



Irish Aid
An Roinn Gnótháil Eachtracha agus Trádála
Department of Foreign Affairs and Trade

INTEGRATING CLIMATE AND NUTRITION FOR A RESILIENT AND FOOD-SECURE NIGERIA

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KEY INSIGHTS

1. Nigeria faces intertwined crises of climate change and malnutrition. Rising temperatures, erratic rainfall, and extreme weather events are already reducing agricultural yields and threatening food security, with an estimated 30.6 million people at risk of severe food insecurity in 2026—about 7 million more than in 2025. Climate shocks and poor nutrition reinforce each other, putting vulnerable populations at even greater risk.

2. Policies and initiatives largely operate in silos. Most national and sub-national climate and nutrition policies and initiatives do not intentionally integrate both agendas, limiting opportunities for synergistic action. While a few policies and initiatives show emerging awareness of the climate–nutrition link, these remain largely analytical rather than actionable, leaving many interventions vulnerable to climate shocks.

3. Integrated action can yield “win-win” outcomes. Linking climate and nutrition in policies, investments, and programs—such as through climate-smart agriculture, water management, and community resilience initiatives—can strengthen food security and improve health outcomes simultaneously. Urgent, coordinated action across government, civil society, and private sector actors is needed to translate national commitments into tangible, locally responsive solutions.

BACKGROUND

Nigeria's longstanding challenges around food and nutrition security remain urgent—and the growing impact of climate change only amplifies them. Nigeria is not on track to achieve the Sustainable Development Goals (SDGs), particularly those directly dealing with nutrition and climate, SDG 2 and SDG 13. For example, it is estimated that 30.6 million people could face severe food insecurity during the 2026 lean season—about 7 million more than in 2025—driven by economic hardship, inflation, climate impacts, and insecurity in the northeastern states¹. Data from 2000–2023 show that rising temperatures, erratic rainfall, and extreme weather events have severely reduced agricultural output, with projections indicating that staple crop yields in Northern Nigeria could decline by 13–20% by 2080. Over 80% of Nigerian agriculture depends on rainfall, making it highly vulnerable to increased evaporation and water demand as temperatures rise².

A key but under-recognized and underused lever in driving progress towards the SDGs, particularly SDG 2 and 13, is the transformation of food systems. How food is produced and consumed is a part of the problem: food production contributes to greenhouse gas emissions³, and climate change in turn damages food systems – negative feedback that threatens crop yields, food security, and nutrition outcomes. But it can be part of the solution, and this opportunity is missing.

There is a clear and urgent need for integrated, evidence-based approaches to address the nutrition–climate nexus. This policy brief captures the key findings from a deep-dive analysis of nutrition and climate policies, initiatives and investments at both the national and sub-national

levels in Nigeria undertaken using the framework of the Initiative on Climate Action and Nutrition (I-CAN). I-CAN is a multi-stakeholder and multi-sectoral global flagship programme to support meaningful integrated action on both climate and nutrition, launched by the Government of Egypt at COP27. I-CAN provides a framework and methodology to assess the integration of climate and nutrition policies. It seeks to identify and leverage areas of synergy and drive actions that deliver dual benefits for both climate and nutrition, to accelerate progress toward shared global targets

BRIEF INTRODUCTION TO THE I-CAN ASSESSMENT FRAMEWORK

The Nigeria Deep Dive Analysis applied the framework using 13 climate parameters and 7 nutrition parameters to assess integration systematically across national and state contexts. It was undertaken in four phases:

- a) Nutrition Integration in National⁴ and Sub-National Climate Policies⁵**
- b) Climate Integration in National⁶ and Sub-National Nutrition Policies⁷**
- c) Nutrition Integration in Climate Initiatives⁸**
- d) Climate Integration in Nutrition Initiatives⁹**

Throughout all four phases, the framework served as the reference point, ensuring consistency in how the level of integration was defined across both national and sub-national policies, initiatives, and investments.

¹Food and Agriculture Organization of the United Nations. (2025, March 10). Latest food insecurity figures reveal persistent threats to the lives of 30.6 million people [Press release]. FAO Nigeria. <https://www.fao.org/nigeria/news/detail-events/en/c/1735060/>

²Federal Ministry of Agriculture and Rural Development (FMARD). (2015). National Agricultural Resilience Framework. Abuja, Nigeria: FMARD.

³Through unsustainable practices like deforestation, overreliance on rainfed farming, inefficient post-harvest systems.

