CERFAM
CENTRE D'EXCELLENCE RÉGIONAL
CONTRE LA FAIM ET LA MALNUTRITION

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Promoting a More Integrated Approach to Strengthening Resilience in Africa

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LIST OF ACRONYMS

CBPP	Community-based participatory planning
CERFAM	*Centre d'Excellence Régional contre la Faim et la Malnutrition*
CH	*Cadre Harmonisé*
CILSS	*Le Comité Permanent Inter-Etats de Lutte contre la Sécheresse dans le Sahel*
CSO	Civil society organization
DFID	Department for International Development
DRC	Democratic Republic of the Congo
ECOWAS	Economic Community of Western African States
EPD	Economic and Political Development
FAO	Food and Agriculture Organization of the United Nations
GIZ	*Deutsche Gesellschaft für Internationale Zusammenarbeit*
HGSF	Home-Grown School Feeding
HIV/AIDS	Human Immunodeficiency Virus / Acquired Immunodeficiency Syndrome
ICA	Integrated Context Analysis
IFAD	International Fund for Agricultural Development
NGO	Non-governmental organization
REUNIR	Réseau des Universités du Sahel pour la Résilience
SDG	Sustainable Development Goals
SIPA	School of International and Public Affairs, Columbia University
SLP	Seasonal livelihood programming
SOFI	State of Food Security and Nutrition in the World
TOR	Terms of Reference

UN	United Nations
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WFP	World Food Programme
WHO	World Health Organization

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EXECUTIVE SUMMARY

In light of the COVID-19 pandemic and its ongoing repercussions in West and Central Africa, and in the greater context of attention towards "building back better" towards the 2021 Food Systems Summit and the 2030 Agenda for Sustainable Development, a holistic reevaluation of resilience efforts to streamline and coordinate efforts at the national and regional efforts is overdue. Resilience efforts by development actors are frequently siloed and uncoordinated. In order to take a true systems approach and address long-term and structural challenges to resilience in West and Central Africa, CERFAM aims to support governments in identifying gaps and tying resilience initiatives together to advance cumulative efforts that will ultimately transform the food systems in these countries for the better. Working with key informant interviews from multilateral organizations, non-governmental organizations, and local government, this report establishes a new framework to understand resilience programming and strategic national-level resilience programs for governments of West and Central Africa. However, beyond making comprehensive policy documents, this report also attempts to address the enabling environment for resilience programming and how to integrate identified good practices and learn from previously implemented resilience programs across these regions. If resilience challenges are not solved at the source and through integrated programs, countries in West and Central Africa will continue to suffer from external shocks like the COVID-19 pandemic, jeopardizing lives and livelihoods due to compromised food systems.

INTRODUCTION

The School of International and Public Affairs (SIPA), Columbia University, Economic and Political Development (EPD) Workshop team was tasked with defining an integrated resilience strategy for the governments of West and Central Africa by the Regional Centre of Excellence against Hunger and Malnutrition (CERFAM), based in Abidjan, Côte d'Ivoire. The terms of reference evolved over the course of the project and the final deliverable included the production of an analytical framework to examine good practices in resilience and create a tool for governments to use and collaborate on a national and regional level. Many resilience initiatives, although taking place, are siloed and lack the coordination mechanisms to ensure their sustainability and their ability to address the underlying issues of long-term development and resilience. By facilitating the linkages of resilience programming at the country and regional levels, this collaboration aimed to develop more robust resilience strategies that take a diversified approach to defining and solving resilience challenges.

Client Agency

The Regional Centre of Excellence against Hunger and Malnutrition (CERFAM) is a hub for knowledge exchange, partnership-building, and South-South Cooperation. The centre is the result of a strategic partnership between the government of Côte d'Ivoire and the World Food Programme (WFP) to support countries in Africa in their national efforts to develop and implement sustainable policies and initiatives to eliminate hunger and combat all forms of malnutrition (WFP, 2019, p.2).

CERFAM works through four main strategic pillars. They include:

1. **Partnership-building** at all levels, including with the Centres of Excellence of Brazil and China, regional institutions, and other platforms, for the dissemination and sharing of expertise, know-how, technologies, and the release of synergies.
2. **Technical assistance** to support countries in strengthening their policy, legal and institutional frameworks, and the implementation of good practices against hunger and malnutrition through a network of experts.
3. **Advocacy and communication** to raise awareness and mobilize collective action at all levels, build and strengthen partnerships, mobilize resources to leverage investments aimed at promoting and implementing good practices and innovative solutions in the region.
4. **Research** to enable the identification, documentation and dissemination of good practices and lessons learned on family farming, post-harvest losses management, coordination and convergence of nutrition interventions, community resilience and social protection.

CERFAM was officially launched on 25 March 2019 and was based on successful models in Brazil and China. The centre was established with the aim of achieving the Sustainable Development Goal (SDG) 2, Zero Hunger, of the 2030 Agenda for

Sustainable Development. CERFAM has focused its activity in the past year on home-grown school feeding, post-harvest losses, nutrition interventions, community resilience and agricultural development (WFP, 2019, p.2).

CERFAM's activities include:

- Identification, selection, documentation, and dissemination of good practices to support governments' efforts to end hunger and malnutrition.
- Organization of consultations, workshops, and study visits to facilitate sharing good practices and experiences among developing countries.
- Network and expert deployment in social protection, home grown school feeding, nutrition, post-harvest losses and rural development, community resilience. Technical support to governments and partners for accompanying the design and implementation of coherent and effective programs and policies.
- Policy dialogue and advocacy for mobilizing decision makers at the highest levels to prioritize initiatives to achieve Zero Hunger and nutrition.
- Partnership with regional and sub-regional organizations for strengthening collaboration, complementarities, and synergies at continental and sub-regional levels.
- Partnerships with academic institutions, research centres and universities for strengthening applied research to create evidence-based information to guide design and implementation. (Sanogo, 2019).

CERFAM's work ties into the objectives of the WFP, UN Member States, and partners in youth and women empowerment, income generation, private sector engagement through local economic and value chain development, and environment and climate (WFP, 2019, p. 4).

Regional Context

The State of Food Security and Nutrition in the World (SOFI), published in 2020 by the FAO, found that West Africa had 59.4 million undernourished people in 2019 (FAO, 2020, p.11). What is most concerning about this statistic is the upward trend in undernourishment, which under current conditions, is projected to reach 118.8 million by 2030 (FAO, 2020, p. 11). West and Central Africa has recently made progress in reducing child stunting and wasting, but this has occurred as the nutritional gap between rich and poor families has become one of the highest in the world (FAO, 2020, p. 30, 38).

One key reason for this ongoing nutritional crisis is the frequency of severe shocks and stressors that impact the region's already strained food system. The region's food system has been hampered by years of violent conflict disrupting food production, loss of human capital from HIV/AIDS and Ebola virus, and corresponding low economic investment (De Loma-Ossorio et al., 2014, p. 15-16). Phenomena such as droughts, floods, protracted conflict, and epidemics uproot communities, halt food production,

and block supply chains, creating acute food shortages and malnutrition (De Loma-Ossorio et al., 2014, p.16).

These shocks can also overlap. In 2012, poor rainfall in the Sahel left 18 million people without access to adequate nutrition, while extreme flooding in Niger and Nigeria displaced 7 million people from their homes (De Loma-Ossorio et al., 2014, p. 12-13). Furthermore, the ongoing COVID-19 pandemic has created its own unique challenges, such as disrupting farmers' access to markets, while intensifying existing challenges and doubling the number of people facing acute hunger worldwide (African Union & FAO, 2020, p. 2-3 & Anthem, 2020).

The impact of these crises is then further magnified by systemic inequality, environmental degradation, and gender disparities that have limited the available resources and capacity of West African communities to recover from external shocks (De Loma-Ossorio et al., 2014, p.16-18). In the Sahel region alone, 80% of lands are estimated to be degraded, increasing the impact of floods, droughts, and erratic rainfall on crop production and human health (WFP, 2018, p. 1). Similarly, rampant deforestation in the Congo Basin is not only degrading local environmental resources but could also create drier conditions in the Sahel and coastal West Africa over time (Van der Ent et al., 2010, p. 6-7 & Bergen, 2019).

Previous interventions and programs aimed at improving nutrition outcomes in this region have been scattered, short-term, and uncoordinated (WFP, 2018, p. 1). As the need for resilient food systems grows, there is greater recognition that interventions must be coordinated, long-term and integrated to adequately address food insecurity at a regional level.

West and Central Africa is a large and incredibly diverse region. The specific risks and issues that one country faces are highly variable, and solutions must be designed and formatted to the context.

Rationale

This project aimed to examine more deeply the root causes of the need for integrated resilience programming undertaken by multilateral organizations, national and regional entities, and local organizations. Many resilience initiatives are not implemented in synergy with other activities at the country level to ensure that there is systemic change that eliminates the underlying challenge to resilience. By focusing on research, good practices, the sharing of technical capacity, know-how and technology, and partnership building across the Global South, CERFAM's work has potential to guide governments and regional institutions to cooperate and partner in a movement towards greater resilience in Africa's food systems. The Columbia SIPA EPD Workshop team (hereinafter the team) examined shocks and stressors, from acute to chronic, and conducted research on resilience initiatives by defining regionally specific barriers to long-term resilience.

Since the outbreak of the COVID-19 pandemic, governments and people worldwide have more acutely recognized the vulnerabilities of the current food system. The latest edition of the State of Food Security and Nutrition in the World (SOFI) Report cautions that world hunger has steadily been rising since 2015, despite a significant decline 30 years prior (FAO, IFAD, UNICEF, WFP and WHO, n.d.). The study estimates that 690 million people went hungry in 2019, which is a 10 million increase from 2018, and a 60 million increase since 2015 (FAO et al., n.d.). Globally, the report predicts that the ongoing pandemic will lead at least 130 million more people into chronic hunger by the end of 2020 (FAO et al., n.d.). Resilience to external shocks is now more vital than ever to rebuild and strengthen food systems to reverse these trends.

By creating a framework for integrated resilience initiatives in West and Central Africa, CERFAM can guide and inform more impactful planning, design, implementation, monitoring, and evaluation of resilience programming. Information gleaned from this project about good practices for connecting the outcomes and objectives of resilience programs will be shared with WFP country offices, government partners, and other members of the development sector. The team conducted desk research and key informant interviews to inform this framework in coordination with CERFAM.

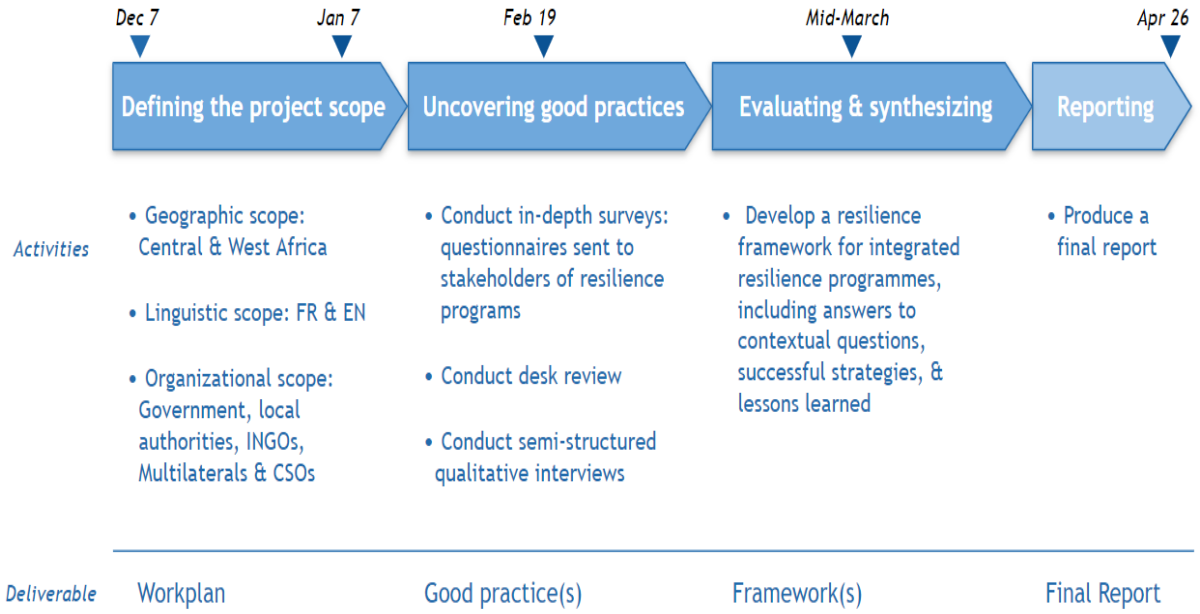
Objective

This report aimed to present the results of the collaboration between Columbia SIPA (the team) and CERFAM in Abidjan. Using desk research and key informant interviews, the team has defined a conceptual and analytical framework for coordinating resilience programming at the country level, encouraging regional cooperation.

