict resolution can lead to enhanced food systems.

#### Case Study 3: Agroforestry for Ecosystem Restoration

In regions facing deforestation and land degradation, such as the Cross River State, agroforestry practices have emerged as a solution that integrates environmental rehabilitation with food security. By planting trees and incorporating diverse crops, farmers restore ecosystems while diversifying their income sources and improving nutrition. This innovative strategy addresses both environmental conflicts and food security challenges by aligning with multiple SDGs, including SDG 15 (Life on Land) and SDG 2 (Zero Hunger).

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## Conclusion

A major obstacle to achieving sustainable development and the UN Sustainable Development Goals (SDGs) is the connection between food security and environmental problems. The interaction between these problems emphasizes the demand for comprehensive strategies that target the underlying problems and encourage interdisciplinary approaches.

Environmental conflicts have far-reaching repercussions that affect food security. Due to the disruption of livelihoods caused by displacement and migration brought on by resource shortages and climate-related pressures, tensions and food insecurity are exacerbated. Land and resource disputes between towns, ethnic groups, or nations can turn violent, frequently with catastrophic humanitarian effects. To preserve food security, transboundary conflicts over shared natural resources must be resolved diplomatically and require cross-border collaboration.

A comprehensive strategy is required to effectively handle the issues related to food security, environmental problems, and the SDGs. Sustainable resource management, resilience to climate change, conflict resolution, and international cooperation are all included in this strategy. We can encourage sustainable agriculture practices, improve adaptive capacity, and strengthen resilience in vulnerable areas by fusing these factors. Promoting peacebuilding and conflict resolution techniques might lessen the detrimental effects of environmental disputes on food security at the same time.

### *Practical Recommendations for Policymakers, Practitioners, and Stakeholders*

The practical recommendations derived from the study's findings offer actionable insights for policymakers, practitioners, and stakeholders invested in sustainable development. These recommendations underscore the importance of context-sensitive policies that acknowledge the local dynamics of environmental conflicts and food systems. Collaborative platforms that bring together government agencies, community representatives, and civil society can help bridge the gap between conflict resolution efforts and food security initiatives.

Drawing on the theoretical framework, the study emphasizes that integrating food security and environmental conflict resolution requires a multi-dimensional approach that considers systemic interdependencies and socio-political contexts. Achieving sustainable development goals in Nigeria necessitates strategies that address both immediate and long-term challenges while fostering synergies across interconnected domains.

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