⁴Nigeria Nation Adaptation Plan (2020) 2. Nigeria's National Climate Change Policy (NCCP) (2021-2030) 3. National Climate Change Act (2021) 4. Nigerian Energy Transition Plan (2022) 5. Nigeria's Nationally Determined Contribution (NDC) (2021) 6. National Adaptation Strategy and Plan of Action on Climate Change for Nigeria (NASPA-CCN) (2020) 7. Climate Smart Agriculture Framework for Nigeria (2024) 8. National Action Plan on Gender and Climate Change for Nigeria (2020)

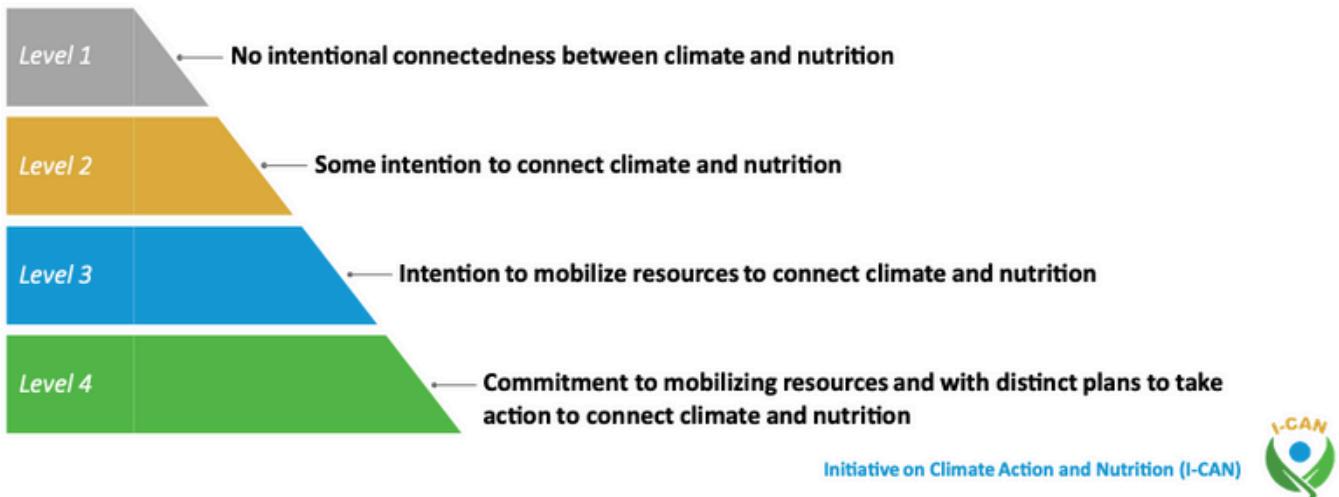
⁵The state-level analysis covered existing policies and initiatives from Lagos, Rivers, Ebonyi, Taraba, Katsina, and Osun States, including the Lagos State Climate Action Plan (2020–2025), Lagos State Climate Adaptation and Resilience Plan (2024), Climate Change Adaptation and Mitigation Plan for Rivers State (2021), Ebonyi State Climate Change Policy (2023), Taraba State Climate Action Plan (2024), Katsina State Green Growth Agenda (2025), and Osun State Climate Action Plan (2025)

⁶National Policy on Food and Nutrition 2016 2. National Multi-Sectoral Plan of Action for Food and Nutrition (NMPFAN) 2021 – 2025 3. National Strategic Plan of Action on Nutrition (NSPAN) 2021-2025 4. Agricultural Sector Food Security and Nutrition Strategy (2016 – 2025) 5. NAFDAC Good Manufacturing Practice Guidelines For Food And Food Products (2023) 6. National Policy on Food Safety and its Implementation Strategy (NPFISI) (2014) 7. National Social Protection Policy (2021) 8. National Policy on Infant and Young Child Feeding in Nigeria (2010) 9. National Health Promotion Policy (2019) 10. National Agricultural Technology and Innovation Policy 2022 - 2027 11. Nigeria National Pathways to Food Systems Transformation - 2021

⁷Lagos State Food and Nutrition Policy (2019-2023) 2. Kano State Nutrition and Health Plan (2019) 3. Kaduna State Policy on Food and Nutrition (2017) 4. Delta State Strategic Plan of Action on Nutrition (2018) 5. Ondo State Strategic Plan of Action for Nutrition (2017-2021) 6. Kebbi State Costed Nutrition Strategic Plan (2017-2021) 7. Borno State Food Security Strategy on Nutrition (2024-2026) 8. Niger State Policy on Food and Nutrition (2017)