The result of this work has been a comprehensive, adaptable framework that can be used to enable more efficient and coordinated implementation of resilience programs in WFP's partnerships with country governments of West and Central Africa. The comprehensive framework will reinforce the capacity of governments to implement resilience programs. In the long term, this framework will enable the governments to take over and take ownership of resilience-focused development programs currently being implemented by multilateral organizations, non-governmental organizations (NGOs), local partners, and local authorities.

METHODOLOGY

Figure 1: Project Methodology



Source: the authors

Project Scope

The geographic scope of this report encompasses West and Central Africa, as shown in Figure 1. The Sahel countries, overlapping with West Africa, are also considered as a distinct ecological region for resilience programs within this larger scope of West and Central Africa. We included the Sahel region in our scope to document the innovative work in resilience being conducted by REUNIR, a network of universities in the Sahel region. The linguistic scope includes French and English.

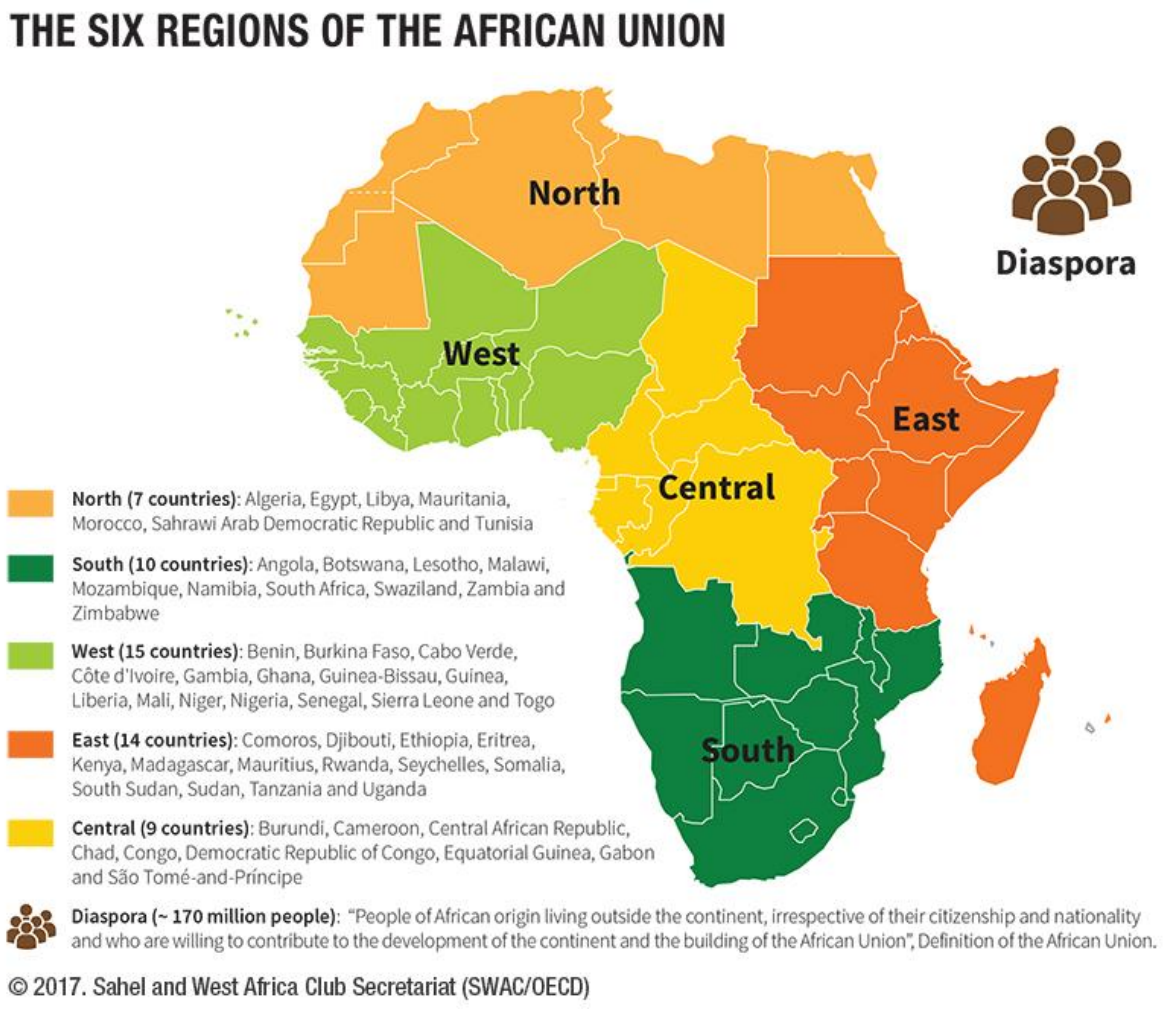
Our initial countries of focus were the Democratic Republic of the Congo (DRC) and The Gambia. However, on our limited timeline, our team was unable to secure an adequate number of interviews from Congolese interviewees. We then shifted our country of focus to Togo given the availability of interviewees and information. We felt that Togo would serve as a sufficient representative country for West Africa given its climatic similarity to the rest of the region. It has both coastal areas and deserts which characterize the West African region. For this reason, we concluded that our research would not be compromised by the shift in geographic scope.

The analysis aimed to use Togo and The Gambia as case studies which could illustrate the problems and dynamics of the entire region. The governments of Togo and The Gambia

will work closely with WFP in the future to implement and operationalize these recommendations.

This report focuses mainly on resilience initiatives implemented by NGOs, multilateral agencies, both local and national government agencies, and research institutions. The team conducted a landscape analysis of food and nutrition resilience initiatives from 2015 onward, as there was a shift in nutrition program objectives in 2015 to meet SDG 2.

Figure 2: Map of Geographical Regions of the African Continent



Explanation of Process

The framework drew on the findings on semi-structured expert interviews as well as a desk review of existing literature in resilience. The literature review assessed documentation, reports, and evaluations from major organizations in food security and nutrition globally, with a specific focus on those that have implemented or evaluated resilience activities in West and Central Africa, and authors who have contributed to the theoretical understanding of resilience. This literature review also drew from the national

plans of Togo and The Gambia specifically, as well as documents jointly produced by WFP and national governments.

Interviews were conducted with field experts including WFP's partners in West and Central Africa from various country offices of the organization, as well as government and NGO partners. The interviews used a set of standard questions in English and French which were adapted to the knowledge area of each key informant. The interviews were transcribed and translated as needed using Trint audio transcription software. Once transcribed and translated, the team analysed the transcripts to extract lessons learned and corresponding good practices, while paying particular attention to the CERFAM good practice criteria.

CERFAM employs several criteria to evaluate good practices, which include:

- Effectiveness
- Efficiency
- Relevance
- Feasibility
- Innovation and learning
- Partnership and multi-sectorality
- Accountability (Good governance and transparency)
- Replicability
- Sustainability and scaling up

The framework utilizes a selection of the CERFAM good practice criteria that are most relevant to resilience programming. The good practices extracted from these interviews and desk review were assessed for each of the below criteria. Good practices that met at least two of the criteria were included in the resilience framework.

- **Feasibility**
  Feasibility means to demonstrate possible implementation. The practice itself should not be too complicated for beneficiaries to understand and benefit from the intervention quickly and easily. Different factors, such as human capacity and development, financial ecosystem, and environment, should be considered and addressed to ensure that the practice is feasible.

- **Innovation and learning**
  Innovation refers to the component of good practice which is perceived as new. It includes not only new technology or technique, but also managerial processes and participation approaches. Evaluation during project implementation and its end could provide an opportunity to learn from the project and improve it in the future if the practice is adopted again or revisited.

- **Sustainability and scaling up**
  The good practice should have a persistent effect on the beneficiaries, even after the withdrawal of other project stakeholders. Moreover, the practice itself should possess potential to be scaled up with attributes of success identified in research or through practical experience.

- **Replicability**
  The practice should show potential for replicability. The evaluation conducted during project implementation could assist in finding the conditions of replicability. With clear conditions of replicability, good practice can be replicated by other practitioners in different contexts without making efforts in vain.

- **Partnership and multi-sectorality**
  The proposed practice should involve and foster the collaboration between several stakeholders, especially the local community and national or local authorities. In addition, the practice needs to create synergies and complementarities while adding value to ongoing initiatives. The involvement of the local community and stakeholders from the beginning to the end of the project is essential (CERFAM, 2020).

Project Limitations

This framework has both geographic and linguistic limitations. Within Central and West Africa, Togo and The Gambia, our "model" countries, can only serve as representative of the broader regions to a point given the climatic variability that exists within, and between, regions. This framework can only be loosely applied to areas outside of Central and West Africa as situations vary across contexts.

Model Countries

To tailor the findings to the Central and West African context, we selected two model countries: The Gambia and Togo. Using these two countries as models, actors can extrapolate these findings to other nations in the region. Please refer to the attached 'country briefs' for recommendations specific to the Togolese and Gambian contexts.

The key informant interviews were conducted in English and French, therefore testimony in indigenous local languages is absent. This framework can, however, be used as a guideline. In West and Central Africa, the best practices from the framework can serve as a starting point for governments and other actors with an interest in the implementation of successful resilience initiatives.

LITERATURE REVIEW

Origins and Current Debate Over the Term: "Resilience"

Although resilience has been a term used in several different disciplines dating back to the 1800s, "resilience" only became an important term in the development and food security space recently (Harris & Spiegel, 2019, p. 9). Originally, resilience was an engineering concept that described the ability of a material to absorb energy without being permanently deformed (Harris & Spiegel, 2019, p. 9). The term's origin in material science is now the basis for many of the criticisms of using resilience as a development goal. Resilience, in its original use, was never meant to be applied to social science or development. Materials that faced a shock would never transform to become stronger or more resilient following the shock (Harris & Spiegel, 2019, p. 9). However, this changed when the term began to be applied to the fields of ecology and psychology, bridging its use in material science to ecological sustainability and the human experience. In ecology, the term is used to describe the "persistence of systems and their ability to absorb change" whereas in psychology it refers to "overcoming of a stress or adversity" (Harris & Spiegel, 2019, p. 10). Combining these two definitions demonstrates why resilience has become a useful and widely applied term to development and food security.

Even so, the long origin story of resilience and its use in multiple disciplines has made this term vague and commonly changed, leading to its wide popularity and notable critiques. There is still no broad consensus on its definition, especially as it pertains to building resilience to shocks and stressors in the long-term, which is the primary objective of this framework. To account for the term's ambiguity, it is helpful to have a clearly defined definition in mind when creating development goals, strategies, and policies aiming to build resilience in addition to targeted performance metrics that reflect the chosen definition. Following suit, this framework clearly outlines the definition of resilience used in this report as well as the applications, strengths, and limitations of using this concept to promote food security and sustainable development in West and Central Africa.

Definitions and Components of Resilience

Resilience is defined by the Food and Agriculture Organization (FAO) as "the capacity of individuals, groups, communities, and institutions to anticipate, absorb, adapt, and transform in the face of shocks" (FAO, 2018, p. 94). We define a resilience-building initiative as "an official program or community intervention that has a goal or objective to improve the capacity of individuals, groups, communities, or institutions to anticipate, absorb, adapt, and transform to shocks in a manner that reduces chronic vulnerability and facilitates inclusive growth" (adapted from: FAO, 2018 & Harris and Spiegel, 2019). Figure 3 illustrates the components of resilience considered throughout the framework development process.

