

FINAL REPORT

LANDSCAPING ANALYSIS ON CLIMATE AND NUTRITION POLICIES IN MOZAMBIQUE



Irish Aid
An Roinn Gnóthaí Eachtracha agus Trádála
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Initiative on Climate Action and Nutrition (I-CAN): The Initiative on Climate Action and Nutrition (I-CAN) is a multistakeholder initiative that aims to advance action to address the critical nexus of climate change and nutrition. Launched by the Government of Egypt, as COP27 President and hosted by WHO, core partners include FAO, GAIN, the SUN Movement, and UNEP.

Global Alliance for Improved Nutrition (GAIN): The Global Alliance for Improved Nutrition (GAIN) is a Swiss based foundation launched at the UN in 2002 to tackle the human suffering caused by malnutrition.

Working with governments, businesses and civil society, we aim to transform food systems so that they deliver healthier diets for all people, especially the most vulnerable, from more sustainable food systems.

Three Stones International (TSI): Three Stones International (TSI) is a research, management, and development firm established in Rwanda in 2012 with the goal of supporting and building the capacity of local organizations. Registered as an international firm in the United States in 2017, TSI has since conducted more than 100 assessments, evaluations, and social research assignments, as well as over 30 strategic and action plans for local and international organizations.

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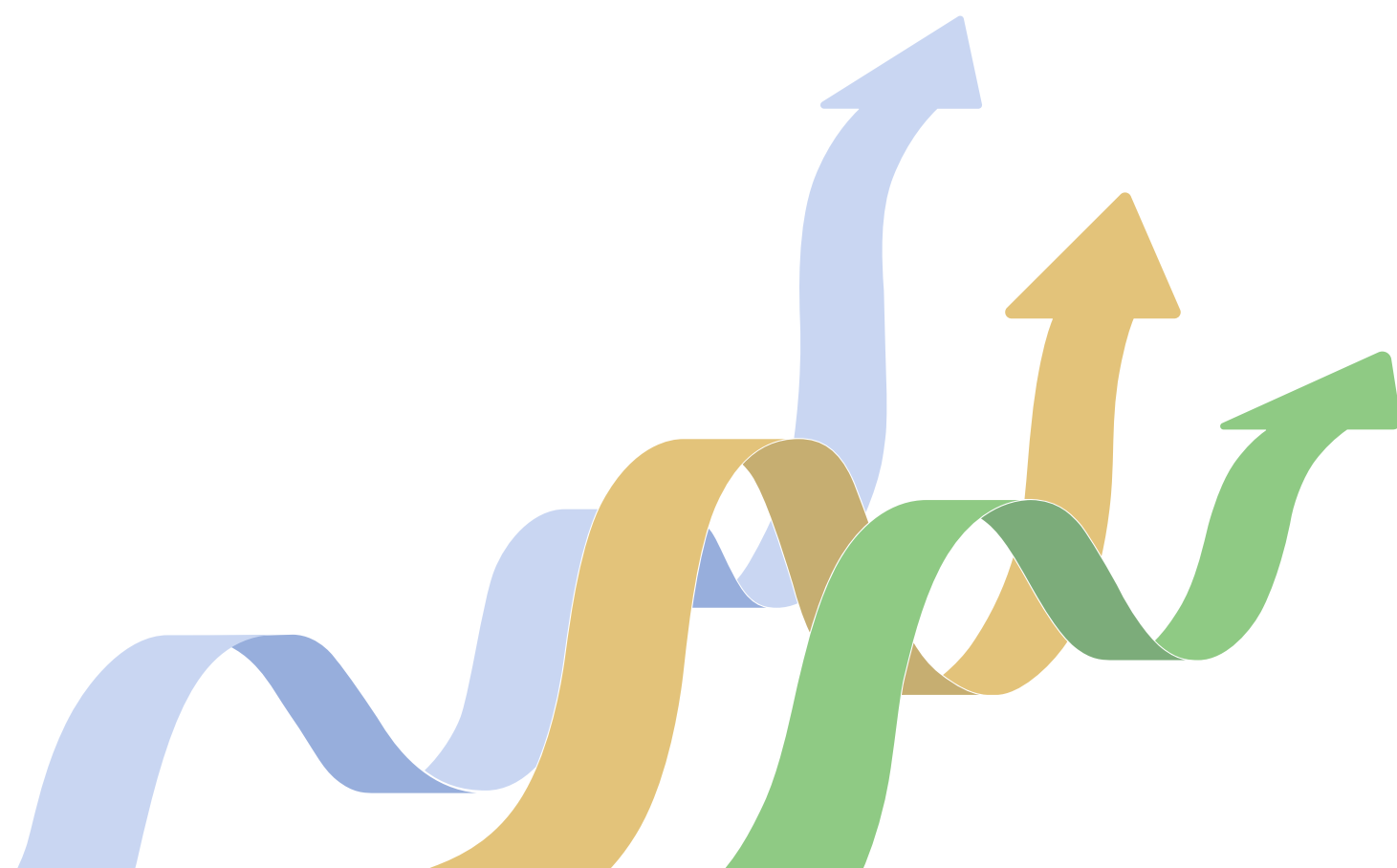
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ACRONYMS

BUR	Biennial Update Report
CMAM	Community-Based Management of Acute Malnutrition
CODSAN	District Council for Food Security and Nutrition
COPSAN	Provincial Council for Food Security and Nutrition
COP27	27th Conference of the Parties to the UN Framework Convention on Climate Change
ENAMMC	National Strategy for Climate Change Adaptation and Mitigation
ENDE	National Development Strategy
ESAN II	Food and Nutrition Security Strategy II
FAO	Food and Agriculture Organization of the United Nations
FTF-RESINA	Feed the Future Resilient, Inclusive, Sustainable Agricultural Systems Activity
GAIN	Global Alliance for Improved Nutrition
I-CAN	Initiative on Climate Action and Nutrition
INGD	National Institute for Disaster Risk Management and Reduction
KII	Key Informant Interview
MAAP	Ministry of Agriculture, Environment and Fisheries
M&E	Monitoring and Evaluation
MISAU	Ministry of Health
NAP	National Adaptation Plan
NDC	Nationally Determined Contribution
NGO	Non-Governmental Organization
PAMRDC	Action Plan for the Reduction of Chronic Malnutrition
PEDSA I	Strategic Plan for Agricultural Sector Development I
PEDSA II	Strategic Plan for Agricultural Sector Development II
PESAN	Food and Nutrition Security Policy and Implementation Strategy

ACRONYMS

PICSA	Participatory Integrated Climate Services for Agriculture
PNISA I	National Agricultural Investment Plan I
PNISA II	National Agricultural Investment Plan II
PQG	Five-Year Government Programme
SETSAN	Technical Secretariat for Food and Nutrition Security
SUN	Scaling Up Nutrition Movement
TNA	Technology Needs Assessment
TSI	Three Stones International
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change
VSLA	Village Savings and Loan Association
WASH	Water, Sanitation and Hygiene
WHO	World Health Organization



I. EXECUTIVE SUMMARY

Mozambique faces interconnected climate and nutrition challenges. Recurrent droughts, floods, cyclones, and extreme rainfall disrupt agricultural production, livelihoods, markets, water and sanitation systems, and health services, with important consequences for food security and nutrition. These hazards are particularly significant because many households depend on climate-sensitive agriculture for food and income. This assessment examines how Mozambique's national policies and institutional landscape frame the connection between climate and nutrition.

The study combines a policy landscaping analysis drawn from the content of 29 policies with a stakeholder mapping and analysis based on 11 key informant interviews with national and provincial government, UN agencies, development partners and NGOs, civil society, academia, research institutions, and the private sector. Policies were assessed using the I-CAN classification framework, ranging from Level 1, indicating no intentional connection between climate and nutrition, to Level 4, indicating commitments supported by resources and distinct implementation plans.

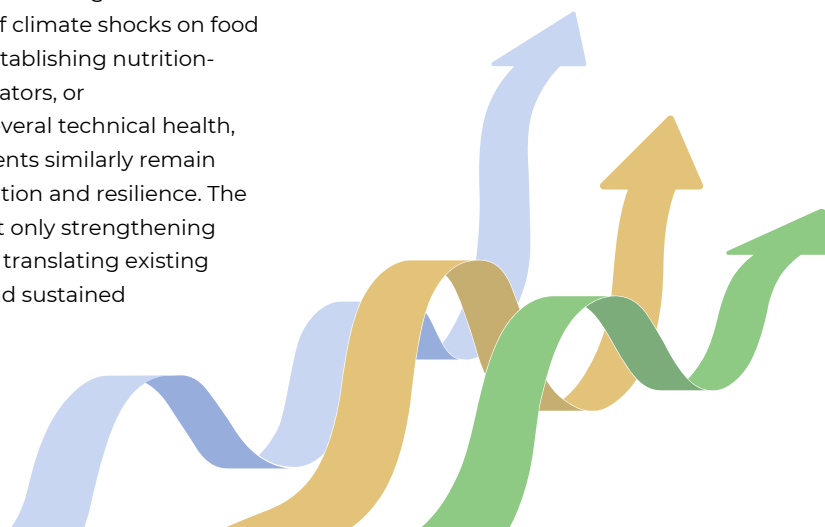
The findings show that Mozambique has made meaningful progress in integrating climate and nutrition, although integration remains uneven. Of the 29 policies reviewed, five are classified at Level 1, 11 at Level 2, four at Level 3, and nine at Level 4. Food systems and agriculture policies demonstrate the strongest integration, with four of five policies classified at Level 4. Several policies (including PESAN 2024–2030, PEDSA I and II, PNISA I and II, ENAMMC, ESAN II, the National Infant and Young Child Feeding Strategy, and the Five-Year Government Programme 2025–2029) provide strong models by combining explicit climate–nutrition objectives with implementation plans, financing arrangements, institutional responsibilities, indicators, and accountability mechanisms.

However, many climate and disaster-management policies acknowledge the effects of climate shocks on food security and livelihoods without establishing nutrition-specific objectives, financing, indicators, or implementation arrangements. Several technical health, nutrition, and food-safety instruments similarly remain disconnected from climate adaptation and resilience. The principal challenge is therefore not only strengthening integration across policy texts, but translating existing commitments into coordinated and sustained implementation.

Stakeholders identify fragmented institutional mandates, limited domestic financing, weak cross-sectoral accountability, insufficient joint monitoring, and limited provincial and district capacity as major implementation barriers. Existing coordination structures, including the Technical Secretariat for Food and Nutrition Security (SETSAN), Provincial Councils for Food Security and Nutrition (COPSAN), and District Councils for Food Security and Nutrition (CODSAN), provide an important foundation but require stronger authority, financing, and operational capacity. Integrated action currently occurs most consistently within donor-funded and NGO-led programmes, where financing, technical support, implementation, and accountability are aligned, but these approaches are not yet systematically embedded within routine government systems.

The assessment also identifies significant opportunities. Mozambique can build on existing Level 4 policies, coordination structures, research capacities, civil-society networks, and promising community-based models rather than creating additional standalone frameworks. Priorities include operationalizing existing policies; embedding climate–nutrition activities within routine planning and budgeting; developing shared monitoring indicators; strengthening subnational staffing, resources, and locally led implementation; and aligning agricultural production, markets, storage, transport, WASH, climate information, and household risk protection more closely with nutrition objectives.

Overall, Mozambique has established much of the policy and institutional foundation required to advance integrated climate and nutrition action. The next step is to convert this foundation into coordinated, financed, locally responsive, and measurable implementation through stronger use of existing systems and partnerships.



II. INTRODUCTION

Background, Rationale, and Objectives

Mozambique is highly exposed to recurrent droughts, floods, cyclones, and extreme rainfall. Because much of the population depends on agriculture for food and income, climate variability directly affects crop production, livelihoods, food availability, and access to nutritious diets. FAO reports that climate variability, recurrent droughts and cyclones, economic pressures, and persistent food insecurity continued to affect millions of Mozambicans in 2025, particularly those living in rural areas (FAO 2026).

Major cyclones illustrate the scale of these risks. Cyclones Idai and Kenneth displaced more than 400,000 people in 2019 and destroyed approximately 715,000 hectares of crops in Sofala and Manica shortly before harvest, while Cyclone Freddy displaced approximately 184,000 people in 2023. Such events damage farmland, homes, markets, water systems, and health infrastructure. Displaced households may also lose access to land, seeds, livestock, and income, further undermining food and water security (Ndlovu and Maviza 2026).

Climate shocks also have direct implications for child nutrition. Research linking climate and household data in Mozambique found that drought during the main rainy and crop-growing season was associated with increased stunting among children in crop-producing livelihood zones. Both extreme drought and extremely wet conditions were associated with a higher probability of stunting, reflecting the combined effects of disrupted production, reduced food access, and greater exposure to waterborne disease (Villanueva, Dimitrova, and Benmarhnia 2022).

Mozambique is already investing in responses that connect agriculture, resilience, and nutrition. In 2025, FAO-supported programmes provided 43,141 farmers with agricultural inputs, strengthened 22,878 farmers' knowledge of agricultural, post-harvest, marketing, and nutrition practices, supported 30,000 people through nutrition interventions, and improved the preparedness of 19,490 households through early-warning and anticipatory-action systems (FAO 2026). These efforts demonstrate the potential for integrated approaches, while the continuing scale of climate and food-security pressures highlights the need to embed them more consistently within national systems (FAO 2026).

Mozambique's experience reflects a broader global pattern in which climate change, food insecurity, and malnutrition are increasingly interconnected. In response

to these linked challenges, the Initiative on Climate Action and Nutrition (I-CAN) was launched in 2022 by the Government of Egypt during COP27, in partnership with WHO, FAO, GAIN, and the SUN Movement. By 2030, I-CAN aims to advance:

1. Policy coherence: Greater integration of climate and nutrition across national policies.

2. Scaled-up action: Accelerated implementation of integrated interventions.

3. Increased financing: Mobilization of resources for climate–nutrition action.

4. Cross-sectoral integration: Stronger alignment of research, advocacy, policy, and implementation.

The work presented here contributes to I-CAN's first out of five strategic pillars¹: **targeted support to strengthen national policies for integrated country action.**

Elucidating the nutrition-climate policy and stakeholder landscape in Mozambique is crucial to understanding what opportunities exist in Mozambique's specific context and what opportunities may be mirrored in other national settings. Specifically, this report consolidates the results from two complementary light touch analyses conducted in support of I-CAN's objectives: first, a national-level policy landscaping and second, a stakeholder mapping analysis, both conducted between April and June 2026.