⁸Nigeria Solar IPP Support Program by Green Climate Fund 2. Nigeria Climate Change Response Programme (NCCRP) 3. African Carbon Market Initiative (ACMI) 4. Carbon Pricing Initiative 5. Agro-Climatic Resilience in Semi-Arid Landscapes (ACReSAL) Project 6. Great Green Wall Initiative Nigeria 7. Africa Adaptation Acceleration Program (AAAP) 8. Acumen Resilient Agriculture Fund II

⁹Accelerating Nutrition Results In Nigeria (ANRiN) 2. Bill & Melinda Gates Foundation \$549K investment in FanMilk 3. Renewed Hope: National Home-Grown School Feeding Programme (RH-NHGSFP) 4. Nutrition 774 Initiative to Combat Malnutrition 5. Lagos Food Bank Initiative (LFB) 6. Katsina State School Feeding 7. Global Food Security Strategy Nigeria Country Plan (2024) 8. Scaling Up Nutrition Strategy (SUN) Strategy (2021-2025) 16 Programme 9. Osun State School Feeding Programme (O'MEALS) 10. Evidence and Action Towards Safe, Nutritious Food (EatSafe) 11. Strengthening Nutrition In Priority Staples (SNIPS) Project in Nigeria 12. Social Enterprise Fund for Agriculture in Africa (SEFAA)



(Figure 1. Four levels of integration between climate and nutrition used in I-CAN framework)

KEY FINDINGS

1. Climate Policies show Limited Integration of Nutrition

The analysis of both national and sub-national climate policies reveals most fall under Level 1 in terms of integration – no intentional connectedness. This includes Nigeria's National Climate Change Policy (NCCP) 2021–2030, the National Adaptation Plan (2020), and state-level policies from Lagos, Rivers, Ebonyi, and Taraba states. This implies that, at present, climate action within these policies is largely conceptualised and implemented without intentional considerations for its direct and indirect impacts on nutritional outcomes, nor how nutrition related activities might exacerbate climate risks.

A limited number of policies scored at Level 2, showing some intention to connect climate and nutrition, such as:

- The National Adaptation Strategy and Plan of Action (2011)
- The Climate Smart Agriculture Policy Framework (2024)
- The Katsina State Green Growth Agenda (2025).

The presence of a limited number of policies at Level 2, showing some intention to connect climate and nutrition, offers hope of some intention to integrate climate and nutrition outcomes. While these policies acknowledge the interdependencies, however, their focus remains largely analytical rather than actionable.

2. Nutrition Policies reveal Untapped Opportunities to Better Integrate Climate

Similarly, most national nutrition policies, such as the National Policy on Food and Nutrition (2016), the Multi-Sectoral Plan of Action for Food and Nutrition (2021–2025), and the National Strategic Plan of Action on Nutrition (2021–2025), are classified at Level 1, showing no intentional integration of climate considerations. Some progress is evident, with the Agricultural Technology and Innovation Policy (2022–2027) reaching Level 2, and the National Pathways to Food Systems Transformation (2021) standing out at Level 3, demonstrating a stronger intention to mobilise resources for dual climate and nutrition outcomes.

At the sub-national level, policies in Kano, Kaduna, Delta, Ondo, Kebbi, and Borno reflect the same pattern of gaps, all ranking at Level 1. The only exception is the Niger State Policy on Food and Nutrition (2017), which achieved Level 2, signalling some recognition of climate–nutrition linkages.

Overall, the predominance of Level 1 classifications highlights a critical policy gap. Without systematically integrating climate resilience into nutrition policies, current efforts remain highly vulnerable to climate shocks, threatening both long-term food security and public health.

3. Climate Initiatives fail to Maximise Potential Nutrition Co-benefits.

Most climate initiatives in Nigeria show little or no connection to nutrition. Programmes such as the Nigeria Solar Independent Power Projects Support Program and the Nigeria Climate Change Response Programme at Level 1, lacks intentional links to nutrition outcomes. Agro-Climatic Resilience in Semi-Arid Landscapes (ACReSAL) 2021, and the Great Green Wall Initiative (2023–2034), are classified at Level 2, reflecting emerging awareness by addressing areas like agriculture, water management, and community resilience. Significantly, the Acumen Resilient Agriculture Fund (ARAF II) 2024 and the Africa Adaptation Acceleration Program (AAAP) 2021 reached Level 4, demonstrating clear commitments and resource mobilisation that actively link climate action with nutrition outcomes.

These initiatives demonstrate an emerging awareness of linkages between climate and nutrition and thus intentionally address areas vital for nutrition, such as sustainable agriculture, water management, and community resilience. While they may not have nutrition as a primary stated objective, their activities inherently contribute to environments that support better nutritional outcomes.