Figure 3: Components of Resilience

Gender, social inclusion	*Agricultural*	*Disaster*	*Sociopolitical*	*Climate*	*Public Health*
Resilience as a function of women's empowerment Women play essential role at each stage in food system from production to consumption	The ability for a farmer to continue to produce a viable crop, year after year Diversification of crop production, crop rotation, crop storage, preparing for "lean" seasons, animal and plant diseases	Resistance to and the capacity to rebound from: • Hurricanes • Tsunami • Earthquake • Wildfires • Landslide • Tornado	Resistance to and the capacity to rebound from: • Changes in government • Social unrest • Civil war • Crime • Power failure • Toxic spills • Terror	Resistance to and the capacity to rebound from: • Droughts • Floods • Severe storms • Heat waves • Cold snaps • Rising sea levels • Crop pests and disease	Strengthening health systems to make them resilient to shocks/stressors that put pressure on these systems and communities, in terms of health and nutrition, including pandemics like COVID-19

Source: the authors

Sustained Resilience and Addressing Vulnerability

Resilience is often used as a measurement of adaptive capacity to shocks during a specific moment of time. However, USAID provides an important addition to the definition of resilience by including that recovery should be done "in a manner that reduces chronic vulnerability and facilitates inclusive growth" (Harris & Spiegel, 2019, p.10).

By expanding the definition of resilience to include this long-term approach to recovery, resilience programming can better address the root causes of vulnerability to facilitate the development of sustainable solutions. Whereas resilience primarily describes a set of tools and abilities to react to shocks and stressors, vulnerability describes the underlying susceptibility to those hazards (Harris & Spiegel, 2019, p. 12). As such, integrating vulnerability into the definition of resilience better captures how social or environmental factors (e.g., gender, ethnicity, season, previous land use, etc.) may differentially impact the resilience of individuals, households, or communities.

Resilience as a Function of Women's Empowerment

The West African Papers posit that women's empowerment is critical for food and nutrition security in West Africa, given that West African women play an essential role at each stage in the food system: production, processing, distribution, food consumption and nutrition (Gnisci, "West African Papers," 2016, p. 7). As such, women can contribute to building resilience to uncertainty and 'shocks.' This study emphasizes the importance of strengthening women's contributions to the resilience of their communities by enabling women's organisations to contribute to policy dialogue processes (Gnisci, p. 7). The study also emphasized the role of women in the protection of the environment, the creation of food-related policies, and decision-making.

Resilience of Production Systems

Within the context of the agrofood value chain, resilience can also refer to "the ability of a food system to respond and adapt to disruptions, while maintaining its function" Research on food systems resilience has focused mainly on disaster response (Seekell et al., 2017). At the global level, resilience research tends to centre on broad economic patterns and relationships, as well as strengthening micro-, small-, and medium-sized enterprises, as opposed to food security solely for individual households (Seekell et al., 2017).

Climate Resilience

The agricultural systems and economies of Sub-Saharan Africa are "highly sensitive to climatic variability." Drought is one of the main contributors of malnutrition and famine across the Sahel region. Smallholder farmers in Sub-Saharan Africa are dependent on "rainfed agriculture" for their livelihoods (Shiferaw et al., 2014). One definition of resilience refers to the ability of farmers to anticipate and adjust to the variability of climate, which will continue to increase in the coming years. Resilience may also refer to a farmer's ability to withstand and recover from drought and famine (Shiferaw et al., 2014).

Climate resilience can also be understood as the ability to withstand the negative impacts of climate variability and extremes on agricultural production, yields and income (FAO, 2018, p. 82). These can include drought, sea-level rise, and degradation of the environment.

Situational Analysis

Food systems and the state of nutrition are in a precarious position in West and Central Africa, marred by frequent shocks and stressors. The food systems, especially the agricultural value chain, in the region are being and can be severely disrupted by climate change, natural disasters, conflict and armed violence, and socio-political changes. Salinization, drought, and desertification, enhanced by climate change, impact agricultural production in the region. In the absence of integrated resilience and adaptation interventions, it is estimated that agricultural yields will decline from 5 percent to 30 percent by 2050 (Green Climate Fund, 2020, p. 2).

Furthermore, post-harvest losses of food crops constitute a significant hindrance in building strong agricultural value chains in the region, and more broadly in Sub-Saharan Africa as well (Stathers et al, Nature Sustainability, p. 821). Reducing post-harvest losses is crucial in building resilient food systems.

The literature review found that these value chain disruptions along with issues of market access, consumption patterns, and reliable access to food and adequate diets are essential to address when focusing on strengthening resilience within communities, institutions, and food systems at large.

Shocks and Stressors

The frequency of severe shocks and stressors that impacts the already strained food systems in the region contribute to the dire nutritional crisis. Phenomena such as droughts, floods, protracted conflict, and epidemics uproot communities, halt food production, and block supply chains, creating acute food shortages and malnutrition (De Loma-Ossorio et al, 2014, p. 16). These shocks can also overlap. In 2012, poor rainfall in the Sahel left 18 million people without access to adequate nutrition, while extreme flooding in Niger and Nigeria displaced 7 million people from their homes (De Loma-Ossorio et al, 2014, p. 12-13).

Moreover, emergencies like pandemics and natural disasters prove to be major detriments to stable food systems in the region, as highlighted by the ongoing COVID-19 pandemic. For example, the close monitoring of the food and nutrition situation in the Sahel and West Africa region by regional actors during the pandemic revealed the negative impacts of the pandemic on the functioning of health centres, agricultural and livestock markets, the development of income-generating activities, access to factors of production (inputs, agricultural labour) and pastoral resources, as well as animal mobility (CILSS Press Release, 2020, p. 1).

Furthermore, the Permanent Interstate Committee for Drought Control in the Sahel (CILSS) estimates that the 51 million people who face food stress are likely to fall into a food crisis without adequate support. Additionally, previous epidemics like Ebola provided evidence of the relative fragility of the food systems in the face of such shocks.

The impact of these crises or shocks is then further magnified by stressors such as systemic inequality, environmental degradation, socioeconomic norms, and gender disparities that have limited the available resources and capacity of West African communities to recover from external shocks (De Loma-Ossorio et al, 2014, p.16-18).

Promising Resilience Initiatives and Programs

Previous interventions and initiatives aimed at improving nutrition outcomes in this region have been scattered, short-term, and uncoordinated (WFP, 2018, p. 1). Therefore, the need for resilient food systems grows, and decision-makers are recognizing that interventions must be coordinated, long-term, and integrated to adequately address food insecurity systemically and at a regional level.

Current resilience initiatives designed and implemented by a range of actors, including international NGOs, civil society organizations (CSOs), multilateral organizations, and government agencies in the region, though scattered and working in silos, provide useful insights to assist in the development of the integrated programmatic framework. They range from focusing on consumption through initiatives like Home-Grown School Feeding (HGSF) to emphasizing livelihood creation through supporting activities such as pastoralism. The literature review highlights that a key aspect of resilience initiatives

should concentrate on livelihood creation and asset building, although not a lot of this long-term implementation currently occurs on the ground.

The review also foregrounded the work being carried out to strengthen information systems. For example, *Cadre Harmonisé* (CH), a regional tool developed to prevent food crisis through providing early warning signs by swiftly identifying affected populations and offering appropriate measures to improve their food and nutrition security. Such tools intended for national, regional, and global mechanisms for the prevention and management of food and nutritional crises, if institutionalized and enhanced through information and technology sharing and South-South cooperation efforts, can be key to integrating resilience initiatives (CILSS, 2020, p.1).

USAID's Building Resilience to Recurrent Crisis

The USAID program and policy guidance for "Building Resilience to Recurrent Crisis" is a set of guidelines that provides insights on how to best target vulnerable communities to integrate, sequence, and layer resilience activities (USAID, 2012, p. 5). Additionally, this report emphasized the importance of women's empowerment in resilience programs, stating that "approaches that systemically and visibly reduce key gender gaps and ensure that women are given the tools, resources, and opportunities to lead and participate are critical to the success of our efforts to achieve sustainable change" (USAID, 2012, p. 12). By stressing the importance of women's empowerment in regions with recurrent crises, this report demonstrates how to prioritize resilience activities around high-risk communities in addition to historically marginalized groups within them.

Most importantly, this report explains USAID's concept of sequencing, layering, and integrating resilience programs from humanitarian relief to development (USAID, 2012 & interview with Zalynn Peishi, 3/3/21). Sequencing refers to the chronological order of programs. This draws on the fact that immediate needs of communities facing shocks and stresses must be met before longer-term development projects can be successful. Layering is the concentration of numerous activities on a specific stage in the development process to achieve more impactful and lasting results.

Integrating, for the purpose of USAID's report, is the coordination of multiple agencies to put their resources into one or multiple initiatives that are also sequenced and layered (USAID, 2014). Altogether, this concept is an important model for improving cooperation between resilience program implementers to successfully move from humanitarian relief to development.

The two examples provided here were chosen to highlight the initiatives' ability to practically integrate their programming across organizations, timeframes, and sectors to build resilience more effectively.

WFP and Oxfam's R4 Rural Resilience Initiative

The R4 Rural Resilience Initiative (R4) is a partnership between Oxfam America and WFP that currently operates in six countries across the African continent. R4 stands for the four integrated risk management strategies that are implemented simultaneously to improve beneficiaries' food and income security: risk reduction, risk transfer, prudent risk taking, and risk reserves (WFP & Oxfam America, 2019, p. 5). This is achieved by specific actions such as building natural resource assets or improving agricultural practices to reduce climate shocks (risk reduction), providing microinsurance options (risk transfer), investing in livelihood diversification (prudent risk taking), and developing savings associations (risk reserves).

Targeting their operations in the eastern, more arid region of the country, the initiative utilized WFP's Food Assistance for Assets Model to reduce risk for smallholder farmers in their beneficiary communities.

In particular, the food assistance provided was conditioned on farmers helping to create soil conserving infrastructure such as stone bunds (piles of rocks along contour lines to slow down water flow) and small dikes. With these new assets being developed, the program would then provide farmers access to weather index-based insurance. However, instead of paying a traditional insurance premium, the farmers could work building up their assets while still gaining coverage for droughts. Lastly, the initiative partnered with the insurance providers to help community members set up small scale savings and earn credit. With better productive assets and access to insurance, farmers would have more financial capital to grow their savings and be able to strategically use credit, making it so that the community has a greater capacity to absorb and adapt to shocks (WFP and Oxfam America, 2019, p. 9).

Building Resilience

Shocks and stressors have the capacity to halt or backtrack progress in development, building up the capacity of communities, governments, and institutions to resist these disruptions in the short and short-term is paramount to achieving the SDGs. Furthermore, taking a resilience approach to development has additional advantages. Namely, building resilience requires, but also facilitates, an interdisciplinary approach, meaning that it has the capacity to link multiple sectors and communities of practice (Béné et al., 2016, p. 2). Similarly, resilience approaches shift the focus from short-term relief to longer-term preventative measures that can help link humanitarian work to development efforts (Béné et al., 2016, p. 2).

However, resilience approaches still have limitations. Béné et al. pointed out that until recently, resilience programs have solely focused on the ability of communities to "bounce back" from shocks, which does not necessarily mean that communities are better equipped to handle the next shock or stress (Béné et al., 2016, p. 7). This was exemplified in a WFP strategic evaluation of their own resilience programs that found that their programs overwhelmingly favoured short-term coping strategies, even though their program recommendations valued longer-term support (WFP Office of Evaluation, 2019, p. vi).

To better explain why past resilience initiatives have struggled to be as successful on the ground, the following section highlights some key challenges uncovered during the literature review.

Key Challenges

Aligning all stakeholders around country goals

Finding ways to utilize all levels of government to coordinate resilience activities around their country goals is a major barrier to building resilience. Humanitarian action moves quickest when it is under the direct guidance of the highest levels of government (Babu & Dorosh, 2017, p. 3). This is the same for the coordination of resilience activities. However, being able to secure buy-in from the highest levels of government generally requires that all resilience initiatives be guided by the development goals of that country and inserted in their national plans or strategies. Considering that several different actors are working on resilience programs, ranging from CSOs, large multilateral agencies, humanitarian NGOs, and the governments themselves, coordinating various these stakeholders around country goals is challenging without a cooperative planning process. Additionally, solutions to this challenge will take different forms based on the landscape of resilience program actors in each country.