The policy landscaping analysis results provided in this report aim to identify and assess the extent to which climate and nutrition are integrated within Mozambique's national policy architecture. By systematically reviewing policies across sectors including climate change and environment, nutrition and health, and agriculture and food systems, the study sought to highlight best practices, identify gaps, and provide insights to inform more coordinated and synergistic policymaking. In parallel, a national-level stakeholder mapping and analysis was conducted to identify, categorize, and determine the key stakeholders across national government, private sector, civil society, and development partners who are essential to advancing integrated climate and nutrition action in Mozambique. Through both the policy landscaping and stakeholder mapping, this report aims to provide a clearer understanding of existing thematic and programmatic efforts, highlight opportunities for collaboration, and inform strategic engagement to support I-CAN's goal of integrating and aligning efforts toward increased climate resilience and improved nutrition outcomes.

1. I-CAN's five pillars include: 1) Policy Coherence and Governance, 2) Financing and Investment, 3) Research, Innovation, and Data, 4) Capacity and Knowledge Sharing, and 5) Locally Led and Inclusive Action.

III. METHODOLOGY

This study was completed in two distinct yet intertwined phases: first, a policy landscaping analysis and second, a stakeholder mapping exercise.

Policy Landscaping Analysis

This policy landscape analysis draws from the content of 29 policies, encompassing policies that are both active and inactive. The policies reviewed cover the thematic categories of nutrition and health, climate and environment, food systems and agriculture, and general development (see [Annex A](#) for a full list of policies).

To assess the level of nutrition and climate integration in each of the reviewed policies, we followed the

methodology outlined in the 2025 I-CAN Assessment, which included a comprehensive keyword search completed using Python, a versatile and high level programming language. Each policy was reviewed using the same Python code that was used in the 2025 I-CAN Assessment. All policies reviewed were Portuguese or English versions. The keywords used for screening were also based on the 2025 I-CAN Assessment methodology, encompassing a grouping of nutrition keywords and a grouping of climate keywords. Below is an illustration of the specific keywords against which each policy was screened, with the addition of several keywords relevant to the Mozambican context (see red text). The Portuguese version of the keywords, which was applied for all Portuguese language policies is included in [Annex F](#).

Climate Keywords	Nutrition Keywords
Group 1 - General Climate: Climate, Climate Change, Climate Crisis, Greenhouse Gas(es), CO ₂ , GHG, Emissions, Extreme Weather, Methane, Sea Level(s), Global Warming, Temperature, Biodiverse(ity), Mitigation(s), Adaptation(s), Net Zero	Group 1 - Food Security: Food Security, Food and Nutrition Security.
Group 2 - Energy: Carbon, Fossil Fuel(s), Oil, Coal, Energy Efficient, Renewable Energy	Group 2 - General Nutrition: Nutrition, Nutritional, Nutrient(s), Malnutrition, Undernutrition, Overnutrition, Nutritious, Nutritious Foods, Food Systems
Group 3 - Sustainability: Sustainable, Sustainability, Recycle(ing), Reduce(ing), Reuse(ing), Single-Use Plastic, Compost(ing), Biodegrade(able), Package(ing)	Group 3 - Diet-related: Diet(s), Adequate Diet, Nutritious Diet, Balanced Diet, Healthy Diet, Unhealthy Diet, Affordable Diet, Accessible Diet, Available Diet, Diet Diversity, Plant-Based, Vegan, Vegetarian
Group 4 - Food: Food Loss(es), Food Waste(s), Overproduce(ing), Shelf Life, Portion Size, Local(ly), Regional(ly), Season(al)	Group 4 - NCDs and Human Health: Obesity, Overweight, Underweight, Weight Loss, Weight Gain, Anemia, Anaemia, Diabetes, Blood Pressure, Hypertension, Blood Sugar, Cholesterol, Cardiovascular Disease, Blood Iron, Stunting, Wasting
Group 5 - ESG: Fairtrade, Animal Welfare, Free Range, Water Use, Land Use, UNFCCC, ESG	Group 5 - Food Safety: Food Hygiene, Food Label, Food Safety, Food Control, Food Quality, Foodborne Disease(s), Waterborne Disease(s), Foodborne Illness(es), Foodborne Outbreak(s), Food Poisoning, Food Contamination, Foodborne Pathogens, Mycotoxin, Aflatoxin, Spoilage, Food Control System, INFOSAN
Group 6 - Agriculture: Intensive Farming, Overfarming, Crop Diversity, Overgrazing, Monoculture, Indigenous Crops, Organic, Bio, Nature-Based Solutions, Neglected-Underutilised Species, Agroecology, Ecology	Group 6 - Food Groups and Types: Cassava, Peanut, Indigenous Foods, Vegetable(s), Fruit(s), Meat, Red Meat, White Meat, Fish, Starch, Dairy, Protein, Fat, Fats, Oil, Oils, Grain, Grains, Wheat, Rice, Maize, Nuts, Eggs, Milk, Pulses, Animal-Sourced Foods / ASF
	Group 7 - Nutritional Content: Vitamin A, Iodine, Vitamin, Micronutrient(s), Mineral, Fiber, Fibre, Calcium, Gluten, Calorie, Caloric, Carbohydrate, Sodium, Salt, Sugar, MSG, Iron, Zinc, Fortified, Biofortified, Fortification, Biofortification

In contrast to the 2025 I-CAN Assessment, we began with the Python keyword search, which then informed manual policy reviews. With the identified keywords as a guide, each policy was manually reviewed by one of two reviewers to ensure consistency in classification. The level of nutrition and climate integration of each policy was then evaluated using the 2025 and 2023 I-CAN Baseline Assessment criteria:

Level 1: No intentional connectedness between climate and nutrition
Level 2: Some intention to connect climate and nutrition
Level 3: Intention to mobilise resources to connect climate and nutrition
Level 4: Commitment to mobilising resources and with distinct plans to take action to connect climate and nutrition

For each policy that was classified as either Level 2 or 3, the second reviewer examined the policy and decided upon their own classification. For the classifications that were different between the first and second reviewer, the two reviewers met and discussed their justification for classification until they reached a consensus on the most appropriate classification level. In line with the 2025 and 2023 I-CAN Baseline Assessment methodology, by no means were the Python-produced results the main determinant of the classification levels themselves and human reviews remained the final authority on the classification of documents. Please refer to [Annex C](#) for a full list of each policy's nutrition and climate integration classification level.

Stakeholder Mapping and Analysis

To complement the policy review, a stakeholder mapping and analysis was performed, through key informant interviews. A total of 11 in-depth interviews were conducted with selected key informants from across government ministries, international non-governmental organizations (NGOs) and development implementers, private sector organizations, and United Nations (UN) and multilateral development agencies. Individual key informants were identified through consultations with the GAIN I-CAN team and TSI's Mozambique-based experts' team. To protect participant confidentiality, the identities of key informants and their organizations have been anonymized in this report. The analysis draws on

interviews with representatives from a range of stakeholder groups, including:

- *National government ministries and agencies responsible for health, agriculture, environment, and food systems;*
- *Provincial government;*
- *United Nations agencies;*
- *International development organizations and NGOs;*
- *Civil society organizations;*
- *Academic and research institutions; and*
- *Specialized agricultural research organizations.*

The key informants were contacted via email and invited to participate in either an in-person or virtual interview with TSI's Mozambique-based consultant team. All interviews were conducted in Portuguese, recorded with informed consent and transcribed by hand or with the assistance of an AI transcriber from the recording. Interviews were then analyzed in Portuguese to identify themes among responses to each question across respondents and analyzed themes were developed in English. A full list of questions explored during interviews can be found in [Annex D](#). The purpose of the key informant interviews was to contribute to both the policy landscaping analysis and to the stakeholder mapping and analysis.

These consultations captured not only institutional roles and mandates, but also informal influence, coalition behavior, catalytic actors, and leverage points within and between sectors (e.g., health, agriculture, climate, finance). This approach enabled the identification of areas where alignment and integration already have momentum, where institutional friction exists, and where dormant capacity could be activated through appropriate policy incentives or technical support.

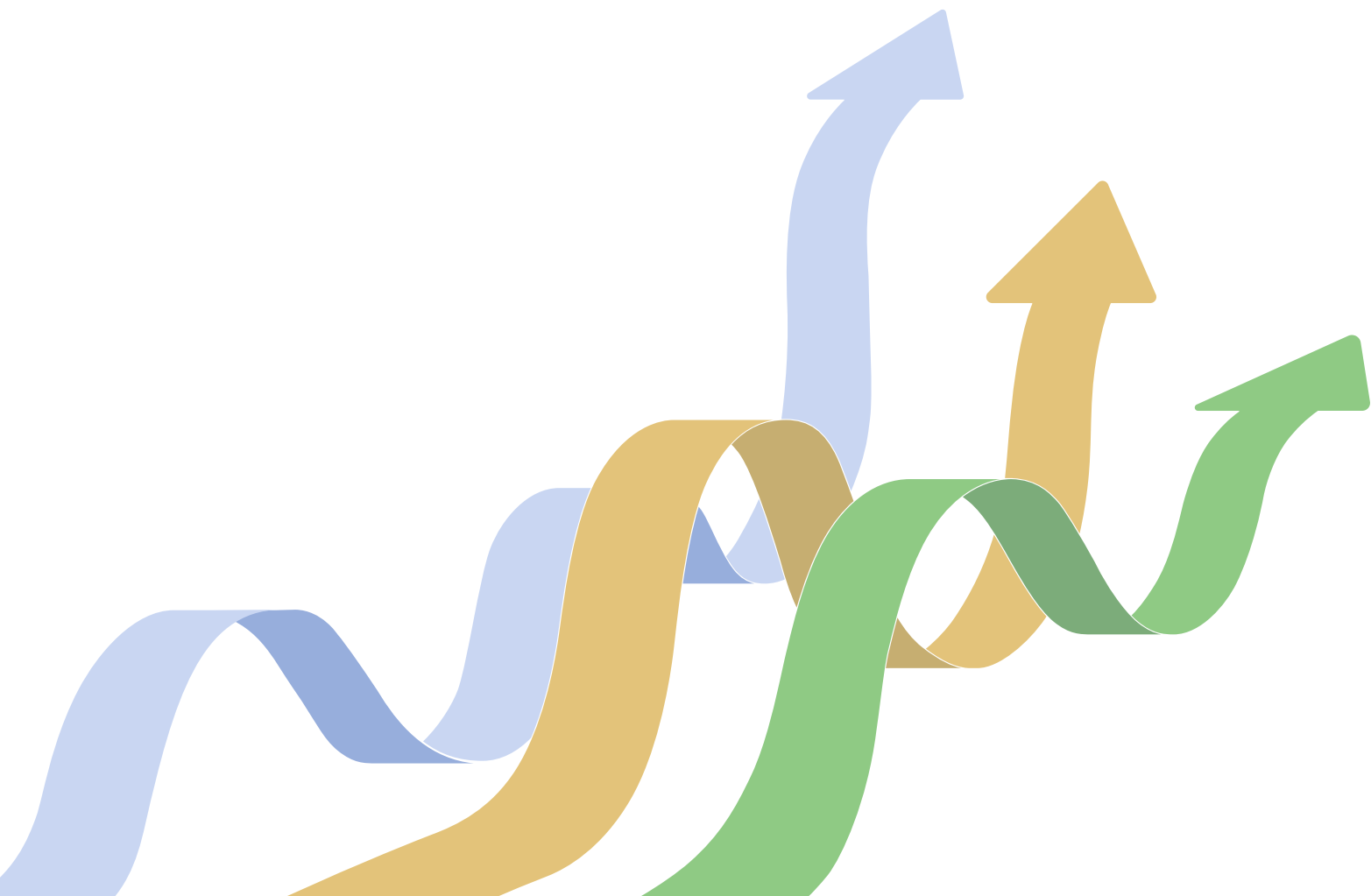
The stakeholder mapping also highlighted multi-sectoral linkages, particularly between climate, nutrition, health, and agriculture. The analysis was layered across three key dimensions:

Actor Functionality: This dimension explored each stakeholder's actual function in climate–nutrition integration beyond its formal role. It identified who funds, convenes, implements, blocks, or translates policy into practice, and examined the barriers that limit stakeholders from maximizing their functionality.

Influence Networks: This dimension captured both formal structures and informal power dynamics, including knowledge brokers and policy entrepreneurs who shape real-world integration efforts. It helps identify practical entry points for promoting more effective integration of climate and nutrition action.

Strategic Engagement Pathways: This dimension assessed each key stakeholder's openness to integration, existing capacities, opportunities and strategic entry points for stronger integration, and the type of engagement required (technical, advocacy, financing, or coordination) to accelerate progress.

Furthermore, TSI developed a stakeholder map based on findings from the key informants interviews, illustrating each actor's level of climate-nutrition integration alongside their level of influence in Mozambican policymaking.



IV. KEY FINDINGS AND ANALYSIS RESULTS

To provide critical context, the stakeholder mapping exercise included key government and coordination actors such as i) the National Council for Food Security and Nutrition (CONSAN), the highest-level coordination body for food and nutrition security, supported by the Technical Secretariat for Food and Nutrition Security (SETSAN), which facilitates multisectoral coordination at the national level, as well as by its decentralized structures, including the Provincial Councils for Food Security and Nutrition (COPSAN) and District Councils for Food Security and Nutrition (CODSAN); ii) the Ministry of Agriculture, Environment and Fisheries (MAAP), which brings together major responsibilities related to agriculture, livestock, fisheries, environment, climate, and food systems; iii) and the Ministry of Health (MISAU), that leads national health and nutrition policy and service delivery. Together, these institutions provide the principal government architecture for coordinating and implementing integrated climate–nutrition action.

Below is a presentation of identified challenges, emerging best practices, and key opportunities that have been drawn from the policy review and landscaping analysis as well as from the key informant stakeholder consultations held. These results are presented together as opposed to separately to better understand and identify themes from across the two phases of this study.

IDENTIFIED CHALLENGES

Uneven and Incomplete Integration Across the Policy Landscape

Climate–nutrition integration is increasingly visible in Mozambique's national policies, but its depth and operationalization vary substantially across sectors. Food systems, agriculture, and food-security policies generally demonstrate the strongest integration, with several policies linking climate resilience and nutrition through implementation plans, financing arrangements, institutional responsibilities, and monitoring frameworks. By contrast, many climate, disaster-management, technical nutrition, food-safety, and public-health instruments continue to address the two agendas separately or connect them only indirectly.

Most climate and disaster-management policies recognize that climate shocks affect food security, agriculture, health, and livelihoods but stop short of establishing nutrition-specific objectives, indicators, financing, or implementation mechanisms. Similarly,

several health and nutrition policies acknowledge environmental, disaster, or food-system factors without systematically incorporating climate adaptation and resilience. Integration therefore remains concentrated in a relatively small number of policy instruments, with stronger integration evident in the Food and Nutrition Security Policy and Implementation Strategy (PESAN 2024–2030), the National Infant and Young Child Feeding Strategy (2019–2024), the Strategic Plan for Agricultural Sector Development II (PEDSA II, 2022–2032), the National Agricultural Investment Plan II (PNISA II, 2022–2026), and the National Strategy for Climate Change Adaptation and Mitigation (ENAMMC). More recent climate instruments, including Mozambique's Provisional Nationally Determined Contribution (2025) and the National Adaptation Plan (2023), also demonstrate greater integration, although this remains uneven across the wider policy landscape.