4. Nutrition Initiatives only rarely Respond to Climate Change.

Most nutrition initiatives in Nigeria do not intentionally incorporate climate change. Programmes such as Accelerating Nutrition Results in Nigeria (ANRIN, 2018), the Renewed Hope: National Home-Grown School Feeding Programme 2005, and various state-level nutrition initiatives do not intentionally incorporate climate change impacts, vulnerabilities, or resilience-building measures. A considerable portion of nutrition efforts may thus be vulnerable to climate shocks, potentially undermining their effectiveness and sustainability in the long run. There are some bright spots, including the Global Food Security Strategy: Nigeria Country Plan (2024), classified at Level 2, which shows some effort to link climate and nutrition, and the Scaling Up Nutrition (SUN) Movement Strategy (2021–2025), which reaches Level 3, demonstrating clear intention to mobilise resources for integrated outcomes.

This signifies a positive step towards integrated action.



1.1 Summary of Results

	Level 1	Level 2	Level 3	Level 4
National Climate Policies	4 (50%)	4 (50%)		
State Climate Policies	5 (57.1%)	2 (42.9%)		
National Nutrition Policies	9 (81.8%)	1 (9.1%)	1 (9.1%)	
State Nutrition Policies	7 (87.5%)	1 (12.5%)		
Climate Initiatives & Investments	3 (37.5%)	3. (37.5%)		2 (25%)
Nutrition Initiatives & Investments	10 (83.3%)	1 (8.3%)	1 (8.3%)	

KEY RECOMMENDATIONS.

We recommend four priority actions to strengthen the integration of climate and nutrition in national frameworks.

1. Better Integration of Climate and Nutrition in Policies

The ongoing review of key national policies—including the National Policy on Food and Nutrition (2016), and the Agriculture Sector Food and Security Strategy (2016–2025)—offers a critical opportunity to integrate climate and nutrition more effectively. Similarly, at the sub-national level, state governments should ensure that the development and implementation of food and nutrition policies reflect the same climate–nutrition priorities. Integrating climate resilience into state-level frameworks and implementation plans will help translate national commitments into local action, ensuring that interventions are context-specific and responsive to regional vulnerabilities. Revised policies should move beyond siloed approaches to clearly link climate impacts, such as extreme weather and resource scarcity, with nutritional outcomes, while recognising that well-nourished populations are more resilient to climate shocks. To achieve this, policies must include actionable strategies with dedicated funding, measurable targets, realistic timelines, and clearly designated lead agencies.

2. Financing Through a Dedicated Fund

Establish a National Climate and Nutrition Fund to drive integrated investments that promote climate resilience and nutrition security. This would leverage global and regional finance mechanisms, support dual-purpose programmes such as climate-smart agriculture, and attract private sector and donor contributions. Initial financing could draw from existing national mechanisms like the Nigerian Agricultural Development Fund (NADF) to mainstream climate–nutrition integration across food systems.

3. Stakeholder Collaboration and Capacity Development

Strengthen multisectoral collaboration by engaging government, civil-society, private-sector, and

research actors to co-develop integrated climate–nutrition solutions. It is crucial to build the capacity of nutrition and health stakeholders to engage effectively in climate policy and finance processes, while ensuring their active participation in national climate coordination platforms to embed nutrition considerations into climate planning and implementation.

4. Develop Multistakeholder Advocacy and Outreach

Develop and implement a targeted climate–nutrition advocacy programme to build consensus and mobilize action across public, private, and civil society actors. The framework should promote stakeholder buy-in through strategic engagement and awareness campaigns. Stakeholders should be encouraged to leverage existing technical assistance opportunities from initiatives such as I-CAN and its partners to strengthen capacity, knowledge exchange, and evidence generation needed for integrated solutions.

In addition, structured multi-stakeholder platforms—including public commitment forums, peer-review mechanisms, and transparent reporting processes—can help sustain accountability and continuous progress toward a climate-resilient and nutrition-secure Nigeria.

CONCLUSION

I-CAN provides a unique jumping-off point to accelerate the integration of climate and nutrition in Nigeria's national and subnational policies and initiatives. Such integration is no longer optional; it is essential for building resilient food systems and improving population health. The current situation of little to no intentional connectedness in policy, programming, and funding risks incoherencies and inefficiencies that Nigeria can ill afford. Climate shocks are already directly and deeply damaging food security and nutritional outcomes of Nigeria's people. By acting on these proposed policy recommendations, policymakers can play a key role in ensuring that revised frameworks are practical, coordinated, and results-driven, setting Nigeria on a path toward a climate-resilient, nutrition-sensitive future.