Securing adequate funding for long-term and sustainable resilience

Building resilience inherently demands a long-term approach, and successful initiatives can be more expensive than traditional humanitarian efforts that focus on emergency and short-term needs. It is true that, when successful, building resilience will be more cost effective in the long-term since the need for humanitarian relief in the future will decrease if countries' food systems are overall more resilient. Nonetheless, communicating this to donors has consistently been a challenge. Even WFP, one of the largest food systems resilience initiative implementers, has had substantial budget shortfalls to pay for its planned resilience activities (WFP Office of Evaluation, 2019, p. v). Making a compelling case to donors to adequately fund long-term resilience efforts will be an important hurdle to overcome.

Breaking down silos within organizations and institutions

Although Béné et al. noted that an advantage of taking a resilience approach to development is that it promotes interdisciplinary work, breaking through the silos in

which bureaucratic institutions operate is still a challenge (Béné et al., 2016, p. 2). The 2019 evaluation of WFP resilience activities found that the siloed nature of their work was a key limiting factor (WFP Office of Evaluation, 2019, p. vi). This is a common feature of large multilateral or government institutions and directly slows the development of strategic partnerships across organizations and disciplines that are associated with more successful resilience initiatives. Institutions that can overcome these silos will be more effective.

Addressing the structural rigidness of modern food systems in policy and practice

Although food systems must be profitable so that all value chain actors can have dignified livelihoods while feeding their communities, profit maximization and industrial agriculture have encouraged an increasingly rigid food system that disadvantages smallholder farmers (Vroegindewey & Hodbod, 2018, p. 4). This rigidity makes the food system more vulnerable in the face of shocks and stresses that are becoming increasingly more common. For example, many smallholder farmers focus their production on a few staple or cash crops to maximize their revenue and meet the demand of agribusiness, which means if an external shock, such as a pest, harms their crops, they will be less able to adapt in time. In the case of COVID-19, trade disruptions led to trouble exporting crops and meeting food import needs. Farmers that rely solely on exports were especially vulnerable. To account for this, a systemic approach to resilience that addresses the trade-off between profit maximization and resilience will be vital, but this transformation may reduce the speed of progress.

Frequently assessing the different shocks and stressors faced by communities

WFP's success in scaling up resilience activities in the Sahel has been partly attributed to their ability to tactfully target their efforts around high-risk communities and have a deep understanding of the threats that local food systems face (WFP, 2018). This was made possible through an in-depth multi-layered context analysis of the region. Although WFP has a framework for this context analysis --the three-pronged approach -- assessing and mapping existing resilience capacities and vulnerabilities is resource intensive. Ongoing conflict and/or epidemics makes this task especially difficult given current technological capacities in the region that could be used to reach individuals safely. Establishing partnerships with institutions that have the technical capacity to conduct these assessments and to train local authorities in coordinating logistics will be an important step to creating successful resilience initiatives.

FRAMEWORK TO ADVANCE RESILIENCE INITIATIVES IN WEST AND CENTRAL AFRICA

Key Terms and Descriptions

The table below presents the various definitions and concepts used in the creation of the integrated resilience programming framework. These definitions were derived from desk research and key informant interviews.

Table 1: Key Terms and Descriptions for the Framework

Terms	Description	Source
Resilience (external definition)	The capacity of individuals, groups, communities, and institutions to **anticipate, absorb, adapt, and transform** in the face of shocks.	FAO, 2018.
Resilience (internal definition)	A resilience program creates long term infrastructure and/or assets that improve their capacity to react to shocks, reducing vulnerability of communities and critical value chains in the short term.	Team's internal definition
Resilience Program (official framework definition)	"An official program or community intervention that has a goal or objective to improve the capacity of individuals, groups, communities, or institutions to anticipate, absorb, adapt, and transform to shocks in a manner that reduces chronic vulnerability and facilitates inclusive growth."	FAO, 2018 & Harris and Spiegel, 2019.
Vulnerability	Vulnerability describes a person or community's level of welfare at a given time. This inevitably determines or is impacted by their social status and other things, specifically looks at their welfare and position within community/society.	Harris & Spiegel, 2019.
Food Security	This is when an individual, community, or country is able to feed themselves and based around the following "pillars": • **Availability** — "supply side," considers trade, production, and distribution • **Accessibility** — "demand side," considers financial assets, transportation, and safety.	Harris & Spiegel, 2019. Adapted from FAO (2008).

	• **Utilization** — "nutrition," ability to make food nutritionally available to promote health. • **Stability** — "Longevity of all three other pillars and their components."	
Food System	The entire range of actors and their interlinked value-adding activities involved in the production, aggregation, processing, distribution, consumption, and disposal of food products that originate from agriculture, forestry, fisheries, and parts of the broader economic, social, and natural environments in which they are embedded.	FAO, 2018, p. 1
Value Chain	The flow and use of physical, financial, and human resources that are involved in producing agricultural products and impacting food availability, access, and use, which includes all the laws, supporting businesses, tax structures, and sociocultural norms that impact each stage of production. This also includes the horizontal coordination structures within certain segments (e.g., farmer organizations) and the vertical coordination structures that link various stages.	Adapted from (Vroegindewey & Hodbod, 2018) for internal use.
Value Chain Resilience	The capacity of a value chain to continue and develop in the provision of food security and other services in the face of disturbances, through preparation for, response to, and recovery from unexpected shocks; the avoidance of tipping points; and adaptation to ongoing change.	Vroegindewey & Hodbod, 2018.

Source: the authors

Principles of the Framework

Conceptually, the framework is based on three key principles of resilience measures that key players can take to build resilience at each stage of agricultural value chain, while building on key informant interview findings in combination with desk review on resilience measures:

Principle 1. Resilience building leads to Development

Principle 2. Resilience is the process and result of building capacity across absorptive, adaptive, and transformative responses to shocks

Principle 3. Resilience must be multi-sectoral and long-term

Principle 1. Resilience building leads to Development

Figure 4: WFP's Humanitarian-Development Nexus

Source: Evaluation team.

ARC – African Risk Capacity
C-ADAPT – Climate Adaptation Management and Innovation Initiative
CFSVA – comprehensive food security and vulnerability analysis
EFSA – emergency food security assessment
FFA – food assistance for assets
FNG – Fill the Nutrient Gap tool
FoodSECuRE – Food Security Climate Resilience facility
FSMS – food security monitoring system
IPC – Integrated Food Security Phase Classification
MAM – moderate acute malnutrition
SISMod – shock impact simulation model
VAM – vulnerability analysis and mapping

Source: WFP, 2019

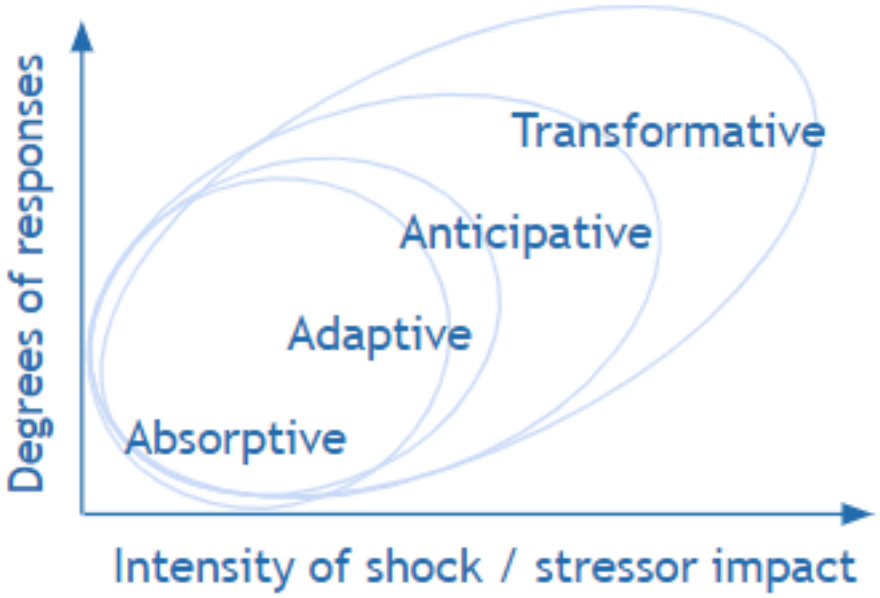
The importance of addressing the structural causes of vulnerability is paramount in designing interventions, and thus the model of the Humanitarian-Development Nexus

took priority over all else. In international development, the definition of resilience has expanded beyond the concept of coping with shocks and stressors to one individual, group or institution and now includes a focus on improvement in well-being and consideration of the factors that may inhibit well-being due to social, political, or economic exclusion (WFP, 2019). Figure 4 above illustrates implications for WFP's dual humanitarian-development mandate and work along the nexus.

Principle 2. Resilience is the process and result of building capacity across absorptive, adaptive, and transformative responses to shocks

We defined the four stages of resilience building: Absorptive, Adaptive, Anticipative, and Transformative The image below presents the concept of resilience as a process and a result. This is adapted from Christophe Béné et al. and 'Anticipative,' has been added between 'Adaptive' and 'Transformative,' as seen in Figure 5 below.

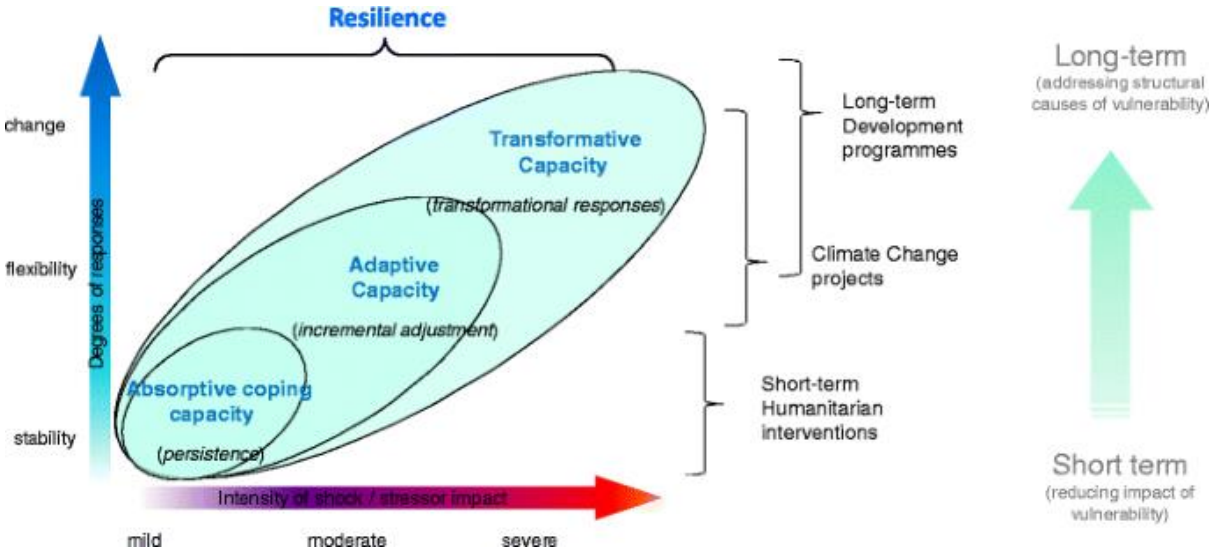
Figure 5: Resilience-Building Stages as Defined and Applied in the Framework



Source: the authors

Originally, resilience was defined as (1) absorptive capacity leading to persistence, (2) adaptive capacity leading to incremental adjustments/changes and adaptation, and (3) transformative capacity leading to transformational responses (Béné et al. 2012).

Figure 6: Diagrammatic Representation of the Ability of the Resilience to Play the Role of Bridge between Humanitarian Interventions and Long-term Development Initiatives



Source: Béné et al., 2012

The adaptation of Figure 6 is important because previous resilience measures focused solely on the absorptive capacity of people and the ability to "bounce back." However, bouncing back often leads to "negative coping strategies, such as selling off assets, withdrawing children from school, or diverting spending away from healthcare, in an attempt to smooth consumption" (Béné et al., 2016, p. 3). To refocus resilience initiatives to address long-term solutions and ensure that communities come back from shocks and stressors more prepared for the next, this added emphasis on adaptation, anticipation, and transformation, and anticipation has been included.