Fragmented Governance and Insufficient Implementation Capacity

Mozambique has established several high-leverage policies and coordination structures, including PESAN, the Health National Adaptation Plan, the National Food Systems Action Plan, SETSAN, CONSAN, COPSAN, and CODSAN. However, the central challenge identified by stakeholders is translating these frameworks into coordinated implementation. Institutional mandates remain fragmented, responsibilities are not always accompanied by clear follow-up arrangements, and integrated activities must often compete with ministries' core sector-specific obligations.

Existing coordination mechanisms possess the structural design required for multisectoral action but have historically lacked sufficient budgetary authority, technical enforcement power, and operational resources to influence planning and implementation consistently. These constraints are especially pronounced at provincial and district levels, where limited staffing, staff turnover, financing, logistics, and technical capacity weaken the implementation chain. Centrally designed interventions may also insufficiently reflect local ecological, economic, and livelihood conditions. In addition, complex regulatory and administrative procedures can delay locally developed nutrition, agricultural, and environmental innovations. Expanding expectations for multisectoral integration without strengthening the capacity of individual sectors and subnational institutions also risks creating superficial integration or diluting already limited resources.

Fragmented Financing and Dependence on Time-Bound Projects

Mozambique's limited fiscal space restricts the government's ability to finance long-term, integrated climate–nutrition action. Dedicated cross-sectoral budget lines remain uncommon, and institutions generally prioritize mandatory sector-specific activities when resources are constrained. Respondents consequently described climate–nutrition integration as highly “projectized,” with some of the strongest examples of operational integration occurring within donor-funded and NGO-led initiatives that are able to align financing, technical assistance, implementation, and accountability outside fragmented public financial systems. Former USAID FTF-RESINA, for example, was cited by KII respondents as successfully combining climate-smart agriculture (including drought-resistant seeds and localized irrigation) with nutrition and livelihood diversification through activities such as poultry production and apiculture.

Although project-based financing has enabled innovation and demonstrated that integrated approaches are feasible, it also creates sustainability risks. Activities may not continue once external financing ends and are not consistently incorporated into routine government plans, budgets, and delivery systems. Stakeholders also cautioned that organizations may sometimes add nutrition components to climate programmes mainly based on donor requirements than on the willingness to achieve meaningful integration. The challenge is therefore not only to mobilize additional resources, but to embed climate–nutrition objectives and costs within routine sectoral planning and budgeting so that implementation is less dependent on temporary external projects.

Weak Integrated Monitoring, Accountability, and Use of Evidence

Mozambique lacks a shared monitoring framework capable of tracking climate stressors, food-system resilience, and nutrition outcomes together. Although several stronger policies include relevant indicators, existing systems generally measure climate, agriculture, food security, health, and nutrition through separate sectoral frameworks. This limits the ability of government and development partners to determine whether climate investments are improving nutrition, whether nutrition programmes are becoming more resilient to climate shocks, or whether integrated interventions are producing benefits across both agendas. Accountability is further constrained by the limited translation of research into formats that decision-makers can readily use.

Stakeholders described a “drawer study” phenomenon in which valuable research on agriculture, food safety, climate impacts, water, and nutrition remains underused because findings are presented in lengthy or highly technical reports rather than concise and actionable products. Academic and research institutions possess relevant expertise and generate localized evidence, but their potential contribution to joint indicator development, decentralized monitoring, policy learning, and accountability is not yet fully utilized.

Food-System Weaknesses Undermine Household Resilience and Access to Nutritious Diets

Structural weaknesses affect Mozambique's food system. Stakeholders reported that high-value and nutrient-dense products may be prioritized for export while domestic markets receive lower-quality produce. Inadequate preservation, storage, processing, and transport contribute to post-harvest food and nutrient losses, while production in some areas remains concentrated around a limited number of staple crops. Additional concerns include insufficient production of foods such as eggs and milk, unregulated pesticide use, mycotoxin contamination, and increasing consumption of ultra-processed foods. These constraints mean that nutrition education alone cannot improve diets where diverse, safe, affordable, and nutritious foods are not sufficiently available.

Household vulnerability is also intensified by dependence on increasingly unreliable rain-fed agriculture, limited income diversification, weak financial-risk protection, and recurrent WASH-related disease risks during floods and droughts. The absence of formal national food-based dietary guidelines further limits alignment between agricultural production, climate adaptation, markets, and nutrition. Without a nationally agreed food basket identifying nutrient-dense and climate-resilient foods, agricultural and investment decisions may continue to prioritize caloric output and export potential rather than dietary quality and domestic nutritional needs.

OBSERVED BEST PRACTICES AND OPPORTUNITIES

Costed Plans and Clear Responsibilities Are Already in Place

Mozambique already has several policy instruments that provide strong practical models for integrated climate and nutrition action. The strongest policies—particularly PESAN 2024–2030, PEDSA II, PNISA I and II, ENAMMC, ESAN II, the National Infant and Young Child Feeding Strategy, and the Five-Year Government Programme

2025–2029—move beyond acknowledging that climate change affects food security and nutrition. They translate this relationship into defined programmes, implementation activities, institutional responsibilities, financing arrangements, timelines, indicators, and accountability mechanisms.

These policies demonstrate several complementary good practices. They treat climate resilience and nutrition as shared objectives; combine nutrition-sensitive actions such as dietary diversification, biofortification, food reserves, nutrition education, and access to nutritious foods with climate-resilient agriculture, irrigation, resilient crops, conservation agriculture, and natural-resource management; assign responsibilities to relevant institutions; and link implementation to costed plans or national planning and budgeting mechanisms. Rather than developing entirely new approaches, Mozambique can use these operational elements as models when revising or implementing less-integrated climate, nutrition, health, disaster-management, and development policies.

SETSAN, COPSAN, CODSAN and MAAP Provide a Ready-Made Coordination Base

Mozambique does not need to build a completely new institutional system for climate–nutrition integration. CONSAN already provides a high-level multisectoral coordination platform, chaired by the Prime Minister and operating administratively under the Council of Ministers, with participation from relevant sector ministries. SETSAN forms part of CONSAN and provides ongoing technical and administrative support, while COPSAN and CODSAN extend this coordination structure to provincial and district levels. Together, these mechanisms provide an existing institutional foundation for collaboration across food security, nutrition, agriculture, health, environment, disaster management, statistics, and other relevant sectors.

The Ministry of Agriculture, Environment and Fisheries provides an additional opportunity by bringing agriculture, livestock, fisheries, environmental responsibilities, climate functions, and other major food-system components within one institutional structure. This consolidation could facilitate closer alignment between climate information, agricultural planning, food production, natural-resource management, markets, and nutrition. The opportunity is therefore to strengthen the authority, financing, accountability, and operational capacity of existing institutions and coordination mechanisms rather than creating additional platforms. Stronger connections between coordination bodies and routine planning, budgeting, implementation, and reporting would allow Mozambique's existing institutional architecture to function more effectively.

Research Institutions and Civil Society Can Strengthen Joint Monitoring and Evidence Use

Academic institutions, specialized agricultural research organizations, UN agencies, development partners, and civil society organizations already play important roles in generating evidence, adapting technical approaches, facilitating coordination, and translating climate information into practical agricultural and nutritional action. Universities and research institutions are conducting locally relevant work on soil health, water safety, agrochemical contamination, mycotoxins, crop quality, nutrient deterioration, food security, and climate-resilient agriculture. Some institutions also participate in multisectoral councils and provide technical support directly to communities and smallholder farmers.

Civil society organizations complement this work by documenting local experiences of climate-related food insecurity, crop failure, dietary constraints, and livelihood disruption and bringing this evidence into policy discussions. UN agencies and development partners act as knowledge brokers by adapting international tools and frameworks to Mozambique and supporting the transfer of climate-resilient technologies and practices.

These capacities provide an important opportunity to strengthen integrated monitoring and accountability. Academic and research institutions could be formally engaged to develop shared climate–nutrition indicators, generate decentralized evidence, monitor implementation, and translate research into concise and accessible products for decision-makers. Better use of these existing knowledge networks would help address the current gap between the availability of evidence and its practical application in planning, budgeting, and programme adaptation.

Integration of Community-Based Agriculture, Climate Information and Livelihood Models Empower Households

Stakeholders identified several government- and partner-supported initiatives that combine climate resilience, agricultural production, nutrition, and household livelihoods in practice. Examples include FTF-RESINA's integration of climate-smart agriculture, nutrition, poultry, apiculture, and livelihood diversification; the use of Participatory Integrated Climate Services for Agriculture to translate forecasts into practical farming decisions; and community initiatives supporting organic fertilizer production, aquaculture, improved agricultural practices, food production, and diversified income sources.

These approaches demonstrate that climate–nutrition integration is most tangible when households receive a combination of climate information, technical support,

livelihood opportunities, agricultural inputs or technologies, and nutrition-sensitive interventions. Locally driven initiatives were also reported to continue generating benefits after project funding ended because they built upon community resources, skills, and livelihood systems rather than relying only on externally delivered activities.

The opportunity is to document, evaluate, and adapt these models through existing government systems. Interventions should be co-designed and tested with provincial and district authorities and communities so that they reflect local ecological conditions, infrastructure, livelihoods, institutional capacity, and socioeconomic realities. Scaling should therefore involve adaptation rather than uniform replication, with successful community-level practices informing routine government programmes and district planning.

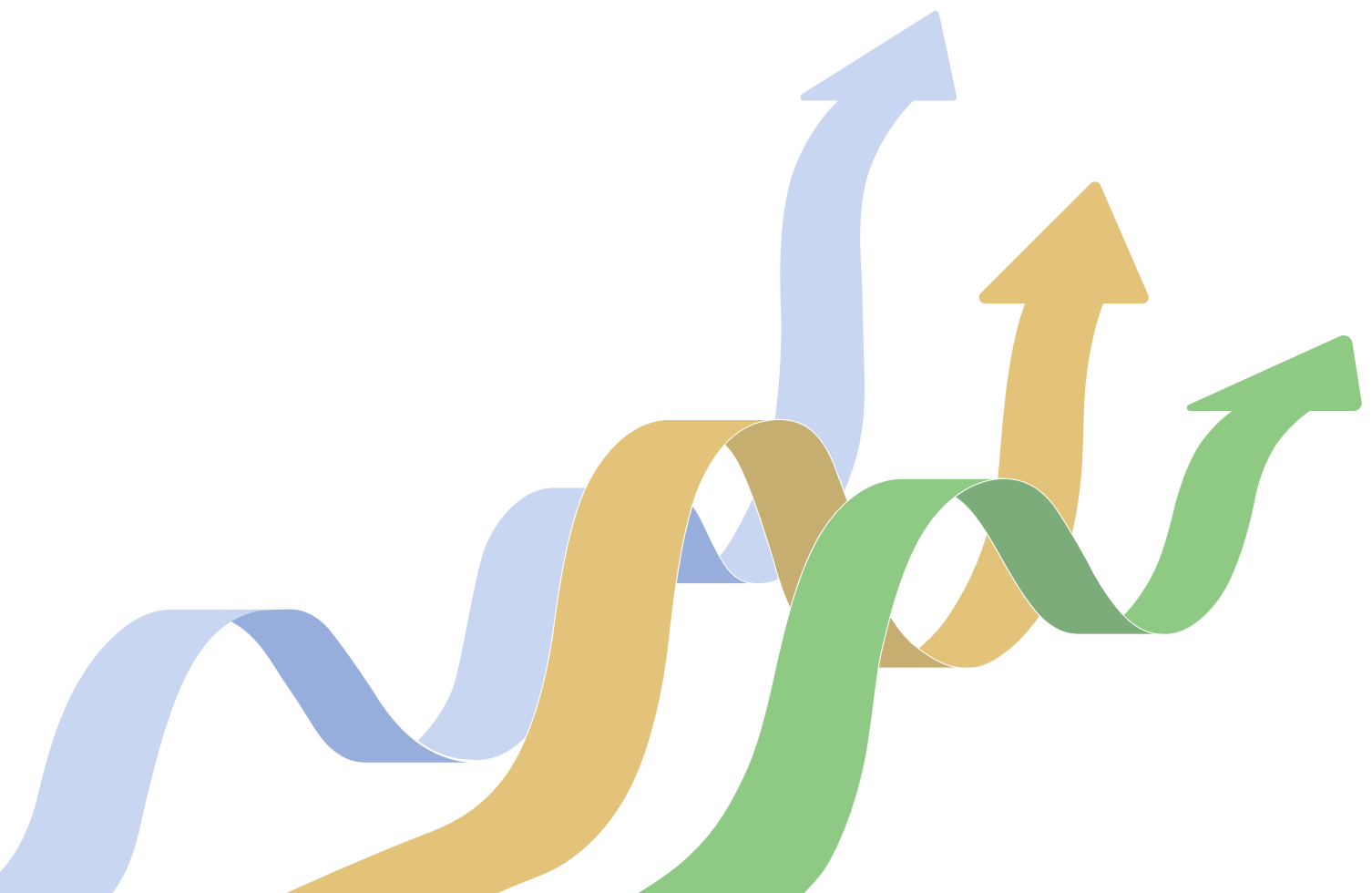
Strengthening Nutrition-Sensitive Food Systems Through Infrastructure, Dietary Guidance, and Risk Protection

Food systems and agriculture emerged as the strongest area of climate–nutrition integration and therefore provide the clearest pathway for further progress. Existing policies already combine climate-smart agriculture, conservation agriculture, resilient crops, irrigation, dietary diversification, biofortification, food reserves, early warning systems, and improved access to nutritious foods.

These approaches recognize that agricultural resilience, household livelihoods, food availability, dietary quality, and nutrition outcomes are closely interconnected.