Béné et al. defined adaptive capacity as, "the capacity to learn, combine experience and knowledge, adjust responses to changing external drivers and internal processes, and continue operating" (Béné et al., 2016, p. 2). Transformative capacity is defined as: "the capacity to create a fundamentally new system when ecological, economic, or social structures make the existing system untenable." For the purposes of this study, the level of economic stagnation in many parts of West and Central Africa resulting from colonial legacies and systemic inequities makes this component more and more coveted, but still very difficult to implement.

These definitions and applications of adaptive and transformative resilience are not without complications. Béné et al. also noted that adaptive measures have also led to decreased resilience. For example, in response to drought in Western Kenya, farmers adapted and began to plant crops that yielded lower returns, but were more drought tolerant, leading them to have lower welfare than before in the short-term despite the ability to resist immediate crop failures. Similarly, transformative actions have also had unexpected results. Pastoralists who switch to sedentary agriculture often become more

vulnerable to threats and crop failures, as the arid regions in which many pastoralists work are not easily cultivated.

Therefore, the theoretical model for this framework includes absorptive, adaptive, and transformative capacity within concentric circles. These activities and actions should be implemented and linked on a continuum, addressing shock absorption first, then adaptation, followed by larger system transformations to ensure that people's immediate needs are met, and that large-scale action is taken from a secure foundation. The goal of this project to integrate resilience initiatives from humanitarian response (absorption) to long-term development goals (transformation).

Lastly, the underlying component to all this framework is the fourth concept that was added by the FAO in 2008, anticipation, anticipative capacity. This is incredibly important when building resilience to shocks and stressors for two reasons. First, in the short-term, it is much easier to absorb shocks and stressors that you are aware of ahead of time, allowing for humanitarian assistance to be available and in place when it needs to be. This can reduce the magnitude of the shock and allow for effective absorptive capacity building by taking actions such as evacuating communities, building up grain reserves, preparing medical supplies, expanding funding sources, etc. This primarily requires early-warning systems that can quickly and efficiently get these warning systems out to governments, humanitarian actors, and, of course, the impacted communities with guidance on what to do to brace themselves.

Secondly, and more importantly for short-term resilience, anticipating the long-term impacts of shocks and stressors is incredibly important for adapting and transforming to the food security threats of the future. By being able to plan strategically and early, using tools like climate models, public health data, and regional socio-political expertise, shocks and stressors can be identified earlier, allowing for larger scale adaptation measures to be taken. For example, with greater access to accurate and credible climate models that are understood and accepted by communities, weather-based crop insurance programs can be developed. These insurance programs allow farmers to invest heavily into their production without the fear of a one-year shock. If long-term models show increasing droughts, which drive up premiums on various crops, there will be plenty of time for farmers to work with development partners to adapt to the changing climate, build up critical infrastructure, and invest in alternative livelihoods, as necessary. In addition to crop insurance, the investments into anticipation could allow for vaccines to be developed for certain diseases, programs to reduce terrorism and violence from the root cause of conflict can be implemented, and programs can be more transparent about their future planning.

Since the ability to see shocks and stressors coming in the short-term is integral to building absorptive capacity, for the purposes of this framework, we have included short-term anticipation as a component of absorptive capacity. This explains why we have

chosen to sequence the stages of resilience as: absorptive, adaptive, anticipative, and transformative.

Principle 3. Resilience must be multi-sectoral and long term

As Mr. Patrick Teixeira, Director a.i. of CERFAM, elaborated in his interview with the team (18 Feb 2021), one of the key success factors for resilience programs is the adoption of a 'participatory approach' that includes target populations in program design, implementation, and evaluation. The participatory approach not only makes the process inclusive but also addresses social norms as well as political and cultural factors should be considered in programming through desk review and be part of the conversation with the community served (The WFP Three-Pronged Approach, 3PA)'s added value 1: Deeper understanding of the local context and livelihoods). Through local authorities and grassroot organizations, communicating with the most vulnerable, who are likely to be left behind and do not shout out about their needs is critical in programming new interventions. Resilience as a process is as equally important as resilience as an outcome, in terms of equipping the community and people served with the right skills and assets; also, to avoid exacerbating inequality or disparity is another consideration in programming and simultaneously expected outcome (3PA's added value 2: Gender awareness).

WFP's innovative programming approach, 3PA, was developed by WFP in consultation with governments and partners. The aim is to strengthen the design, planning and implementation of programs in resilience building, safety nets, disaster-risk reduction, and preparedness. As seen in Figure 7, the 3PA includes three processes at three levels: national, sub-national, and local. The Integrated Context Analysis (ICA) at the national level is a collaborative tool used to identify the most appropriate programmatic strategies in specific geographical areas between the government and its partners, based on areas of convergence of historical trends of food security, natural shocks, and land degradation (as an aggravating factor that heightens the risk and impact of shocks). The Seasonal Livelihood Programming (SLP) at the sub-national level is a consultative process that brings together communities, government, and partners to design multi-year, multi-sectoral operational plans using seasonal and gender lenses. Third, the Community-based Participatory Planning (CBPP) at the local level utilizes a "bottom up" tool that ensures communities have a strong voice and will lead in setting priorities. It is also used to develop multi-sectoral plans tailored to local priorities, ensuring prioritization and ownership by communities (WFP, 2019).

Stressors and shocks impede governments from building their capacity to absorb and recover from crisis. Focusing on crisis response to save lives, WFP's interventions are dedicated to the 'recovery' phase of resilience-building.

The inclusivity of the program as well as its ability to address social norms and political and cultural factors should be considered in programming. These factors should also be a key component of participatory discussions with the communities served. It is

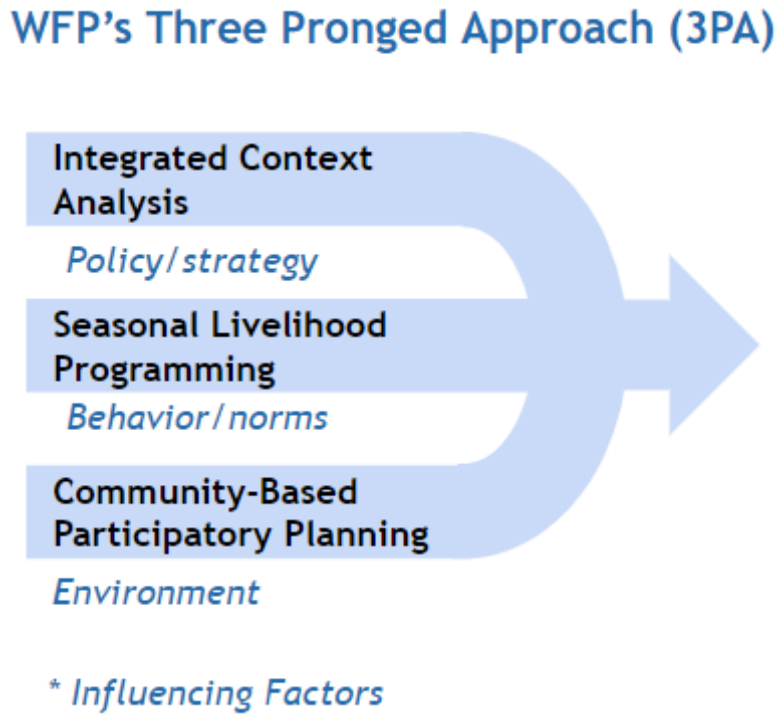
important as an outcome, in terms of equipping the community and people served with the right skills and assets; also, to avoid exacerbating inequality or disparity is another consideration in programming and simultaneously expected outcome.

Figure 7: WFP's Operational Approach to Resilience for Food Security and Nutrition

Source: WFP, 2017

The value chain approach provides the basis for more broadly segmented points of intervention for resilience activities for the purposes of the framework that we designed. Agricultural value chains play a crucial role in determining food price, availability, and the income of everyone involved in agricultural production, processing, and distribution. Furthermore, ensuring that agricultural value chains are resilient will make sure that food availability and price do not fluctuate wildly when shocks do occur (Vroegindewey & Hodbod, 2018). However, the agrofood value chain alone does not address the complex social, cultural, political, and environmental factors that influence food systems. As such, our research has identified three primary influencing factors that impact food systems: policy and strategy, environment, and behaviour and norms. The three influencing factors are defined in Figure 8 below.

Figure 8: WFP's Three-Pronged Approach (3PA) and Three Food System Influencing Factors



Source: the authors (adapted from WFP)

Policy & Strategy

This influencing factor can be defined as any public policy, strategy, or action plan that directly or indirectly impacts agricultural value chains or the greater food system. These policies and strategies might exist at the regional, national, sub-regional, or local level and include policies or strategies of multilateral institutions. They may also be internal (impacting how the institutions work) or external (shaping incentives, laws, taxes, subsidies, etc.). Policies and strategies do include the programs that governments and multilaterals may or have implemented pertaining to food access, availability, use, or stability.

Environment

For the purposes of this framework, the environment includes the context in which food choices are made, including the availability and affordability of food, properties of the food, vendor, and messaging. This also includes the availability and affordability of food, properties of the food (e.g., convenience, safety, and quality), vendor, and messaging (i.e., available information and marketing).

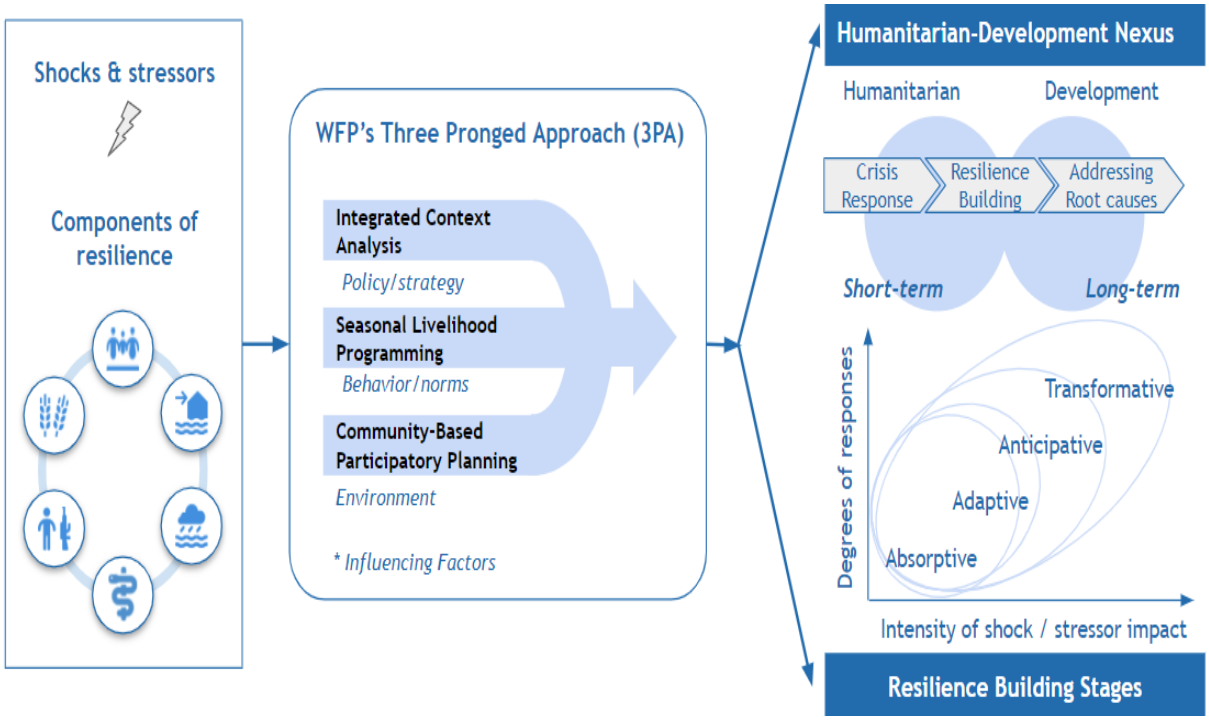
Behaviour & Norms

This influencing factor aims to consider the individual behavioural characteristics that define a person's food choices and actions within an agricultural value chain. These are primarily shaped by socio-cultural norms and how those norms interact with their identity (i.e., their race, gender, ethnicity, socioeconomic status, ability, etc.) in their

specific food environment. These are also the social or cultural factors (such as social norms regarding gender, race, ethnicity, ability, and age) that influence or determine an individual's capacity or choice to access and use available food as well as participate in value chain functions. How these influencing factors and stages of the value chain will be applied to our framework will be outlined later in this section.