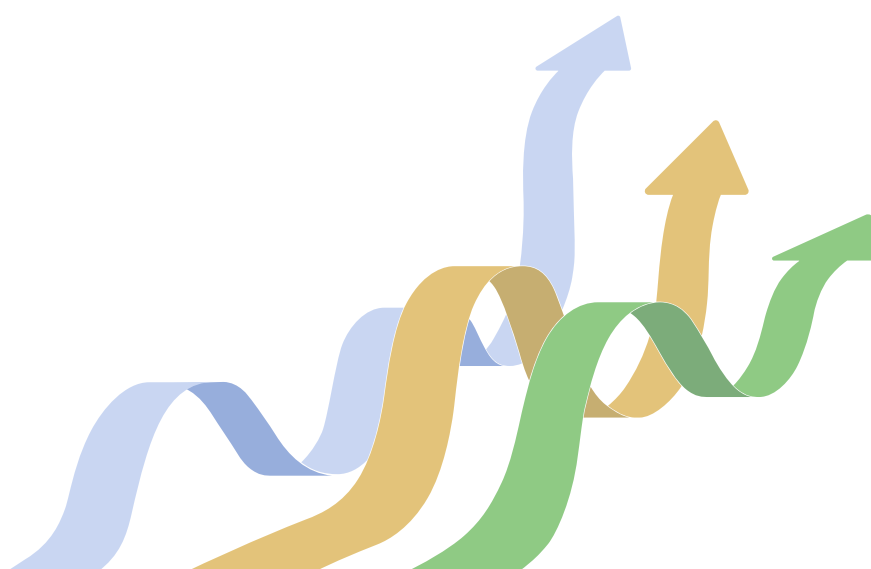
Further opportunities lie in extending integration beyond agricultural production to the wider food system. Investments in preservation, storage, processing, transport, and renewable-energy technologies could reduce post-harvest food and nutrient losses and improve the availability of nutritious foods in domestic markets. Agricultural planning and market incentives could also better balance export objectives with the need to produce diverse, affordable, nutrient-dense foods for domestic consumption. Development of national food-based dietary guidelines would provide a shared definition of nutritious and climate-resilient foods around which agriculture, health, climate adaptation, markets, procurement, and food-system investment could align.

Food-system resilience can be further strengthened by integrating WASH, food safety, climate information, livelihood diversification, agricultural insurance, VSLAs, anticipatory action, and climate-informed social protection. Combining these measures would help protect household diets during climate shocks and address the multiple pathways through which climate change affects nutrition, not only through agricultural production, but also through income, markets, water, disease, food safety, and household coping strategies.



Summary of Climate–Nutrition Integration Across Reviewed Policies

Dimension	Description	Example Policies
Level 1: No intentional connectedness	Climate and nutrition are addressed in separate policy silos. References to environmental or climatic conditions, where present, are technical or incidental and do not establish an intentional climate–nutrition relationship.	Food Fortification Regulation; Code for the Marketing of Breast-Milk Substitutes; CMAM Integrated Data Monitoring and Referral Systems; Regulation on Hygienic-Sanitary Requirements for Foodstuffs; Regulation on Fortification of Foods with Industrially Processed Micronutrients.
Level 2: Some intention to connect climate and nutrition	Policies acknowledge relationships between climate shocks, food security, agriculture, health, livelihoods, or nutrition, but generally lack dedicated joint objectives, financing, indicators, or implementation arrangements.	Disaster Management Law; Master Plan for Disaster Risk Reduction; Legal Framework for Disaster Risk Management and Reduction; Second BUR; Updated NDC 2021; National Food Fortification Strategy; Healthy Eating and Physical Activity Strategy; Nutrition Treatment and Rehabilitation Manual; Public Health Law; PAMRDC; National Development Strategy.
Level 3: Intention to mobilize resources	Policies identify food and nutrition security as a climate or development priority and signal the mobilization of institutions, financing, or adaptation investments, but do not yet provide fully operationalized nutrition-specific budgets, plans, or accountability mechanisms.	Mozambique's Provisional NDC 3.0; National Adaptation Plan; Technology Needs Assessment for Adaptation in Agriculture; UN Sustainable Development Cooperation Framework 2022–2026.
Level 4: Commitment, resources, and distinct plans for action	Policies establish explicit climate–nutrition objectives and support them through programmes, implementation plans, financing or costed actions, assigned institutional responsibilities, indicators, and accountability mechanisms.	ENAMMC; ESAN II; National Infant and Young Child Feeding Strategy; PESAN 2024–2030; PEDSA I; PEDSA II; PNISA I; PNISA II; Five-Year Government Programme 2025–2029.



SUMMARY OF STAKEHOLDER MAPPING AND ANALYSIS FINDINGS

Mozambique has a relatively strong policy and institutional foundation for integrated action. Frameworks such as PESAN, the Health National Adaptation Plan, and the National Food Systems Action Plan provide entry points for climate–nutrition integration, while SETSAN, CONSAN, and its provincial and district structures (COPSAN and CODSAN) provide an established coordination architecture. Institutional commitment was generally perceived as strong across stakeholder groups. However, implementation remains uneven: government implementation capacity was assessed as moderate-weak, M&E and accountability readiness as weak, and the sustainability risk of government and provincial programmes as high.

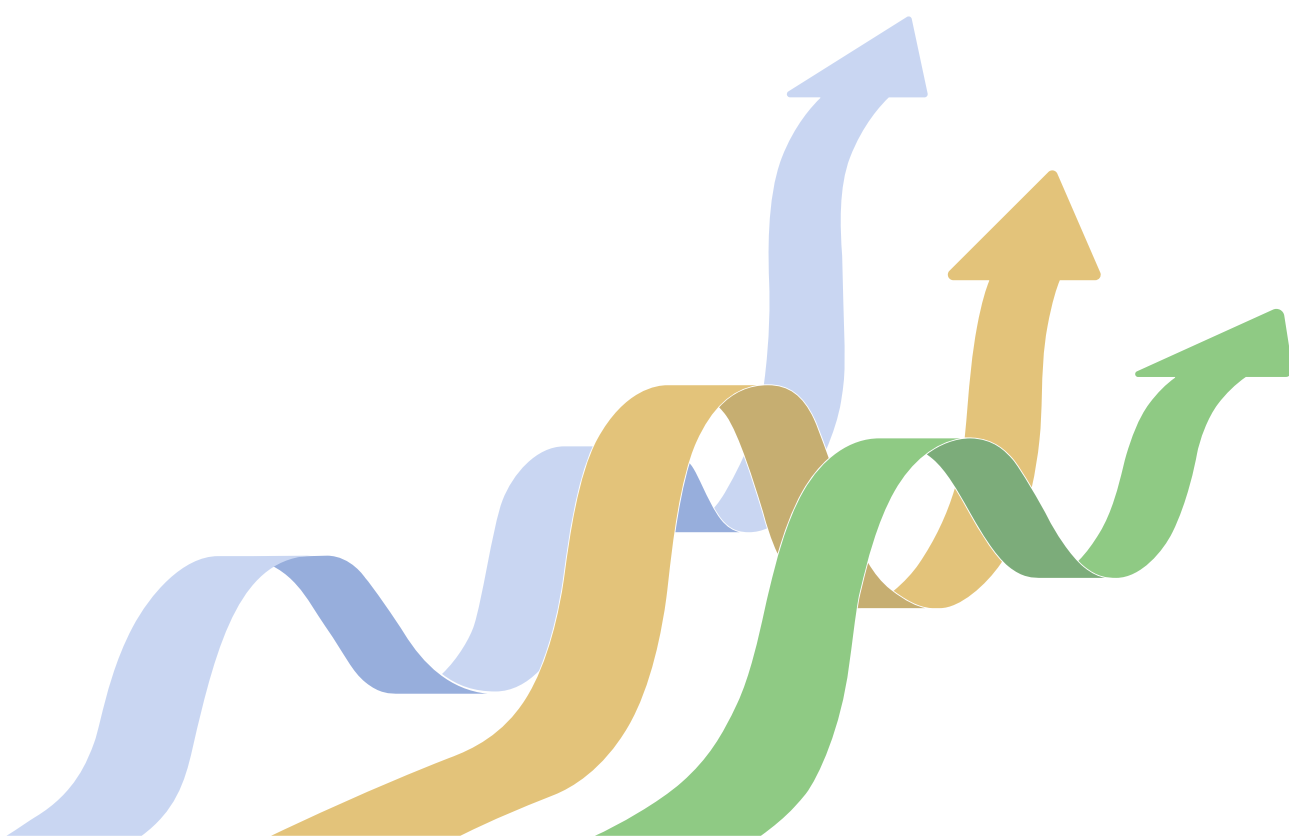
Stakeholders consistently emphasized that the principal challenge is no longer policy development, but the implementation of existing commitments. Fragmented institutional mandates, limited domestic financing, the absence of dedicated cross-sectoral budget lines, weak joint monitoring systems, and subnational constraints related to staffing, logistics, technical capacity, and resources continue to limit integrated action. Consequently, many of the strongest examples of climate–nutrition integration occur within donor-funded and NGO-led programmes, where financing, technical assistance, implementation, and accountability are more closely aligned than within routine government systems.

Different stakeholder groups nevertheless contribute important and complementary capabilities. Government institutions provide policy leadership, regulation,

coordination, climate information, and public-service delivery. Development partners and NGOs supply much of the financing, technical assistance, innovation, and community-level implementation. Civil society organizations connect community experience with national policy discussions and support localized monitoring and advocacy, while academic and research institutions generate evidence and technical knowledge but remain underused in integrated indicator development, decentralized monitoring, and evidence translation. Subnational authorities occupy a critical position between national policy and community realities, but often lack the autonomous resources and capacity required to fulfil this role effectively.

Overall, the analysis suggests that Mozambique should strengthen existing systems rather than create additional policies or coordination structures. Priority opportunities include embedding climate–nutrition integration within routine planning and budgeting, strengthening the authority and resourcing of existing coordination mechanisms, developing shared climate–nutrition indicators, making better use of research and locally generated evidence, expanding bottom-up and district-led implementation, and aligning agricultural production, markets, storage, transport, WASH, and household resilience more closely with nutrition objectives.

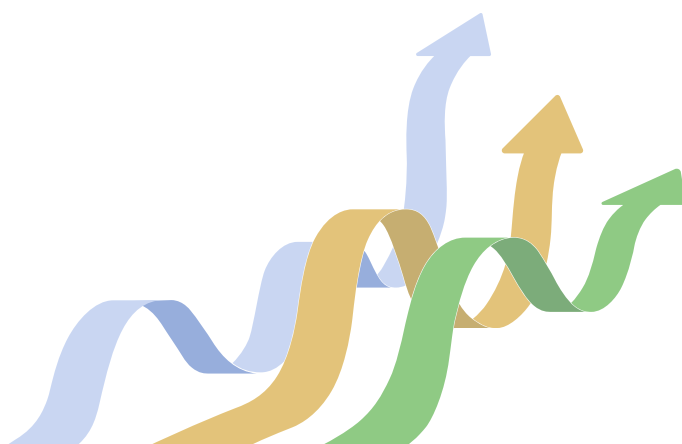
Because the analysis is based on a limited number of qualitative interviews, the stakeholder classification should be interpreted as an illustrative, ecosystem-level assessment of roles, relationships, capacities, and opportunities rather than a definitive evaluation of individual institutions or stakeholder groups.



RECOMMENDATIONS

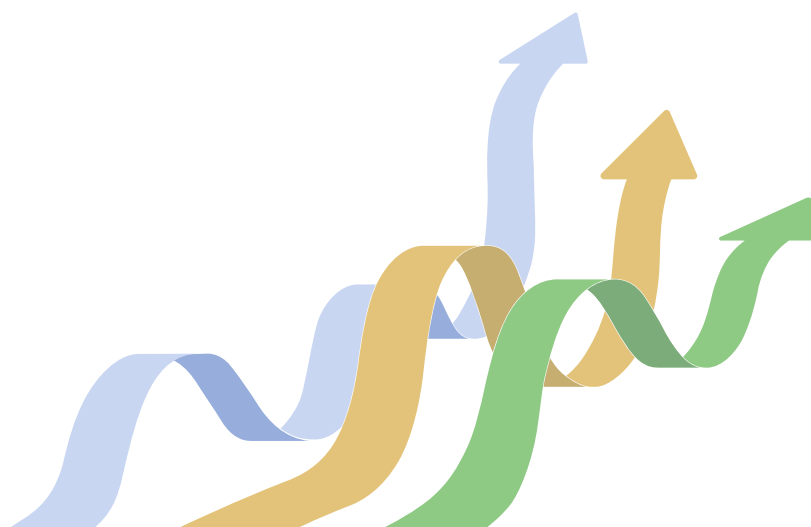
Strengthen Governance, Coordination, and Implementation of Existing Frameworks

Recommendation	Term	Lead	Supporting	Rationale
Prioritize operationalization of PESAN, the Health National Adaptation Plan, the National Food Systems Action Plan, and other existing Level 4 frameworks rather than developing additional standalone policies.	Immediate priority	SETSAN, MAAP and MISAU, according to the relevant framework	CONSAN, COPSAN, CODSAN, provincial and district governments, development partners and implementing organizations	Stakeholders consistently stated that Mozambique's main gap is implementation rather than policy development. Existing frameworks already provide entry points for integrating sustainability, food systems, climate resilience, health, and nutrition.
Strengthen the authority, resourcing, and accountability of SETSAN, COPSAN, and CODSAN so that they can influence sector planning, budgeting, implementation, and reporting.	Annual planning and budgeting cycles; ongoing	SETSAN and relevant national government institutions	COPSAN, CODSAN, MAAP, MISAU, provincial government, development partners	These bodies have the structural design for multisectoral coordination but lack sufficient budgetary authority, enforcement capacity, and operational resources. Strengthening existing mechanisms is preferred to creating new structures.
Clarify institutional responsibilities and follow-up arrangements for integrated actions included in national policies and plans.	During operational planning and policy implementation	Institutions designated in each policy, coordinated through SETSAN where relevant	Agriculture, health, environment, disaster-management, research and subnational institutions	Level 4 policies demonstrate that clearly assigned responsibilities are a core feature of operational integration, while fragmented mandates remain a major implementation constraint.
Include explicit nutrition objectives, indicators, interventions, institutional responsibilities, and financing in future revisions of NDCs, adaptation plans, and disaster-risk-management frameworks.	Next policy revision cycle	MAAP and national climate-policy institutions; INGD for disaster-management frameworks	MISAU, SETSAN, academic and research institutions, UN agencies and development partners	Most climate policies acknowledge food security and livelihoods but lack nutrition-specific operational arrangements. The policy review explicitly identifies future NDC, adaptation-plan, and disaster-framework revisions as opportunities for stronger integration.



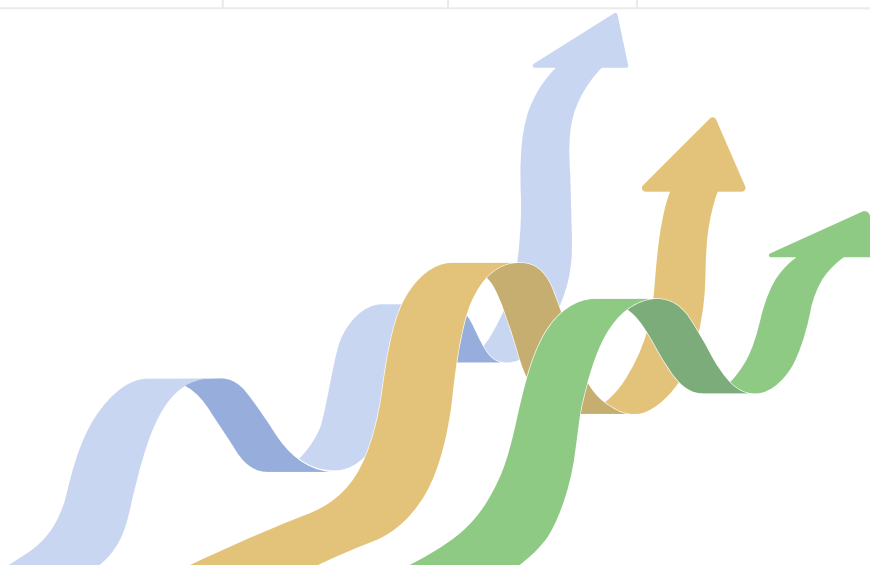
Align Financing and Institutional Incentives

Recommendation	Term	Lead	Supporting	Rationale
Embed climate–nutrition activities and costs within routine sectoral plans and budgets, including dedicated or clearly identifiable cross-sectoral financing arrangements.	Annual and medium-term planning and budgeting cycles	Government institutions responsible for sector planning and budgeting, coordinated with SETSAN	MAAP, MISAU, provincial government, development partners	Dedicated cross-sectoral budget lines are uncommon, and integrated actions compete with sector-specific obligations. Routine financing is necessary to reduce dependence on temporary projects.
Use the costed plans and financing arrangements in PESAN, PEDSA II, PNISA I and II, ENAMMC, and the Five-Year Government Programme as models for other policies and programmes.	During new programme design and policy revision	Relevant policy-owning government institutions	SETSAN, development partners and technical institutions	Costed implementation plans and explicit resource mobilization distinguish the strongest Level 4 policies from those that only acknowledge climate–nutrition linkages.
Encourage development-partner financing to require substantive climate, nutrition, gender, and youth outcomes rather than the superficial addition of nutrition components to climate projects.	During funding design and approval	International development partners and donors	Government institutions, NGOs, implementing organizations and research partners	External financing strongly influences programme priorities. Stakeholders recommended using funding conditions to encourage genuine integration while avoiding tokenistic inclusion of nutrition.
Where appropriate, provide support through technical services, equipment, products, and capacity-building alongside or instead of cash transfers.	During programme design and subnational implementation	Development partners and implementing organizations	Provincial and district governments, NGOs, community structures	Stakeholders identified administrative and disbursement bottlenecks and suggested that direct support through services and capacity-building can strengthen implementation where cash-based mechanisms are constrained.



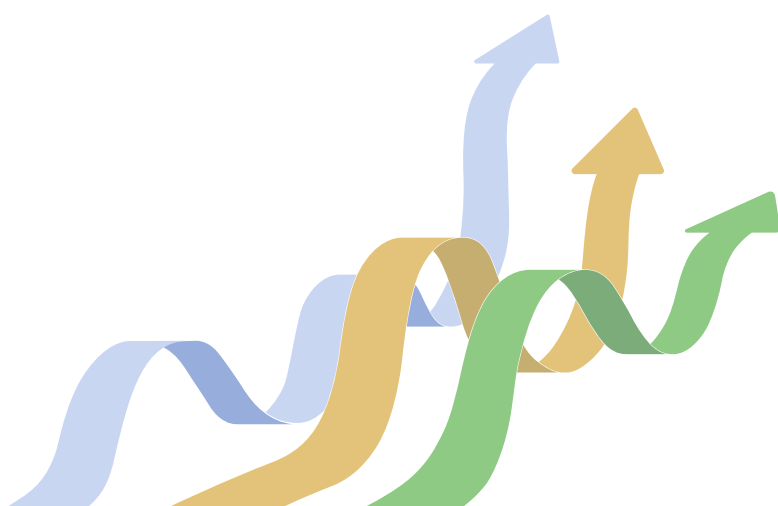
Establish Integrated Monitoring, Evidence, and Accountability

Recommendation	Term	Lead	Supporting	Rationale
Develop a shared monitoring framework that links climate stressors, food-system resilience, food security, and nutrition outcomes.	Immediate technical priority; exact timing not specified	SETSAN in collaboration with academic and research institutions	MAAP, MISAU, provincial government, UN agencies, development partners and specialized research organizations	Existing systems rarely track climate and nutrition outcomes together. Joint indicators would improve accountability, adaptive management, and assessment of dual climate–nutrition benefits.
Formally engage and resource academic and research institutions to develop, map, test, and monitor integrated indicators.	During development of the shared monitoring framework	Academic and research institutions, under an agreed government mandate	SETSAN, MAAP, MISAU, specialized agricultural research organizations and development partners	Universities and research institutions were identified as technically capable but underused actors that could help address the government's M&E deficit.
Generate decentralized evidence on soil health, water safety, food contamination, nutrient deterioration, climate exposure, and nutrition outcomes.	Ongoing and linked to provincial and district planning	Academic and specialized research institutions	Provincial and district governments, civil society, farmer and community structures, development partners	Local evidence is required because ecological, food-system, and implementation conditions vary considerably across locations.
Translate research into concise, accessible, and decision-oriented policy products.	Ongoing; aligned with policy and budget decision points	Academic and research institutions	Civil society, UN agencies, development partners and government technical teams	Stakeholders described a “drawer study” problem in which valuable evidence is not used because it is not communicated in formats accessible to decision-makers.
Use existing coordination mechanisms to review joint indicators and report on implementation across sectors and levels of government.	Regular reporting cycles	SETSAN, COPSAN and CODSAN	Relevant sector institutions, research institutions, civil society and development partners	Shared reporting would link indicators to institutional accountability and strengthen follow-through between national commitments and subnational implementation.



Localize Implementation and Strengthen Subnational Capacity

Recommendation	Term	Lead	Supporting	Rationale
Co-design, test, and validate integrated interventions with provincial and district authorities and communities before national scale-up.	Before scaling each intervention	Provincial and district governments	MAAP, MISAU, SETSAN, COPSAN, CODSAN, civil society, NGOs, communities and research institutions	Centrally designed approaches often fail to reflect local ecological conditions, livelihoods, infrastructure, and implementation constraints. Bottom-up co-design can improve ownership and sustainability.
Strengthen district-level staffing, staff retention, logistics, technical support, and operational resources for integrated implementation.	Immediate and ongoing institutional priority	National and provincial government institutions	Development partners, NGOs, academic institutions and technical agencies	Staff attrition, limited budgets, weak logistics, and insufficient technical capacity disrupt the implementation chain and contribute to the gap between national policy and community-level delivery.
Adapt successful community-based approaches through existing government systems rather than replicating uniform externally designed models.	Phased following testing and validation	Provincial and district governments with relevant national sector institutions	NGOs, civil society, development partners, research institutions and community structures	Stakeholders emphasized that promising local approaches should be adapted to ecological, institutional, and socioeconomic contexts and progressively embedded in routine systems.
Strengthen household resilience through diversified livelihoods, climate information, VSLAs, agricultural risk-transfer mechanisms, and climate-informed social protection.	Phased and ongoing	Relevant agriculture, disaster-management, social and local-government institutions	Development partners, NGOs, community structures, financial-service actors and research institutions	Diversified incomes and risk-protection mechanisms can help households maintain food access and nutrition during climate shocks and reduce negative coping strategies.



Align Food-System Transformation with Climate and Nutrition Objectives

Recommendation	Term	Lead	Supporting	Rationale
Develop formal national food-based dietary guidelines that identify nutrient-dense and climate-resilient foods and provide a shared basis for agricultural, health, and climate planning.	Priority policy-development action; exact timing not specified	MAAP and MISAU, in coordination with SETSAN	Academic and research institutions, food-system actors, civil society, UN agencies and development partners	The absence of dietary guidelines limits alignment between agricultural production, climate adaptation, and nutritional needs and allows caloric output and export potential to dominate planning.
Increase production and domestic availability of diverse, nutrient-dense foods, including foods currently produced in insufficient quantities.	Phased through agricultural and food-system programmes	MAAP	SETSAN, MISAU, producer organizations, private-sector actors, research institutions and development partners	Limited dietary diversity and insufficient production of foods such as eggs and milk constrain nutrition outcomes and increase vulnerability to shocks.
Invest in preservation, storage, processing, and transport systems suited to Mozambique's climatic conditions to reduce post-harvest food and nutrient losses.	Phased infrastructure and market investment	MAAP and relevant food-system institutions	Private-sector and logistics actors, provincial governments, development partners and research institutions	Inadequate storage and transport reduce the quality and availability of nutritious foods and accelerate post-harvest nutrient deterioration.
Review market incentives to better balance export objectives with the domestic availability and quality of nutritious foods.	During agricultural, market, and investment-policy review	MAAP	Private-sector and market actors, SETSAN, MISAU, civil society and development partners	Stakeholders reported that nutrient-dense, higher-quality produce is often prioritized for export while domestic consumers receive lower-quality food.
Integrate WASH, food safety, early warning, climate information, livelihood diversification, and household risk protection into food-system resilience programmes.	During programme design and implementation	MAAP, MISAU and relevant disaster-management institutions	SETSAN, provincial and district government, development partners, NGOs, research institutions and community structures	Agricultural production interventions alone cannot prevent malnutrition where floods, droughts, unsafe water, disease, food contamination, and household financial shocks undermine nutrition.
Document, evaluate, and adapt promising integrated models, including USAID FTF-RESINA (dissolved in 2025), PICSA, organic-fertilizer initiatives, aquaculture, apiculture, poultry, and diversified-livelihood approaches.	Ongoing, followed by phased adaptation and scale	Relevant government programme owners, including MAAP and subnational authorities	Development partners, NGOs, academic and research institutions, civil society and community organizations	These approaches demonstrate practical integration of climate information, agriculture, livelihoods, and nutrition. Lessons should inform routine systems but be adapted rather than replicated uniformly.

CONCLUSION

Mozambique has made substantial progress in recognizing and operationalizing the relationship between climate resilience, food systems, and nutrition. The policy landscape includes several strong examples in which climate and nutrition are treated as shared objectives and supported by implementation plans, financing arrangements, assigned institutional responsibilities, and monitoring frameworks. Food systems and agriculture policies provide the clearest models, while recent nutrition, climate, and development frameworks demonstrate that integrated action is increasingly embedded within national planning.

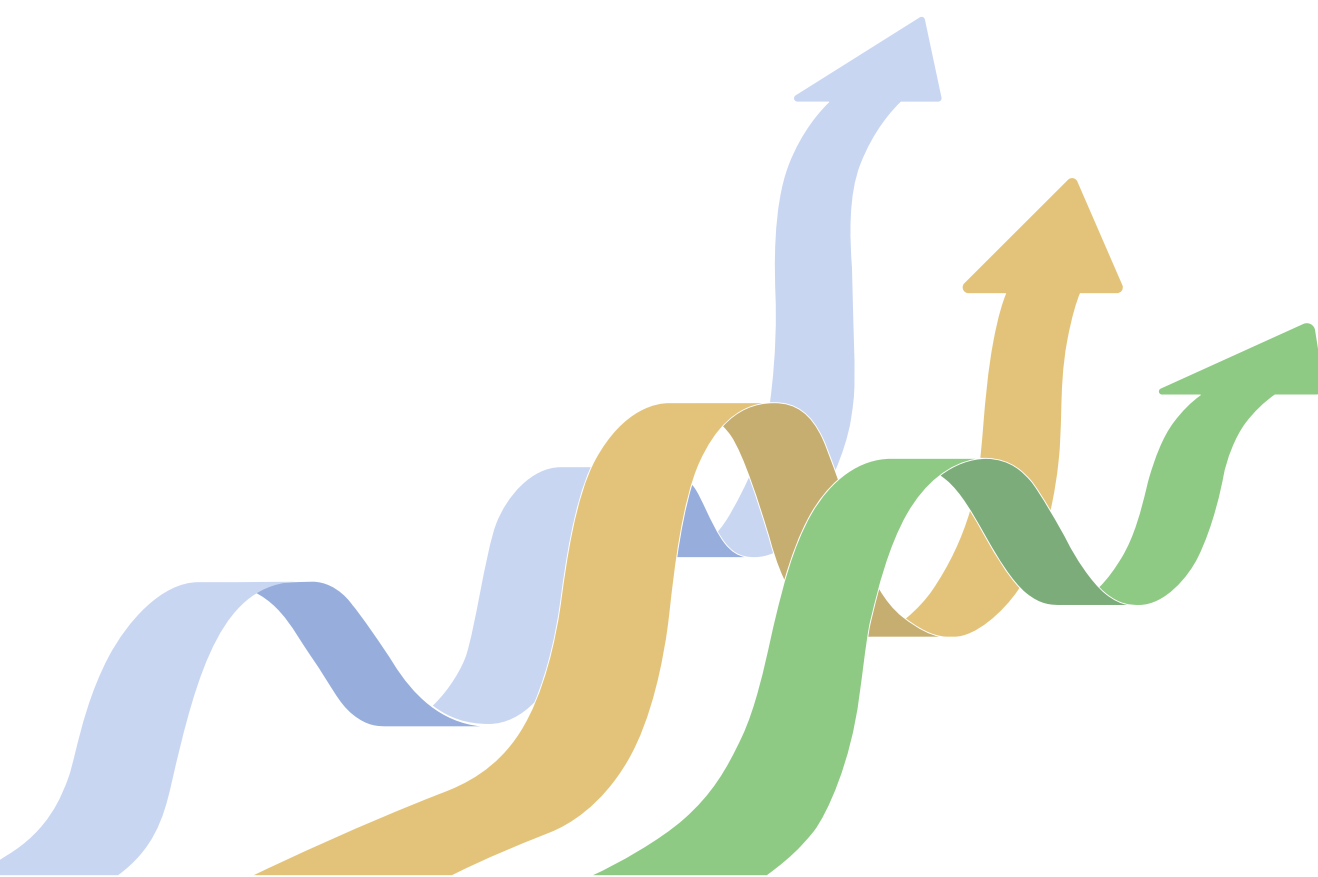
However, this progress remains uneven. Many climate and disaster-management policies still address nutrition primarily through food security, livelihoods, or emergency assistance, while several health, nutrition, and regulatory instruments do not systematically incorporate climate risks. Even where policies demonstrate strong integration, implementation is constrained by fragmented responsibilities, limited cross-sectoral financing, weak joint monitoring and accountability, and inadequate provincial and district capacity. The continued concentration of integrated delivery within externally financed projects also creates sustainability risks.

Mozambique's priority should therefore be to strengthen how existing policies, institutions, and coordination structures function together rather than

establish additional frameworks. SETSAN, CONSAN, COPSAN, CODSAN, MAAP, MISAU, research institutions, civil society, development partners, and subnational authorities each possess complementary roles that can support implementation. Coordination between these actors and routine planning, budgeting, monitoring, and local delivery would help translate policy commitments into more consistent results.

Progress will also depend on addressing the wider food-system conditions through which climate change affects nutrition. This includes increasing the domestic availability of diverse and nutritious foods, reducing post-harvest food and nutrient losses, strengthening climate information and early warning, improving WASH and food safety, diversifying livelihoods, and protecting households against climate-related financial shocks. Formal national food-based dietary guidelines could provide a shared foundation for aligning agriculture, markets, climate adaptation, health, and nutrition.