Interactions and Synergies in the Framework

Figure 9: Interactions and Synergies within the Framework



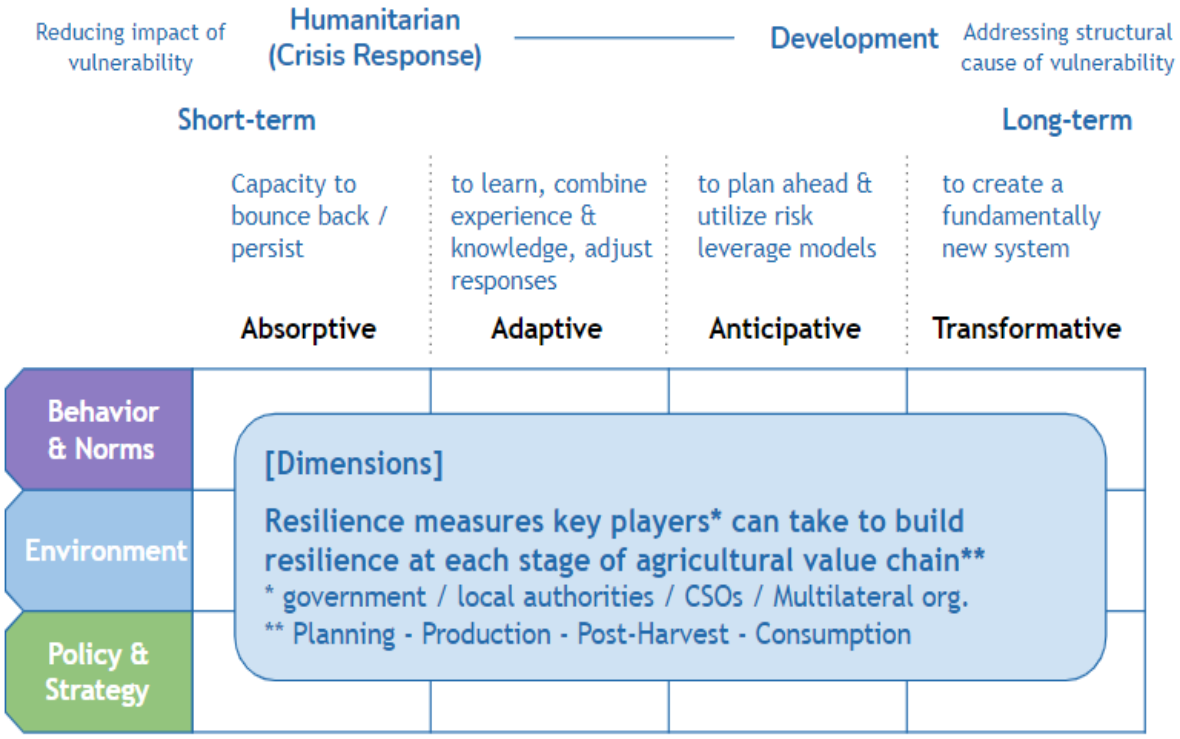
Source: the authors

Figure 9 summarizes the development of the framework, which begins with the examination of shocks and stressors that affect regional and national food systems in West and Central Africa. From the desk review, the team defined six components of resilience. Considering the WFP's innovative programming approach through interviews with resilience specialists from CERFAM and the WFP Togo Country Office, the framework builds on WFP's Three-pronged Approach (3PA). Linking our framework to the 3PA also demonstrates its ability to capture the context of countries at multiple levels and aid program implementers in targeting their interventions around high priority groups. The three influencing factors are also derived from the 3PA, as delineated previously.

The Humanitarian-Development Nexus is a core principle of the framework and has been embraced by WFP to deliver better in line with challenges the world faces today (WFP, 2018). In responding to emergencies, WFP continues to invest in reducing and preventing the need for humanitarian aid in the medium and short-term through resilience building.

In the bottom right of Figure 9, are the four stages of resilience building, as defined in the Principle 2. Figure 10 takes a closer look at how the four resilience components and the three influencing factors evolve over time, which can also be represented via the humanitarian-development nexus.

Figure 10: Framework Template Illustrating Interactions between Resilience Stages, Influencing Factors, and the Humanitarian-Development Nexus



Source: the authors

Each cell of the framework (for example, upper left-hand cell) in Figure 10 summarizes resilience interventions that consider all stages of the agricultural value chain. The interventions in these cells may come from governments, multilateral organizations, local authorities, and civil society organizations. The levels of the agricultural value chain are broadly sectioned into 1) planning, which refers to the input stage; 2) production, referring to the growth of the crop to its harvest; 3) processing/transformation (post-harvest, covering storage, transportation/logistics) followed by 4) consumption, which broadly indicates the point at which the agrofood has reached its end markets and demand-side influences provide opportunities for intervention.

Key Stakeholders

This framework considers governments, multilateral organizations, local authorities, and civil society organizations as the primary players working together toward resilience building in taking humanitarian emergency measures.

In humanitarian emergencies, multilateral organizations often lead and initiate interventions to assist national governments or local authorities in responding to an immediate need and make decisions. In less fragile states, national governments take the lead to set an agenda, design interventions, initiate partnerships with donor states and multilateral organizations, and build capacity to coordinate interventions throughout all levels of government, including local authorities. International NGOs collaborate with national governments and local authorities through regional or national resilience-building initiatives. Civil society organizations and private sector actors work with local authorities under the leadership of national governments and local authorities. The less fragile the state is, the better coordinated and flexible interventions can be on the ground.

Good Practice Criteria

Good practices, as previously mentioned, are a critical component of this framework. To ensure the practical implementation of the findings of this report for a variety of different contexts, objectives, and stakeholders, the good practices outlined later in this document were screened by a set of five criteria, which are provided below. As CERFAM notes, these criteria were selected from good practice criteria developed given their relevance to appropriately measure sustainability or long-term impact of the intervention.

1. Feasibility

This is a metric of the possibility of implementation, considering practical considerations of finances, environment, and technical capacity of implementers. The practice itself should not be complex and complicated, as CERFAM notes, so that the beneficiaries can understand and benefit from it more quickly and easily (CERFAM, 2020, p. 3).

2. Innovation & Learning

This metric refers to the application of new technologies, techniques, managerial processes, or participatory approaches within a good practice (CERFAM, 2020, p. 3). Similarly, evaluation of these new practices or approaches is a crucial component of this criterion to ensure that it is continuously improved and made more adaptable for future use.

3. Sustainability and Scaling Up

As CERFAM states, to meet this criterion, "the good practice should have a persistent effect on the beneficiaries, even after the withdrawal of other project stakeholders. Moreover, the practice itself should possess potential to be scaled up with attributes of success identified in research or through practical experience" (CERFAM, 2020, p. 4).

4. Replicability

The practice should be replicable by other practitioners and in diverse contexts without the need to drastically alter the original practice (CERFAM, 2020, p. 4). Additionally, evaluation of practices should determine the conditions that make the practice replicable.

5. Partnerships and Multi-Sectorality

The practice should collaborate with a wide range of stakeholders, fostering equitable participation and involving partners at all or most levels of implementation from program planning to evaluation. This is particularly important for involving the local community and national or local authorities in addition to a wide range of sectors and discipline experts (CERFAM, 2020, p. 3). Furthermore, the practice should ensure that partners are chosen strategically to complement the weaknesses of stakeholders while highlighting each other's strengths.

With these criteria in mind, the team then compiled the information collected from our desk review and interviews to develop a finalized list of good practices based on a given policy or initiative's ability to meet most or all the above criteria. This finalized list is presented in Figure 11.

FRAMEWORK FINDINGS

To make this framework operational across West and Central Africa, this report outlines a list of lessons learned, enabling conditions, and good practices to act as guiding principles and case studies to inform program implementers on how to best design integrated resilience initiatives for their objectives and context. All three lists have been developed based on the interviews and the literature review conducted by the team.

Lessons Learned

The lessons learned aim to address the challenges through which previous interventions or implementers have had to navigate, providing insights as to how future programs can be designed to overcome these obstacles. They are as follows:

Strategic partnerships should be developed with the comparative advantages of all relevant stakeholders considered.

Having a deep understanding of the strengths and limitations of all relevant stakeholders will allow for the intervention to capitalize on the strengths of all stakeholders while filling the capacity gaps of the implementing organizations. By focusing on developing strategic partnerships that explore the comparative advantage of different stakeholders and complement relevant stakeholders when designing a resilience initiative, important synergies potentialized will be created that can contribute to multiple effects and benefit the initiative's performance. However, to do this effectively, all stakeholders must be engaged from the beginning and clear roles and responsibilities must be collaboratively defined (Interview with Dr. Christiani Buani and Pierre Tahe, 18 Feb 2021).

Institutions that work in silos have a harder time implementing integrated resilience programs.

The interviews indicated that WFP often works with governments to support their resilience programs, but that they only work with a single ministry (interview with Zalynn Peishi, 3 Mar 2021). Shocks and stressors impact food systems in complex and connected ways. Addressing this vulnerability in an integrated way requires a multidisciplinary, multi-sectoral approach (interview with Aboubacar Toguyeni, 23 Feb 2021).

Integrated resilience programs should have a shared platform for data collection and monitoring with an agreed upon set of indicators.

One of the greatest challenges of integrating resilience programs was the lack of a coordinated mechanism to monitor and evaluate resilience programs (interview with Aboubacar Toguyeni, 23 Feb 2021). Mr. Toguyeni explained that "when you have a magnitude of actors who are there and not everyone has the same vision, the same approach and … sometimes it creates problems on the ground."

Taking a value chain approach to improve food production and economic stability can be very effective.

In the Sahel, REUNIR worked with onion farmers to develop new food storage methods to prolong farmers' ability to sell their onions throughout the year instead of selling them to a wholesaler directly after harvest (interview with Aboubacar Toguyeni, 23 Feb 2021). This approach effectively helped the onion farmers gain more economic stability by expanding horizontal value chain options and increasing value received by the farmers for their onions.

Resilience as a process is equally important as resilience as an outcome.

All resilience activities should aim to achieve desired outcomes of health, security, and livelihoods of beneficiaries as well as building capacity of all involved stakeholders (i.e., local authorities, local communities, government ministries, etc.) (interview with Patrick Teixeira, 18 Feb 2021).

Social, political, and cultural factors of a resilience program should be incorporated from the ideation and design stage with an emphasis on vulnerable voices in a target group.

To account for all factors, a participatory approach to needs assessment and initiative design must occur (interview with Patrick Teixeira, 18 Feb 2021) in reflecting on implications from most of the findings, sensitization development, awareness raising to achieve long-term goals. Additionally, resilience programs in urban or rural areas will have vastly different needs so programs should be designed to those contexts and the relative strengths and capacities of local institutions (interview with Zalynn Peishi, 3 Mar 2021).

Preventative measures to address root causes of shocks and stressors will yield stronger long-term results in building resilience.

Understanding ahead of time what the most likely shocks and stressors are and building resources and/or assets that are preventative is key (interview with Zalynn Peishi, 3 Mar 2021). For example, in the Sahel, mass migration of internally displaced people and refugees leaves them at extreme risk for food security, which places extra stress on humanitarian or development actors. However, migration is often linked to specific problems, like land degradation (interview with Aboubacar Toguyeni, 23 Feb 2021). Therefore, resilience programming that aims

to combat this initial land degradation would also have ripple effects into stemming climate displacement.

Data collection and dissemination tools should be made more accessible via language, open-source technology, and digital connectivity infrastructure development.