Mozambique is well positioned to move from increasingly integrated policy commitments toward sustained and measurable action. By financing integration, promoting coordination, strengthening accountability, investing in subnational capacity, using evidence more effectively, and adapting successful local approaches through national systems, the country can build food systems and communities that are simultaneously more climate-resilient and nutrition-sensitive.



ANNEX A: LIST OF REVIEWED DOCUMENTS

CLIMATE CHANGE, ENVIRONMENT, AND BIODIVERSITY POLICIES

- National Strategy for Climate Change Adaptation and Mitigation (ENAMMC), 2013–2025
- Five-Year Government Programme (PQG), 2025–2029
- Mozambique's Provisional Nationally Determined Contribution (NDC 3.0), 2025
- National Adaptation Plan (NAP) of Mozambique, 2023
- Technology Needs Assessment for Adaptation to Climate Change in the Agriculture Sector in Mozambique, 2012
- Disaster Management Law (Law No. 15/2014)
- Master Plan for Disaster Risk Reduction, 2017–2030
- Legal Framework for Disaster Risk Management and Reduction (Law No. 10/2020)
- Second Biennial Update Report to the United Nations Framework Convention on Climate Change, 2024
- Updated First Nationally Determined Contribution (NDC), 2021

HEALTH AND NUTRITION POLICIES

- Food Fortification Regulation (Ministerial Diploma No. 77/2016)
- Code for the Marketing of Breast-Milk Substitutes (Ministerial Diploma No. 129/2007)
- Integrated Data Monitoring and Referral Systems for Community-Based Management of Acute Malnutrition (CMAM) in Mozambique, 2013
- Regulation on Hygienic-Sanitary Requirements for Foodstuffs (Decree No. 15/2006)
- Regulation on the Fortification of Foods with Industrially Processed Micronutrients (Decree No. 47/2025)
- National Food Fortification Strategy, 2023–2027
- Healthy Eating and Physical Activity Strategy, 2019–2023
- Nutrition Treatment and Rehabilitation Manual, Volume II: Adolescents and Adults (≥15 Years), 2013
- Public Health Law (Law No. 3/2022)
- Food and Nutrition Security Strategy II (ESAN II), 2008–2015
- Food and Nutrition Security Policy and Implementation Strategy (PESAN), 2024–2030
- National Infant and Young Child Feeding Strategy, 2019–2024
- Action Plan for the Reduction of Chronic Malnutrition (PAMRDC), 2011–2020

FOOD SYSTEMS AND AGRICULTURE POLICIES

- Strategic Plan for Agricultural Sector Development (PEDSA I), 2011–2020
- Strategic Plan for Agricultural Sector Development II (PEDSA II), 2022–2032
- National Agricultural Investment Plan I (PNISA I), 2013–2017
- National Agricultural Investment Plan II (PNISA II), 2022–2026

DEVELOPMENT POLICIES

- National Agricultural Investment Plan II (PNISA II), 2022–2026
- United Nations Sustainable Development Cooperation Framework for Mozambique, 2022–2026

ANNEX B: KEYWORD SEARCH PYTHON CODE

```

import re
from pathlib import Path
import pandas as pd
from loguru import logger
import fitz # PyMuPDF

# Helper function to clean strings for Excel compatibility
def clean_excel_string(s):
    if not isinstance(s, str):
        return s
    # Remove illegal Excel characters
    s = re.sub(r"[\x00-\x08\x0B\x0C\x0E-\x1F]", "", s)
    # Replace corrupted unicode blocks
    s = s.encode("utf-8", "ignore").decode("utf-8", "ignore")
    return s

# Load document type metadata
parent_dir = Path.cwd()
doctype_file = Path(parent_dir, "resources/document_types.xlsx")
# print(doctype_file)
doctype_df = pd.read_excel(doctype_file)

# Convert Areas into a list / No filtering – use all rows
doctype_df["Area_list"] = doctype_df["Area"].str.split(", ")
print("Loaded document types:")
print(doctype_df)

# =====
# Load keywords
keywords_file = Path(parent_dir, "resources/keywords_list.xlsx")
df = pd.read_excel(keywords_file)

df["Keywords_list"] = df["Keywords"].str.split(", ")

# Subset to keep only keywords of relevant Areas (i.e., Nutrition and/or Climate)
all_areas = doctype_df["Area_list"].explode().unique()
df = df[df["Area"].isin(all_areas)]
print(df)

# Create a list of tuples for iteration
groups_and_keywords = list(df.apply(
    lambda row: (
        row["Area"],
        row["Group_id"],
        row["Group_name"],
        row["Keywords_list"],
        row["Highlight_color"]
    ),
    axis=1
))
# print(groups_and_keywords)

# =====

```

```

# Locate PDF documents
# Use the current working directory as the parent directory
doc_dir = Path(parent_dir, "Mozambique")
print(f"Using current working directory as parent_dir: {parent_dir}")
print(doc_dir)

# Read all PDFs in doc_dir (not in any existing subfolders)
file_names = list(doc_dir.glob("*.pdf"))
print("\t", *(f.name for f in file_names), sep="\n\t")

# =====
# Process PDFs
all_results = []

# Loop through PDFs
for file_name in file_names:
    logger.info(f"Processing file: {file_name.name}")

    # Open PDF
    pdf = fitz.open(file_name)
    file_hits = 0

    # Loop through group names, keywords and highlighting colors
    for area, group_id, group_name, keywords_list, color_str in groups_and_keywords:
        print(f"Group: {group_name}")

        # Convert color string from "(1.0, 0.5, 0.0)" to (1.0, 0.5, 0.0)
        highlight_color = tuple(map(float, color_str.strip("(").split(",")))

        # Loop thorough keywords
        for keyword in keywords_list:
            pages, count, sentences = [], 0, []

            # Loop through PDF pages safely
            for page_number in range(len(pdf)):
                page = pdf.load_page(page_number)
                text = page.get_text()

                # Find keywords in page with regular expression
                pattern = r"\b{}\b(?:[.,;:]?)".format(
                    re.escape(keyword).replace(r"\ ", r"[\s-]*")
                )

                for match in re.finditer(pattern, text, flags=re.IGNORECASE):
                    count += 1
                    file_hits += 1

                # Extract sentence safely
                start = text.rfind('!', 0, match.start())
                end = text.find('!', match.end())

                if start == -1:
                    start = 0
                else:
                    start += 1