The COVID-19 pandemic has highlighted the importance for robust and equitable digital infrastructure, particularly in food systems, as rural populations may not have the same access to key information and data for decision-making. Moreover, women and ethnic minorities may lack the access to understand tools created in non-local languages, thus excluding them from lifesaving information or resources. In data collection, enumerators must be trained to share information at multiple levels of understanding and distribute questionnaires or surveys in accessible ways (interview with WFP Togo office, 19 Feb 2021).

Enabling conditions are systemic and structural characteristics of a government, which make the recommended good practices and sample interventions more feasible. Enabling conditions may require sweeping political action, internal policy changes within organizations, or the formation of long-term partnerships to develop.

Enabling Conditions

Enabling conditions are systemic and structural characteristics of the political, social, and economic environment, which make the recommended good practices and sample interventions more feasible. The Team defines Enabling conditions as those conditions that may require sweeping political action, internal policy changes within organizations, or the formation of long-term partnerships to develop.

Having all or any of these enabling conditions in place is not a requirement to implement successful integrated resilience programs. The presence of these conditions would create a more conducive environment for programming to succeed. Therefore, for governments aiming to create longer-term resilience strategies, considering these conditions can be a crucial first step in developing integrated resilience initiatives. The identified enabling conditions for this framework are as follows:

Initiative implementers must be able to acquire and secure adequate long-term funding for resilience initiatives.

Establishing connections to governments and the primary donors or revenue sources funding resilience initiatives is an important starting point to meeting this condition. WFP has recognized that adequate long-term funding is one of the greatest limitations to implementing effective resilience programs because bridging the gap between humanitarian recovery and resilience is time-consuming and expensive (interview with Patrick Teixeira, 18 Feb 2021). Securing long-term

funding then allows governments to inscribe adequate and stable spending required for resilience initiatives into their national budget, turning resilience into a guaranteed activity rather than just a priority. Based on the demonstrated capacity of resilience activities to reduce future threats, these programs can be pitched as an investment to reduce future relief requirements, contingent on open communication with donors. Frequent communication with donors and other resilience partners is particularly important for less stable governments since they may have less established relationships with donors that must be strengthened.

Governments and multilateral organizations working on building resilience must be in tight coordination regarding their programs, indicators, and desired outcomes.

Strong coordination requires that governments and their ministries must be able to easily form partnerships with development actors, such as other ministries, academic and research institutions, CSOs, and regional think tanks (e.g., CILSS) (interview with CILSS, 24 Feb 2021). Links between these organizations facilitate cooperative agendas instead of competition within the development sector at the national and regional levels. These partnerships would also allow different implementing organizations to jointly set agendas, get feedback and inputs from one another, set common indicators, and develop an agreed upon strategic plan that emphasizes the strength of each stakeholder (interview with Igor Bazemo, 18 Feb 2021 & interview with Aboubacar Toguyeni, 23 Feb 2021). Formal partnerships are encouraged (e.g., through a memorandum of understanding) and institutions working in resilience should encourage partnerships in TORs and eligibility requirements for funding or other public support.

Vulnerability assessments and mapping of the regional, national, and community level strengths, vulnerabilities, and threats to communities must be conducted routinely.

Having a holistic understanding of the relative vulnerability and current resilience capacity of all members of society within a region, country, or locality is an important prerequisite to creating relevant resilience programs (interview with Zalynn Peishi, 3 Mar 2021). This knowledge allows implementers to best address the root causes of vulnerability and concentrate activities around the communities facing the most pressing threats (interview with Aboubacar Toguyeni, 23 Feb 2021). These research efforts should also be facilitated by partnerships between public institutions and research institutions.

Resilience program implementers, particularly governments, must aim to improve digital connectivity and equitable access to technology alongside their resilience programs.

The COVID-19 pandemic has demonstrated the importance of digital information sharing in being able to connect people and communities with critical services, information, and public planning opportunities. However, the pandemic also has emphasized the digital divide that exists between the urban and rural, men and women, and practitioners and beneficiaries. Working to improve digital connectivity as a part of resilience, rather than separate from, will make future programs more flexible and adaptive (interview with WFP Togo office, 19 Feb 2021). Furthermore, the role of governments to create an enabling environment for successful initiatives is critical due to their capacity to make investments and policy. Having governments that are active supporters of resilience initiatives that invest in breaking down structural barriers to success (i.e., inadequate access to technology) is a key enabling condition.

Good Practices and Good Practice Criteria

With the previously mentioned lessons learned and enabling conditions in mind, the good practices listed below should be used as guidelines to design and implement integrated resilience programs, adapted to the various goals and context of the implementing organization. This is primarily because these practices are more general than other good practice recommendations to allow them to be applied to the wide range of actors and contexts throughout West and Central Africa. Additionally, they should be layered simultaneously into the planning, design, implementation, and evaluation of programs to synergize and mainstream these good practices in long term development strategies.

Good Practices

1. Restore and protect natural resources, specifically those that improve productive capacity (e.g., water storage ponds and forests) (interview with Adamou Issaka, 24 Feb 2021 & interview with Aboubacar Toguyeni, 23 Feb 2021).
2. Concentrate activities around a defined target group (interview with Adamou Issaka, 24 Feb 2021 & interview with CILSS, 24 Feb 2021).
3. Train implementing partners and beneficiaries on how to take over resilience programs, involving them throughout the entire process (interview with Patrick Teixeira, 18 Feb 2021).
4. Partner with local universities to conduct program research, coordinate with target communities, and identify applicable technology (interview with Aboubacar Toguyeni, 23 Feb 2021).
5. Utilize open-source and technology and web-based platforms to improve information and data access of government and value chain actors (interview with ACF, 9 Mar 2021; interview with CILSS, 24 Feb 2021 & interview with WFP Togo office, 19 Feb 2021).

6. Facilitate local ownership of resilience programming by identifying and building on resilience capacities of communities (interview with ACF, 9 Mar 2021; interview with CILSS, 24 Feb 2021 & interview with WFP Togo office, 19 Feb 2021).
7. Economically and socially empower the most vulnerable groups in a target community, particularly women and girls (interview with Zalynn Peishi, 3 Mar 2021).
8. Interventions should focus on saving livelihoods rather than just saving lives (interview with ACF, 9 Mar 2021; WFP R4 Initiative, 2019 & Béné et al., 2016).
9. Short term resilience efforts should be linked with ongoing government programs so that governments can facilitate the transition to long term development (interview with ACF, 9 Mar 2021).
10. Strengthen health systems to reduce vulnerability of communities (interview with ACF, 9 Mar 2021 & FAO, 2020).

See Figure 11 below for a complete list of the good practices and the criteria met by each.

Figure 11: Complete List of Recommended Good Practices and the Criterion met by each

Good Practice	Feasibility	Innovation	Sustainability	Replicability	Partnerships
Restore and protect natural resources, specifically those that improve productive capacity (e.g. water storage ponds and forests)	■		■	■	
Concentrate activities around a defined target group	■		■		■
Train implementing partners and beneficaries on how to take over resilience programs, involving them in entire process	■		■	■	■
Partner with local universities to conduct program research, coordinate with target communities, and identify applicable technology	■	■	■	■	■
Utilize open-source technology and web-based platforms to improve information and data access of government and value chain actors	■	■	■		■
Facilitate local ownership of resilience programming by identifying and building on resilience capacities of communities	■		■		■
Economically and socially empower most vulnerable groups in a target community, particularly women and girls	■		■		■
Interventions should focus on saving livelihoods rather than just saving lives	■	■	■	■	■
Short-term resilience efforts should be linked with ongoing government programs so that gov. can facilitate transition to long-term development			■	■	■
Strengthen health systems to reduce vulnerability of communities	■		■	■	■

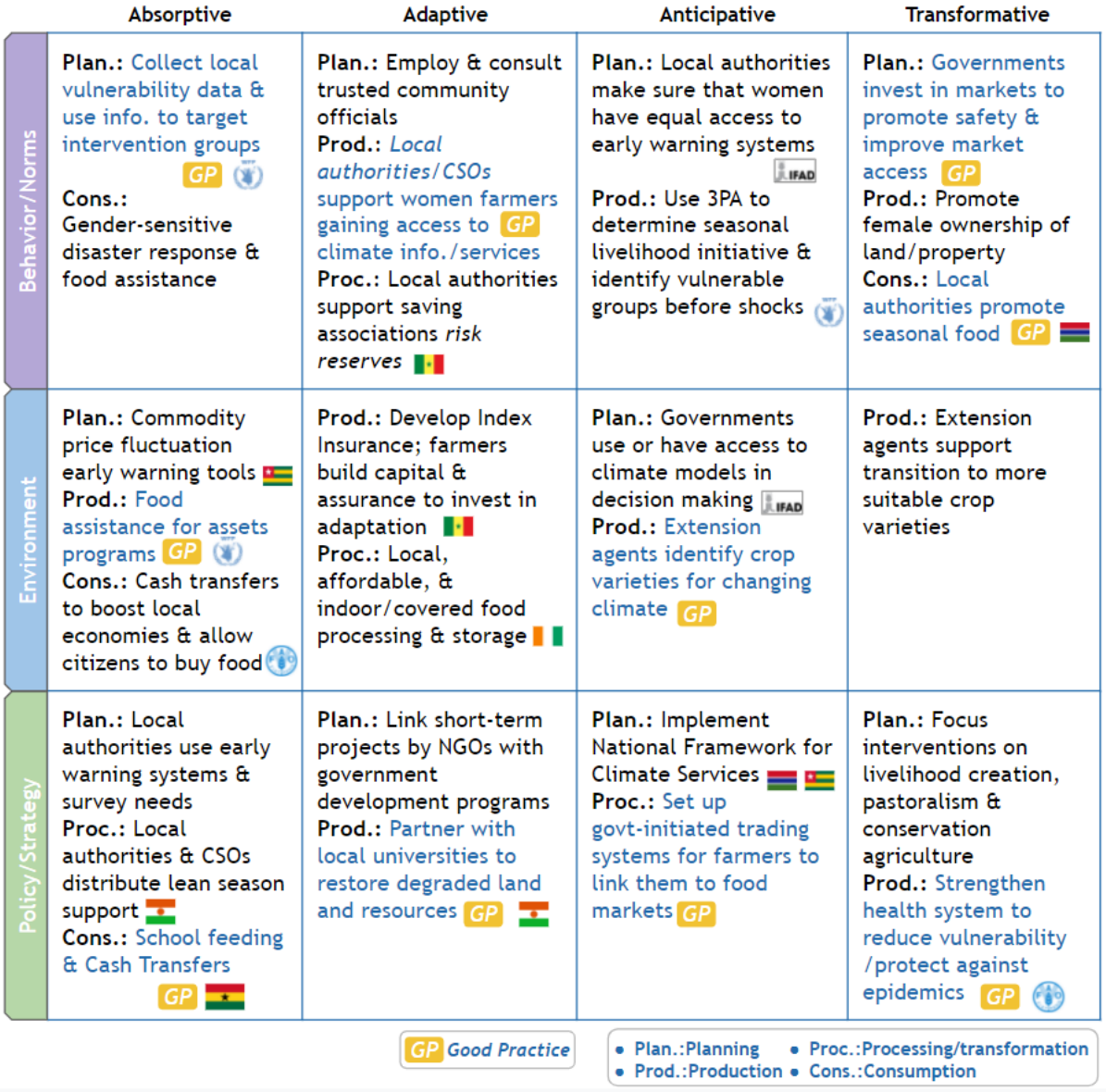
Legend ■ Good practice meets this criterion ■ Good practice meets criteria **and is most relevant to that criterion**

Source: the authors

To highlight strong examples of specific criterion, Figure 11 also indicates to which criterion each good practice most strongly aligns, based on the available data. The goal

for this distinction is to allow governments to prioritize good practices based on which criteria they aim to strengthen in their resilience initiatives. For example, if a government would like to increase the number of partnerships they make when implementing resilience initiatives, this chart would recommend partnering with local universities. Universities are hubs for collaboration that can link governments with academia, research leaders, and students that are well versed in implementing local projects.