```

```

    if end == -1:
        end = len(text)

    sentence = text[start:end].strip()
    sentences.append(sentence)

    if (page_number + 1) not in pages:
        pages.append(page_number + 1)

    # Highlight keyword
    for inst in page.search_for(match.group(0)):
        highlight = page.add_highlight_annot(inst)
        highlight.set_colors(stroke=highlight_color)
        highlight.update()

# Append results
all_results.append({
    'File Name': file_name.name,
    'Keyword_area': area,
    'Keyword_group_id': group_id,
    'Keyword_group': group_name,
    'Keyword': keyword,
    'Pages': ', '.join(map(str, pages)) if pages else 'Not found',
    'Total Occurrences': count,
    'Sentences': '\n'.join(sentences)
})

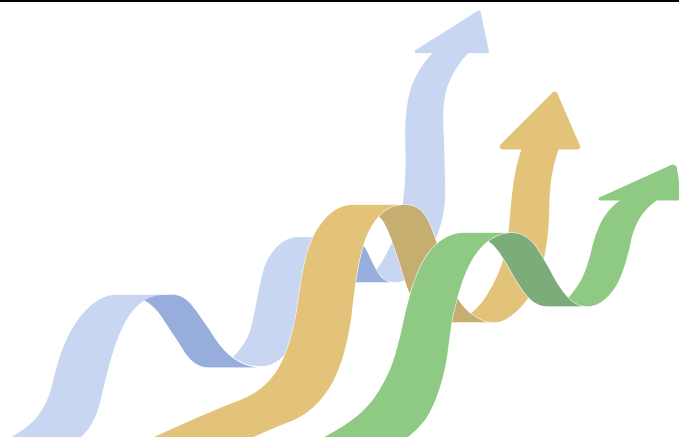
# Save highlighted PDF
if file_hits > 0:
    # Create a new filename with "highlight_" before the filename
    new_file_name = "highlight_" + file_name.name # just prefix the original name
    output_path = parent_dir / "highlighted_pdfs" / new_file_name
    output_path.parent.mkdir(parents=True, exist_ok=True)
    pdf.save(str(output_path))
else:
    print("No keywords found, not saving PDF")

# =====
# Save results
combined_results = pd.DataFrame(all_results)

logger.info(f"Combined results:\n{combined_results}")

# Save the combined results to an Excel file
output_excel_file = parent_dir / 'keyword_search_results.xlsx'
combined_results = combined_results.apply(lambda col: col.map(clean_excel_string))
combined_results.to_excel(output_excel_file, index=False)
logger.info(f"Results saved to {output_excel_file}")

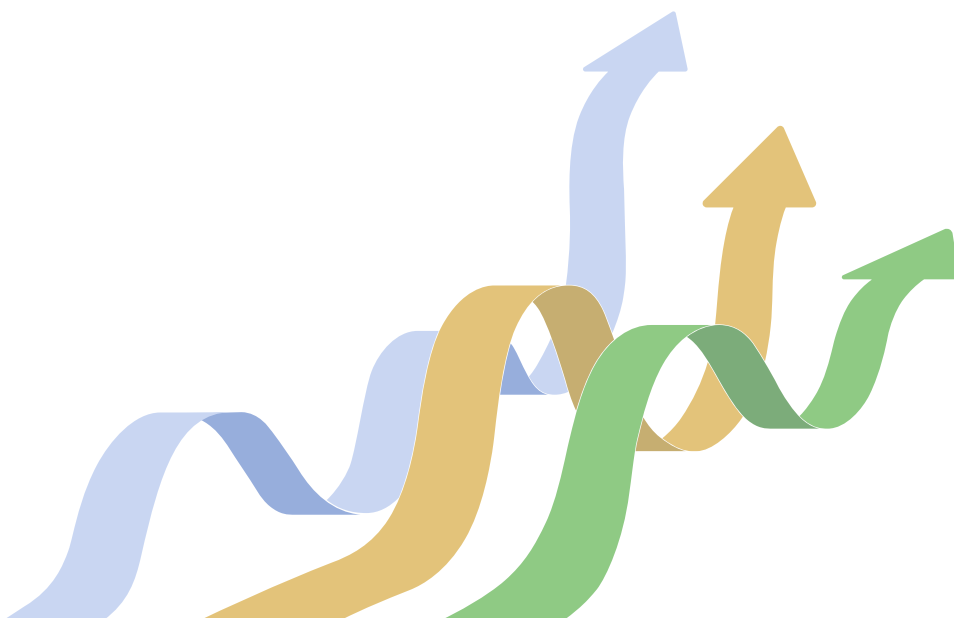
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ANNEX C: DETAILED POLICY CLASSIFICATION TABLE

Policy	Thematic Classification	Integration Classification
Disaster Management Law (Law No. 15/2014)	Climate, Environment, and Biodiversity	Level 2
Master Plan for Disaster Risk Reduction (MPDRR) 2017-2030	Climate, Environment, and Biodiversity	Level 2
Legal Framework for Disaster Risk Management and Reduction (Law No. 10/2020)	Climate, Environment, and Biodiversity	Level 2
Second Biennial Update Report to the United Nations Framework Convention on Climate Change (BUR), 2024	Climate, Environment, and Biodiversity	Level 2
Updated First Nationally Determined Contribution (NDC), 2021	Climate, Environment, and Biodiversity	Level 2
Mozambique's Provisional Nationally Determined Contribution, 2025	Climate, Environment, and Biodiversity	Level 3
National Adaptation Plan (NAP) of Mozambique, 2023	Climate, Environment, and Biodiversity	Level 3
Technology Needs Assessment for Adaptation to Climate Change in the Agriculture Sector in Mozambique, 2012	Climate, Environment, and Biodiversity	Level 3
National Strategy for Climate Change Adaptation and Mitigation (ENAMMC) 2013-2015	Climate, Environment, and Biodiversity	Level 4
Food Fortification Regulation (Ministerial Diploma No. 77/2016)	Nutrition and Health	Level 1
Code for the Marketing of Breast-Milk Substitutes (Ministerial Diploma No. 129/2007)	Nutrition and Health	Level 1
Integrated Data Monitoring and Referral Systems for Community-Based Management of Acute Malnutrition (CMAM) in Mozambique, 2013	Nutrition and Health	Level 1
Regulation on Hygienic-Sanitary Requirements for Foodstuffs (Decree No. 15/2006)	Nutrition and Health	Level 1
Regulation on the Fortification of Foods with Industrially Processed Micronutrients (Decree No. 47/2025)	Nutrition and Health	Level 1
National Food Fortification Strategy, 2016–2021	Nutrition and Health	Level 2
Healthy Eating and Physical Activity Strategy 2019–2023 (MISAU)	Nutrition and Health	Level 2

Policy	Thematic Classification	Integration Classification
Nutrition Treatment and Rehabilitation Manual, Volume II: Adolescents and Adults (≥15 Years), 2013	Nutrition and Health	Level 2
Public Health Law (Law No. 3/2022)	Nutrition and Health	Level 2
Food and Nutrition Security Strategy II (ESAN II), 2008–2015	Nutrition and Health	Level 4
National Infant and Young Child Feeding Strategy (2019–2024)	Nutrition and Health	Level 4
Food and Nutrition Security Policy and Implementation Strategy (PESAN 2024–2030)	Nutrition and Health	Level 4
Action Plan for the Reduction of Chronic Malnutrition (PAMRDC)	Food Systems and Agriculture	Level 2
Strategic Plan for Agricultural Sector Development (PEDSA I), 2011–2020	Food Systems and Agriculture	Level 4
Strategic Plan for Agricultural Sector Development II (PEDSA II), 2022–2032	Food Systems and Agriculture	Level 4
National Agricultural Investment Plan I (PNISA I), 2013–2017	Food Systems and Agriculture	Level 4
National Agricultural Investment Plan II (PNISA II), 2022–2026	Food Systems and Agriculture	Level 4
Mozambique National Development Strategy (ENDE), 2015–2035	Development	Level 2
United Nations Sustainable Development Cooperation Framework for Mozambique (2022–2026)	Development	Level 3
Five-Year Government Programme (PQG) 2025–2029	Development	Level 4



ANNEX D: KEY INFORMANT INTERVIEW GUIDE (ENGLISH)

This Key Informant Interview (KII) guide was developed to support the study's objectives of assessing the extent and quality of climate–nutrition integration in Mozambique and conducting stakeholder analysis and mapping. The questions were informed by the study research questions and integration assessment approach, and structured to capture information on policy coherence, institutional coordination, financing, implementation mechanisms, and stakeholder influence and engagement pathways within a 45–60 minute interview format.

1. Introductions and Role

1.1 Could you briefly describe your role and how your work connects to climate change, nutrition, agriculture, health, food systems, or social protection in Mozambique?

1.2 What geographic areas do you work in (national, province, district)? Which populations are you most concerned with (e.g., children under 5, girls, pregnant/lactating women, refugees/internally displaced persons, urban poor)?

2. Mozambican Climate–Nutrition Problem Landscape

2.1 From your perspective, what are the major climate-related events or stressors currently affecting Mozambique? Probes: drought, floods, landslides, heat stress, pests and disease outbreaks, water stress, rainfall variability.

2.2 How do these climate-related stressors affect food security and nutrition outcomes in Mozambique? Probes: food availability, food prices, access to diverse foods, diet diversity, water access, disease burden, health service disruptions, caregiving practices.

2.3 Which regions or groups in Mozambique are most affected by these impacts, and why? Probes: northern/central hotspot provinces for child undernutrition, especially Nampula, Cabo Delgado, Zambézia, Niassa, Tete and Manica; cyclone-affected central provinces (notably Sofala and Manica); children under 5, especially those born to teenage mothers; smallholder farmers.

3. Climate–Nutrition Integration in Mozambican Policy and Planning

3.1 In the climate/environment policies you work with (such as the NDC, climate strategies, environment/biodiversity strategies, climate finance plans): where (if anywhere) do they include nutrition? Probes: objectives, actions, indicators, targets, institutional responsibilities, or financing.

3.11 *Where is nutrition missing or treated superficially?*

3.12 *What would meaningful inclusion look like?*

3.13 *Which specific climate/environment policy documents should we review most closely for nutrition content (including drafts/updates)?*

3.2 In the nutrition policies/strategies you work with (such as UNAP, food and nutrition policy, health/nutrition plans): where do they include climate/environment? Probes: risks, resilience, adaptation/mitigation actions, early warning, environmental degradation / natural resource constraints, seasonality, environmental determinants, or indicators?

3.21 *Where are climate/environment considerations missing or weak? What would meaningful inclusion look like?*

3.22 *Which specific nutrition policy documents should we review most closely for climate/environment content (including drafts/updates)?*

3.3 In agriculture and food systems policies/strategies (such as agriculture sector plans, food systems transformation work, fisheries, value chains, school feeding/procurement) where do they link nutrition outcomes with climate/environment issues? Probes: synergies, trade-offs, joint goals, shared indicators, implementation mechanisms, financing?

3.31 *Where are these linkages missing? What would meaningful inclusion look like?*

3.32 *Which agriculture/food systems documents should we prioritize for review (including drafts/updates)?*

3.4 What are Mozambique's strongest examples of climate–nutrition integration in policy or planning? Probes: food systems resilience, climate-smart agriculture linked to nutrition, WASH and health resilience, disaster risk management connected to nutrition outcomes

3.5 What mechanisms currently exist to implement integrated climate–nutrition actions in Mozambique? Probes: joint planning processes, joint work plans, shared delivery platforms (extension, health, social protection), multi-sector guidelines, district implementation mechanisms

3.6 What are the main coordination challenges that prevent effective integration? Probes: fragmented mandates, lack of leadership, weak inter-ministerial coordination, different priorities across sectors, lack of structured follow-up mechanisms, limited joint monitoring, evaluation, and reporting systems across sectors, limited capacity at district/province level, weak accountability mechanisms

3.7 Who are the most important actors driving or influencing climate–nutrition integration in Mozambique (government, development partners, CSOs, private sector, research institutions)? Probes: Who convenes? Who funds? Who implements? Who champions? Who blocks or slows progress? Who bridges sectors?

3.8 In practice (beyond policy text), to what extent are climate risks factored into nutrition policies and programs in Mozambique?

3.81 *Are climate shocks accounted for in planning for malnutrition, service delivery, targeting, and preparedness?*

3.82 *Are there tools or guidance used for climate-risk screening or shock triggers in nutrition programming?*

4. Monitoring, Evidence, and Data Systems

4.1 Are there monitoring systems or indicators in Mozambique that track both climate resilience and nutrition outcomes together?

4.12 *If yes: which indicators or systems? Who uses them?*

4.13 *If no: what indicators or data sources would be most practical to strengthen integration?*

4.2 What evidence is missing that would help the government or partners make stronger decisions on integrated climate–nutrition programming?

5. Financing and Budgeting for Integration

5.1 How are climate–nutrition actions financed in Mozambique today? Probes: government budgets, donor-funded programs, climate finance, humanitarian funding, loans, district grants

5.2 Where do financing and budgeting bottlenecks occur for integrated work? Probes: limited budget lines for cross-sector activities, unclear mandates, planning vs implementation gaps, disbursement challenges, reporting requirements, short project cycles, bureaucratic procurement processes

5.3 What financing mechanisms or changes could strengthen climate–nutrition integration? Probes: joint costing, pooled funding, performance-based financing, climate-sensitive nutrition investments, incentives for cross-sector coordination, streamlined disbursement and procurement procedures

6. Sub-National Implementation

6.1 How effectively are national priorities translated into province-level and district-level implementation in Mozambique? Probes: district planning processes, capacity constraints, staffing, budgets, coordination across district departments

6.2 Are there provinces or districts implementing climate-smart agriculture and community-based nutrition programs in tandem?

6.21 *If yes: which provinces/districts?*

6.22 *What integrated interventions are being implemented?*

6.23 *Who is leading and delivering them (local government, CSOs, farmer groups, community structures)?*

6.24 *What results or lessons have emerged?*

7. Opportunities and Recommendations

7.1 In your view, where is climate–nutrition integration currently weakest and most in need of improvement in Mozambique? Probes: policy coherence across sectors, translation into sub-national implementation, financing, data/M&E, inclusion of vulnerable groups, resilience building

7.2 What are your top 3 practical recommendations to strengthen climate–nutrition integration in Mozambique over the next 12–24 months?

8. Closing

8.1 Who else should we speak to for this study (including people who may disagree with your perspective)?

8.2 Are there any key documents, strategies, evaluations, or reports you recommend we review?

KEY INFORMANT INTERVIEW GUIDE (PORTUGUESE)

Guião de Entrevista com Informantes-Chave – Rascunho Preliminar

1. Introduções e Funções

1.1 Poderia descrever brevemente a sua função e como o seu trabalho se relaciona com as alterações climáticas, nutrição, agricultura, saúde, sistemas alimentares ou proteção social em Moçambique?

1.2 Em que áreas geográficas trabalha (nacional, provincial, distrital)? Com que populações o seu trabalho está mais ligado (ex.: crianças menores de 5 anos, raparigas, mulheres grávidas/lactantes, refugiados/deslocados internos, populações urbanas pobres)?

2. Panorama dos Problemas Clima–Nutrição em Moçambique

2.1 Na sua perspetiva, quais são os principais eventos ou factores de stress relacionados com o clima que afetam atualmente Moçambique? Explorar: seca, cheias, deslizamentos de terra, stress térmico, pragas e surtos de doenças, stress hídrico, variabilidade da precipitação.

2.2 De que forma estes factores de stress relacionados com o clima afectam a segurança alimentar e os indicadores nutricionais em Moçambique? Explorar: disponibilidade de alimentos, preços dos alimentos, acesso a alimentos variados, diversidade da dieta, acesso à água, carga de doenças, interrupções nos serviços de saúde, cuidados na infância.

2.3 Quais as regiões ou grupos em Moçambique mais afetados por estes impactos e porquê? Explorar: províncias do norte/centro com altos índices de desnutrição crónica infantil, especialmente Nampula, Cabo Delgado, Zambézia, Niassa, Tete e Manica; províncias do centro afectadas por ciclones (nomeadamente Sofala e Manica); crianças menores de 5 anos, especialmente as filhas de mães adolescentes; pequenos agricultores.

3. Integração Clima–Nutrição nas Políticas e Planeamento em Moçambique

3.1 Nas políticas de clima/ambiente com que trabalha (tais como o NDC (Nationally Determined Contribution, ou Contribuição Nacionalmente Determinada), estratégias climáticas, estratégias de ambiente/biodiversidade, planos de financiamento climático): onde (se em algum lugar) incluem a nutrição? Explorar: objetivos, ações, indicadores, metas, responsabilidades institucionais, ou financiamento.

3.11 *Onde é que a nutrição está ausente ou é tratada superficialmente?*

3.12 *Como seria uma inclusão significativa?*

3.13 *Que documentos de políticas climáticas/ambientais específicos deveríamos analisar com mais atenção quanto ao conteúdo de nutrição (incluindo rascunhos ou documentos preliminares/actualizações)?*

3.2 Nas políticas/estratégias de nutrição com que trabalha (tais como o PAMRDC, políticas de segurança alimentar e nutricional, planos de saúde/nutrição): onde incluem o clima/ambiente? Explorar: riscos, resiliência, ações de adaptação/mitigação, aviso prévio, degradação ambiental / limitações de recursos naturais, sazonalidade, determinantes ambientais ou indicadores.

3.21 *Onde é que as considerações climáticas/ambientais estão ausentes ou são fracas? Como seria uma inclusão significativa?*

3.22 *Quais documentos de políticas de nutrição específicos deveríamos analisar com mais atenção quanto ao conteúdo de clima/ambiente (incluindo rascunhos ou documentos preliminares/actualizações)?*

3.3 Nas políticas/estratégias de agricultura e sistemas alimentares (tais como planos do sector agrário, sistemas alimentares, pescas, cadeias de valor, alimentação escolar), onde relacionam os resultados nutricionais com questões climáticas/ambientais? Explorar: sinergias, trade-offs (compensações), objetivos conjuntos, indicadores partilhados, mecanismos de implementação, financiamento?

3.31 *Onde é que esta relação está ausente? Como seria uma inclusão significativa?*

3.32 *Que documentos de agricultura/sistemas alimentares deveríamos priorizar para revisão (incluindo rascunhos ou documentos preliminares/actualizações)?*

3.4 Quais são os exemplos mais fortes de integração clima–nutrição em Moçambique ao nível da política ou planeamento? Explorar: resiliência dos sistemas alimentares, agricultura climaticamente inteligente ligada à nutrição, resiliência em Água, Saneamento e Higiene (WASH) e saúde, gestão de risco de desastres ligada a resultados nutricionais.

3.5 Que mecanismos existem actualmente para implementar acções integradas clima–nutrição em Moçambique? Explorar: processos de planeamento conjunto, planos de trabalho conjuntos, plataformas de prestação de serviços partilhadas (extensão, saúde, proteção social), diretrizes multissetoriais, mecanismos de implementação distrital.

3.6 Quais são os principais desafios de coordenação que impedem uma integração eficaz?

Explorar: mandatos fragmentados, falta de liderança, coordenação interministerial fraca, prioridades diferentes entre sectores, falta de mecanismos estruturados de seguimento, sistemas limitados de monitoria, avaliação e reporte conjuntos entre sectores, capacidade limitada ao nível distrital/provincial, mecanismos de responsabilização (accountability) fracos.

3.7 Quem são os intervenientes/actores mais importantes que impulsionam ou influenciam a integração clima–nutrição em Moçambique (governo, parceiros de desenvolvimento, organizações da sociedade civil, sector privado, instituições de pesquisa)? Explorar: Quem reúne parceiros? Quem financia? Quem implementa? Quem defende a causa? Quem bloqueia ou atrasa o progresso? Quem faz a ponte entre sectores?

3.8 Na prática (além do que está escrito nas políticas), até que ponto os riscos climáticos são considerados nas políticas e programas de nutrição em Moçambique?

***3.81** Os choques climáticos são tidos em conta no planeamento para a desnutrição, prestação de serviços, definição de grupos-alvo e preparação?*

***3.82** Existem ferramentas ou orientações utilizadas para a triagem de riscos climáticos ou factores potenciais de choque na programação em nutrição?*

4. Sistemas de Monitoria, Evidência e Dados

4.1 Existem sistemas de monitoria ou indicadores em Moçambique que avaliam conjuntamente a resiliência climática e os resultados nutricionais?

***4.12** Se sim: quais indicadores ou sistemas? Quem os utiliza?*

***4.13** Se não: que indicadores ou fontes de dados seriam mais práticos para fortalecer a integração?*

4.2 Que evidências estão em falta que ajudariam o governo ou os parceiros a tomar decisões mais robustas sobre a programação integrada clima–nutrição?

5. Financiamento e Orçamentação para a Integração

5.1 Como são financiadas as acções de clima–nutrição em Moçambique hoje? Explorar: orçamentos governamentais, programas financiados por doadores, financiamento climático, financiamento humanitário, empréstimos, subvenções/grants distritais.

5.2 Onde ocorrem os estrangulamentos de financiamento e orçamentação para o trabalho integrado? Explorar: rubricas orçamentais limitadas para actividades intersectoriais, mandatos pouco claros, lacunas entre planeamento e implementação, desafios no desembolso, requisitos de reporte, ciclos de projecto curtos, processos de contratação/aquisição burocráticos.

5.3 Que mecanismos de financiamento ou mudanças poderiam fortalecer a integração clima–nutrição? Explorar: orçamentação conjunta, fundos comuns (pooled funding), financiamento baseado em resultados/performance, investimentos em nutrição sensível ao clima, incentivos para a coordenação intersectorial, procedimentos simplificados de desembolso e aquisição.

6. Implementação Subnacional

6.1 Com que eficácia as prioridades nacionais são traduzidas para a implementação ao nível provincial e distrital em Moçambique? Explorar: processos de planeamento distrital, limitações de capacidade, pessoal, orçamentos, coordenação entre departamentos distritais.

6.2 Existem províncias ou distritos a implementar agricultura climaticamente inteligente e programas de nutrição de base comunitária em conjunto?

Se sim:

6.21 *Que províncias/distritos?*

6.22 *Que intervenções integradas estão a ser implementadas?*

6.23 *Quem as lidera e executa (governo local, organizações da sociedade civil, grupos de agricultores, estruturas comunitárias)?*

6.24 *Que resultados ou lições emergiram?*

7. Oportunidades e Recomendações

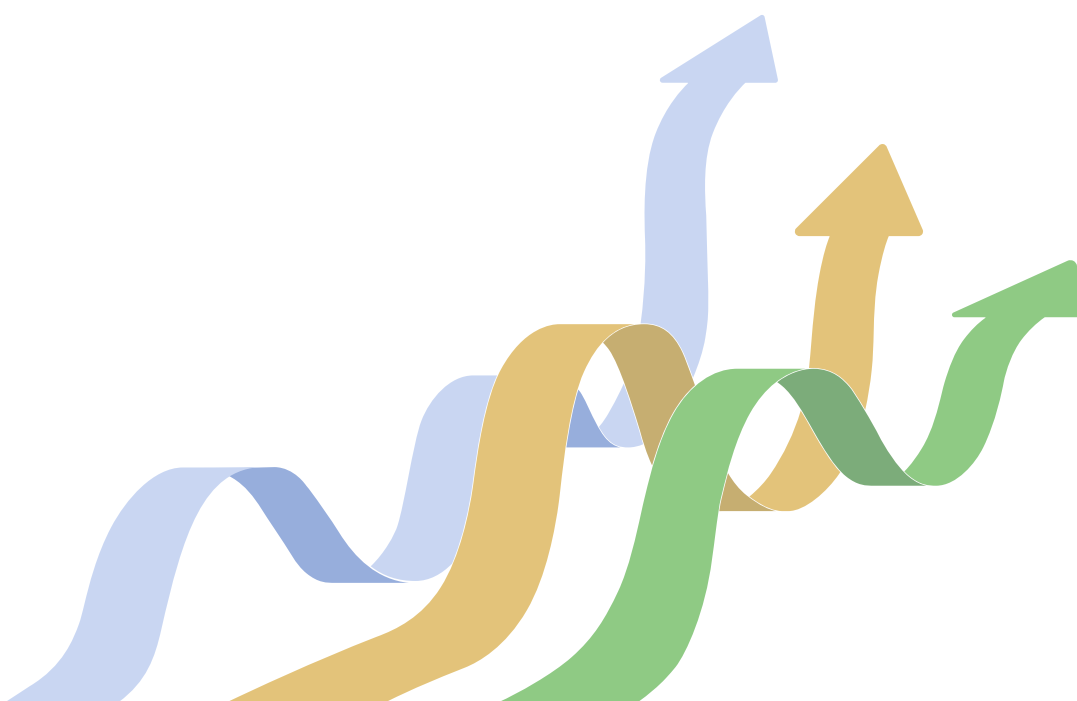
7.1 Na sua opinião, onde é que a integração clima–nutrição é actualmente mais fraca e necessita de mais melhorias em Moçambique? Explorar: coerência de políticas entre sectores, tradução para a implementação subnacional, financiamento, dados/M&E, inclusão de grupos vulneráveis, fortalecimento da resiliência.

7.2 Quais seriam as suas 3 principais recomendações práticas para fortalecer a integração clima–nutrição em Moçambique nos próximos 12–24 meses?

8. Encerramento

8.1 Com quem mais deveríamos falar para este estudo (incluindo pessoas que possam discordar da sua perspectiva)?

8.2 Existem documentos-chave, estratégias, avaliações ou relatórios que recomenda que analisemos?

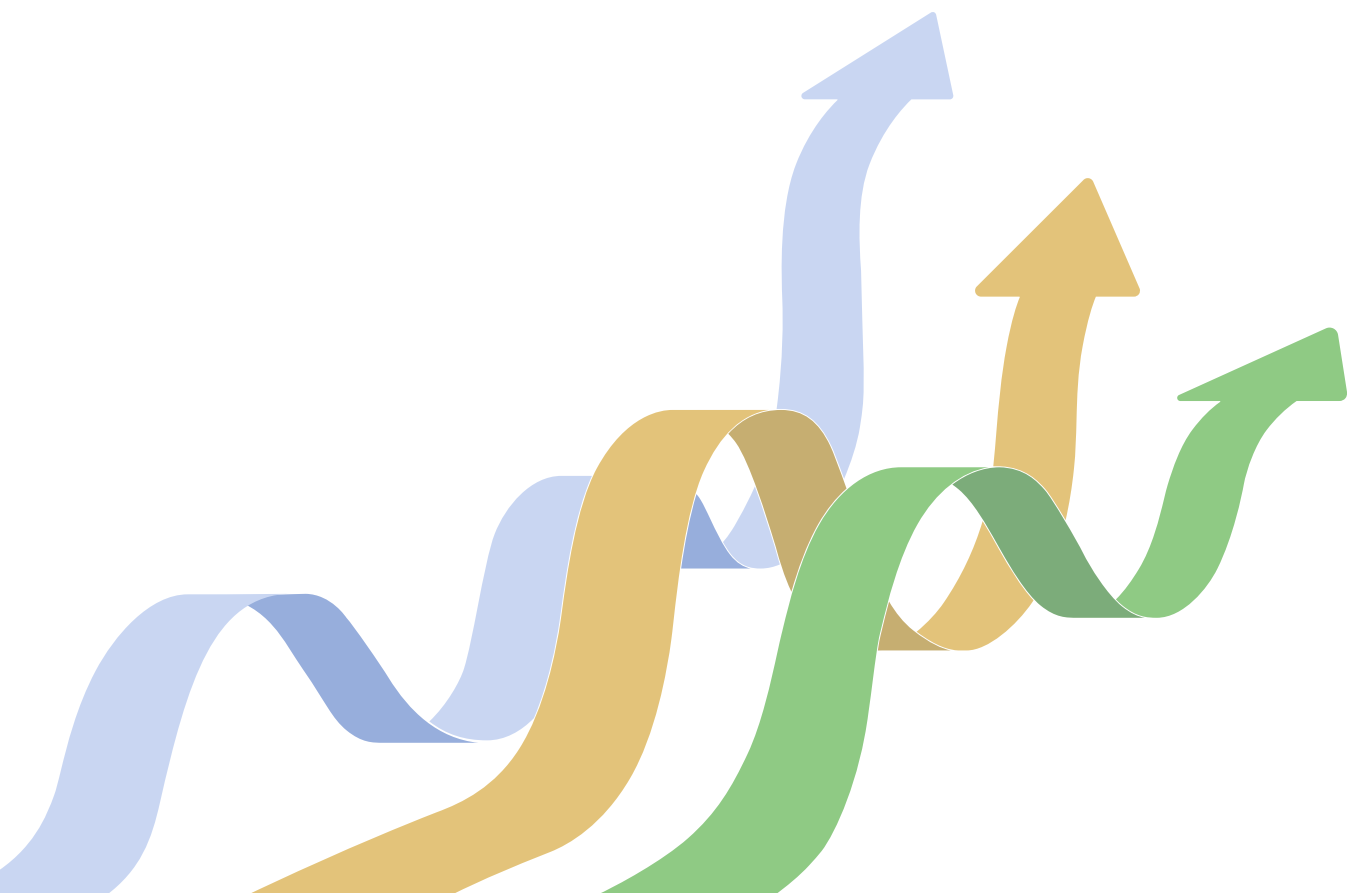


ANNEX E: SOURCES CITED

Food and Agriculture Organization of the United Nations (FAO). 2026. *FAO in Mozambique: Annual Report 2025*. Maputo: FAO.

Ndlovu, Sindiso, and Gracious Maviza. 2026. "A Systematic Review of the Impact of Climate-Related Displacements on Food and Water Security in Mozambique and Zimbabwe." *Jàmbá: Journal of Disaster Risk Studies* 18 (1): a1965. doi:10.4102/jamba.v18i1.1965.

Villanueva, Marinelle, Anna Dimitrova, and Tarik Benmarhnia. 2022. "The Impact of Climate Shocks and Women's Empowerment on Child Undernutrition in Mozambique." *Challenger: A McNair Scholars Paper Series*, Student Paper 3. University of California, San Diego.



ANNEX F: ENGLISH AND PORTUGUESE KEYWORDS

Climate Keywords [EN-PT]	Nutrition Keywords [ENPT]
Group 1 – General Climate Climate – Clima Climate Change – Alterações Climáticas Climate Crisis – Crise Climática Greenhouse Gas(es) – Gas(es) com Efeito de Estufa CO ₂ – CO ₂ GHG – GEE (Gases com Efeito de Estufa) Emissions – Emissões Extreme Weather – Eventos Climáticos Extremos Methane – Metano Sea Level(s) – Nível / Níveis do Mar Global Warming – Aquecimento Global Temperature – Temperatura Biodiverse(ity) – Biodiversidade / Biodiverso Mitigation(s) – Mitigação / Medidas de Mitigação Adaptation(s) – Adaptação / Medidas de Adaptação Net Zero – Neutralidade Carbónica / Emissões Líquidas Zero / Net Zero	Group 1 – Food Security Food Security – (In)Segurança Alimentar Food and Nutrition Security – (In)Segurança Alimentar e Nutricional
Group 2 – Energy Carbon – Carbono Fossil Fuel(s) – Combustível Fóssil / Combustíveis Fósseis Oil – Petróleo Coal – Carvão Energy Efficient – Eficiência Energética / Eficiente em termos energéticos Renewable Energy – Energia Renovável / Energias Renováveis	Group 2 – General Nutrition Nutrition – Nutrição Nutritional – Nutricional Nutrient(s) – Nutriente(s) Malnutrition – Malnutrição Undernutrition – Desnutrição / Subnutrição Overnutrition – Sobrenutrição Nutritious – Nutritivo / Nutritiva Nutritious Foods – Alimentos Nutritivos Food Systems – Sistemas Alimentares
Group 3 – Sustainability Sustainable – Sustentável / Sustentáveis Sustainability – Sustentabilidade Recycle(ing) – Reciclar / Reciclagem Reduce(ing) – Reduzir / Redução Reuse(ing) – Reutilizar / Reutilização Single-Use Plastic – Plástico(s) de Uso Único Compost(ing) – Composto / Compostagem Biodegrade(able) – Biodegradável Package(ing) – Embalagem / Embalagens	Group 3 - Diet-related Diet(s) – Dieta(s) / Alimentação Adequate Diet – Dieta/Alimentação Adequada Nutritious Diet – Dieta/Alimentação Nutritiva Balanced Diet – Dieta/Alimentação Equilibrada Healthy Diet – Dieta/Alimentação Saudável Unhealthy Diet – Dieta/Alimentação Não Saudável Affordable Diet – Dieta/Alimentação Financeiramente Acessível Accessible Diet – Dieta/Alimentação Localmente/Geograficamente Acessível Available Diet – Dieta/Alimentação Disponível / Disponibilidade Alimentar Diet Diversity – Diversidade Alimentar / Diversidade da Dieta Plant-Based – À Base de Plantas Vegan – Vegan(o/a) Vegetarian – Vegetariana/o

Climate Keywords [EN-PT]	Nutrition Keywords [ENPT]
Group 4 – Food Food Loss(es) – Perda(s) Alimentar(es) Food Waste(s) – Desperdício Alimentar Overproduce(ing) – Sobreprodução / Produção Excessiva Shelf Life – Prazo de Validade / Tempo de Prateleira Portion Size – Tamanho da Porção / Porções Local(ly) – Local(mente) Regional(ly) – Regional(mente) Season(al) – Sazonal(mente)	Group 4 – NCDs and Human Health Obesity – Obesidade Overweight – Excesso de Peso / Sobrepeso Underweight – Baixo Peso Weight Loss – Perda de Peso Weight Gain – Ganho de Peso Anemia / Anaemia – Anemia Diabetes – Diabetes Blood Pressure – Pressão Arterial Hypertension – Hipertensão Blood Sugar – Glicemia / Açúcar no Sangue Cholesterol – Colesterol Cardiovascular Disease – Doença Cardiovascular Blood Iron – Ferro Sanguíneo / Níveis de Ferro Stunting – Desnutrição Crónica Wasting – Desnutrição Aguda
Group 5 – ESG Fairtrade – Comércio Justo Animal Welfare – Bem-Estar Animal Free Range – Criação ao Ar Livre Water Use – Uso da Água Land Use – Uso do Solo UNFCCC – Convenção-Quadro das Nações Unidas sobre Alterações Climáticas[SC1] ESG – ASG (Ambiental, Social e de Governação)	Group 5 – Food Safety Food Hygiene – Higiene Alimentar Food Label – Rotulagem/Rótulo(s) Alimentar(es) Food Safety – Segurança dos Alimentos Food Control – Controlo Alimentar Food Quality – Qualidade Alimentar Foodborne Disease(s) – Doença(s) Transmitida(s) por Alimentos Waterborne Disease(s) – Doença(s) Transmitida(s) pela Água Foodborne Illness(es) – Doença(s) Alimentar(es) Foodborne Outbreak(s) – Surto(s) Alimentar(es) / Surto(s) de Origem Alimentar Food Poisoning – Intoxicação Alimentar Food Contamination – Contaminação Alimentar Foodborne Pathogens – Patógenos Alimentares / Agentes Patogénicos Alimentares Mycotoxin – Micotoxina(s) Aflatoxin – Aflatoxina(s) Spoilage – Deterioração Alimentar Food Control System – Sistema de Controlo Alimentar INFOSAN – INFOSAN

Climate Keywords [EN-PT]	Nutrition Keywords [ENPT]
Group 6 – Agriculture Intensive Farming – Agricultura Intensiva Overfarming – Cultivo Excessivo / Exploração Agrícola Excessiva / Sobre-Exploração Agrícola Crop Diversity – Diversidade de Culturas Overgrazing – Sobrepastoreio / Pastoreio Excessivo Monoculture – Monocultura Indigenous Crops – Culturas Autóctones / Tradicionais / Indígenas Organic – Biológico / Orgânico Bio – Bio Nature-Based Solutions – Soluções Baseadas na Natureza / Soluções Naturais Neglected-Underutilised Species – Espécies Negligenciadas e Subutilizadas Agroecology – Agroecologia Ecology – Ecologia	Group 6 – Food Groups and Types Cassava – Mandioca Peanut – Amendoim Indigenous Foods – Alimento(s) Autóctone(s) / Tradicional(ais) / Indígena(s) / Silvestre(s) Vegetable(s) – Legume(s) / Verdura(s) / Vegetal/Vegetais Fruit(s) – Fruta(s) / Fruto(s) Meat – Carne(s) Red Meat – Carne Vermelha White Meat – Carne Branca Fish – Peixe(s) Starch – Amido Dairy – Laticínio(s) / Produto(s) Lácteo(s) Protein – Proteína(s) Fat / Fats – Gordura(s) Oil / Oils – Óleo(s) Grain / Grains – Cereal/Cereais / Grão(s) Wheat – Trigo Rice – Arroz Maize – Milho Nuts – Frutos Secos / Oleaginosas Eggs – Ovos Milk – Leite Pulses – Leguminosas Animal-Sourced Foods / ASF → Alimentos de Origem Animal
	Group 7 – Nutritional Content Vitamin A – Vitamina A Iodine – Iodo Vitamin – Vitamina(s) Micronutrient(s) – Micronutriente(s) Mineral – Mineral / Minerais Fiber / Fibre – Fibra(s) Calcium – Cálcio Gluten – Glúten Calorie – Caloria(s) Caloric – Calórico / Energético Carbohydrate – Hidratos de Carbono / Glícidos Sodium – Sódio Salt – Sal Sugar – Açúcar MSG – Glutamato Monossódico (GMS) Iron – Ferro Zinc – Zinco Fortified – Fortificado(s) Biofortified – Biofortificado(s) Fortification – Fortificação Biofortification – Biofortificação