Figure 12: Integrated Analytical Framework for Resilience Programming



Source: the authors

EXPLANATION OF THE FRAMEWORK

The framework (Figure 12 above) aims to provide readers with ideas of resilience programs that could work for their context and how they could be applied. This diagram should also be used alongside the lessons learned, enabling conditions, and good practice recommendations listed above. Most importantly, it is meant to allow governments to map out their own resilience programs and goals to determine the gaps that still exist as they develop integrated initiatives that are sequenced across all three influencing factors of the food system (represented on the left side of Figure 12) and the four stages of resilience (represented as the column headers of Figure 12).

This framework addresses the three influencing factors defined above as integral components of the food system that must be addressed in integrated resilience initiatives to ensure their success. Additionally, including all three factors into the definition of food systems supports program implementers in integrating their programs since one program or policy will most likely not be sufficient to address all three. For example, if CBPP were to influence social norms around female land ownership so that women can have more agency in land use decisions, governments may also need to focus their national policies on supporting female entrepreneurs to make both interventions more successful.

On the other hand, the four stages of resilience provide a conceptualization for how programmes can be sequenced chronologically. Bridging the gap between humanitarian relief and long-term development is the reason why building resilience is so critical. However, to do so requires that people's needs be met in the short-term while investments towards the future are made. This framework provides ideas as to how programs can be sequenced or layered to address different or multiple resilience stages at the same time. For example, if a program implementer wanted to support the productive capacity of the environment from relief to longer-term development, the above framework would recommend utilizing WFP's Food Assistance for Assets model to bolster the absorptive capacity of a community of smallholder farmers. Then, with a resource base built and the immediate needs of beneficiaries met, the initiative could transition to linking the same group of farmers with weather-based index insurance initiatives to support their long-term capacity for resilience.

The third dimension of the framework is the value chain, which provides an important structure to pinpoint specific areas of intervention. For example, if a government would like to strengthen their jurisdiction's absorptive capacity (i.e., to withstand shocks) through policy, the framework provides designated target groups and the related policy ideas based on the stage of the value chain. If their primary target group were children, then an intervention such as school feeding initiatives would target the consumption stage.

The final dimension of the framework is the two different types of images: flags and "GP" signs. The flags represent the countries or organizations that implemented the documented practice. This is meant to spur South-South learning between governments and to assist in the contextualization of recommendations. With this information, governments will be able to coordinate with the right partners to design their programs and meet their resilience goals. The "GP" icon denotes that a practice applies multiple good practices identified in this report.

Overall, this framework must be adapted to the context and situation of the implementing organization, its target area, and the target beneficiaries. Each country will have different shocks, stresses, and threats that it may face, in addition to differing levels of vulnerability. Although there are regional strategies in place, each country also has its own priorities for short and long-term goals for its development. Understanding all these factors, in addition to following the recommendations of this framework, will provide crucial information for resilience program implementers of all levels of government to successfully coordinate and link their initiatives.

Policy and Programming Cycle

Considering that this framework was designed for government officials and policy decision makers, the following are key questions that important stakeholders, including governments, local authorities, multilateral organizations, NGOs, and CSOs, may pose as they design new interventions or improve existing initiatives.

- **Agenda Setting**: How can facts recognizing an initiative be shown by governments as a priority agenda issue?

  Governments invest in markets to promote safety and improve market access
  - Influencing factor: Behaviour/Norm
  - Stage of resilience: Transformative
  - Stage of agricultural value chain: Planning

- **Problem Definition**: How can an initiative be evidenced as a topic linked to cross-sectoral challenges?

  (Governments) Partner with local universities to restore degraded land and resources
  - Influencing factor: Policy/Strategy
  - Stage of resilience: Adaptive
  - Stage of agricultural value chain: Production

- **Policy Development**: How can most needed and appropriate factors to a national context be stimulated by governments?

(Governments) Set up government-initiated trading systems for farmers to link them to food markets
    - Influencing factor: Policy/Strategy
    - Stage of resilience: Anticipative
    - Stage of agricultural value chain: Processing/Transformation

- **Policy Implementation**: What policy adjustments may optimize national socioeconomic and socio-political impacts?

  (Governments) Strengthen health system to reduce vulnerability /protect against epidemics
    - Influencing factor: Policy/Strategy
    - Stage of resilience: Transformative
    - Stage of agricultural value chain: Production

- **Policy Evaluation**: How can decision makers estimate what policy tasks need rethinking?

  (Governments) Collect local vulnerability data & use information to target intervention groups
    - Influencing factor: Behaviour/Norm
    - Stage of resilience: Absorptive
    - Stage of agricultural value chain: Planning

- **Agenda Improvement**: How can governments ensure that evidence is used to improve policy?

  (Governments) Develop Index Insurance, and farmers build capital and assurance to invest in adaptation
    - Influencing factor: Environment
    - Stage of resilience: Adaptive
    - Stage of agricultural value chain: Production

These questions also guided the construction of the framework with good practices and research findings. This framework intends to allow governments and their partners to map out their existing programs to evaluate existing gaps and show them how they can coordinate, sequence, and layer their efforts to build integrated resilience, while presenting them with several ideas and recommendations to inform their planning.

RECOMMENDATIONS

Fundamentally, only governments have the power to transform the enabling environment for resilience programmes administered by any development actor to be successful. Moreover, only governments have the capacity and political leadership to embed resilience in national development plans. Through progressive tax systems and reductions in government corruption, governments can work to integrate national resilience frameworks that include systems for disaster preparedness and response, options for living wage, equal access to services and political participation, and sharing risk through social insurance. To preserve the principle of protecting livelihoods as well as saving lives, governments have the agency to mobilize domestic resources.

CERFAM has a key role to play in the process of gathering feedback from country governments and sharing findings across countries to promote South-South partnership and knowledge sharing. Multilateral organizations can support regional coordination and more easily identify shared resilience challenges across borders and connect relevant government officials. With CERFAM's role as a leader of research and collector of good practices regionally, the Centre can connect governments to relevant partners and provide critical feedback on national resilience strategies. Governments should consider the following recommendations in designing a national strategy as well as looking ahead to resilience challenges that are transnational in nature.

Developing this national strategy should be a collaborative effort that builds on the experiences of field organizations in the country as well as national and local governments and multilateral organizations that will continue to support disaster risk reduction, climate change adaption, and poverty reduction. To facilitate these dialogues and the development of a contextually relevant national plan, the desk research and key informant interviews conducted in this study recommends the following tactics to effectively ideate, develop, and formalize a national resilience plan:

Building a National Resilience Strategy

- **Integrating resource and risk management.** This includes national laws, dedicated ministries, the mainstreaming of risk management policies, and multi-stakeholders, multi-level decision-making (so efforts can be scaled up from local to district and national levels).
- **Developing longer-term plans that are inclusive of multiple institutions as well as other development stakeholders including academic institutions, CSOs, and the private sector.** Governments should support in identifying and facilitating the formalization of these partnerships across different sectors and parts of government alongside

documenting and supporting the resource (human and financial) needs of these resilience programmes. Strategic partnerships to ensure inclusivity and sustainability of resilience agendas should also consider eco-regions of West and Central Africa that would benefit from transnational cooperation and shared resource management.

- **Strengthening institutions and social protection systems 'to ensure equitable access to key assets**. Examples include national policies on potable water, health services, education, climate information and basic rights; local norms regulating access to natural resources; laws for indigenous groups' land rights; and customs encouraging wealthier households to support poorer ones during hardships.

- **Supporting people's ability to influence policy and planning at different levels, in government and governance**. This can be through popular campaigning to ensure that at-risk populations can raise concerns that are heard and acted upon by decision-makers.

- **Providing national support to innovation and learning through the funding and expansion of agricultural extension that works directly with farmers** to address the needs of the agrofood sector, as well as insurance, resource management, sanitation support, and new employment skills for agricultural workers to move along different parts of the agrifood value chain. The framework developed in this study also uses intervention points that align with the agricultural value chain to enable easy incorporation with ongoing national and multilateral resilience initiatives.

Adapting Lessons Learned to Facilitate Strong Enabling Environments

The current landscape of resilience programmes and information on risk should inform government policy, with the consideration and incorporation of a people-centred approach to resilience that also centres shocks such as unemployment, insecure land rights, and violence or instability. To adapt and implement the previously mentioned lessons learned, specific recommendations to address these gaps are provided below:

Strategic partnerships should be developed with the comparative advantages of all relevant stakeholders considered.

Governments should consider working with multilateral organizations and local CSOs to fund and support needs assessments for short, medium, and long-term resilience. Participatory approaches to assessing needs and risks will also ensure the long-term success of such resilience initiatives by being directly responsive to relevant stakeholders as well as developing buy-in from implementing and affected communities. The incorporation of inputs from different levels of stakeholders should occur early in the design process and continue to be included through the monitoring, evaluation, and learning stages.

Institutions that work in silos have a harder time implementing integrated resilience programs.

As previously noted, taking a more holistic approach to resilience requires the cooperation of different sectors and government bodies that oversee different aspects of resilience that are interconnected. Interagency task forces can work together to jointly release terms of reference and build partnerships within governments as well as agenda-driven partnerships with relevant stakeholders outside of national government.

Integrated resilience programs should have a shared platform for data collection and monitoring with an agreed upon set of indicators.

In the creation of national action plans for resilience or national strategies, governments must ensure that learning and information from ongoing, previous, and future projects are aligned. This requires robust data collection as well as strong digital infrastructure to facilitate collaboration, especially to mitigate issues of conflicting approaches to resilience.

Taking a value chain approach to improve food production and economic stability can be very effective.

WFP uses a value chain development approach for much of its development projects. This approach should continue to be used with an incorporation of the enabling environment for different value chains. Moreover, to avoid the highly segmented nature of different agricultural value chains, governments and relevant stakeholders must focus on horizontal linkages that not only capture more value for farmers but also contribute to long-term resilience through the expansion of processing examples, transportation options, storage facilities, and so on.

Resilience as a process is equally important as resilience as an outcome.

To view resilience holistically, it is necessary to acknowledge that resilience as a temporary outcome of a project may not necessarily indicate long-term resilience. In strategy design, governments should consider monitoring, evaluation and learning approaches that define resilience as a long-term and continuous outcome as opposed to a static measure or indicator.

Social, political, and cultural factors of a resilience program should be incorporated from the ideation and design stage with an emphasis on vulnerable voices in a target group.

Need-based strategy development is key to the long-term success of national resilience strategies. In working with external stakeholders, governments should also be able to point to strong evidence-based assessments to advocate for the

different areas in which they need support and resources. Governments can also ensure through multistakeholder discussions and participation that national strategies can adapt to changing circumstances and shifting political, social, and economic conditions.

Preventative measures to address root causes of shocks and stressors will yield stronger long-term results in building resilience.

Robust needs assessments in the design stage of a national resilience strategy should also help governments take preventative action for longer term resilience. Understanding the root issues behind current stressors and being able to better predict future shocks requires a strong understanding of the current landscape at all levels.

Data collection and dissemination tools should be made more accessible via language, open-source technology, and digital connectivity infrastructure development.

In line with several previously mentioned lessons learned and about the enabling environment for long-term resilience planning, digital connectivity is a requirement. The financial and human capital required to improve digital infrastructure across West and Central Africa should be included in national resilience strategies. Academic and research institutions have an important role to play in the collecting, disseminating, and sharing of relevant information to develop resilience strategies for even the most unexpected shocks, like the COVID-19 pandemic. Rural populations and marginalized groups within them must also have fair and consistent access to data and digital infrastructure from the beginning to assist in using accurate data to inform policy. Language and literacy accessibility must also be factored in the planning stages. Governments should partner with open-source platforms like Digital Green and Access Agriculture to expand their digital reach with agricultural and rural communities.

Using the Framework

Through bilateral and multicountry partnerships, CERFAM is well positioned to disseminate this framework as a tool of analysis and program design for resilience in West and Central Africa. The framework is an evolving tool and can continue to be adapted based on a country's specific needs or different resilience challenges over time. Currently, the framework provides specific examples from various West and Central African countries; and the higher-level recommendations in this section are directly linked to the identified good practices and lessons learned from key informant interviews.

With this framework, governments will be better positioned to consolidate, streamline, and optimize resilience programming in their countries and ultimately reduce or eliminate the need for foreign aid to address resilience challenges. The framework is an important tool in the design and evolution of national resilience plans. By showing the

progression in the stages of resilience (from absorptive to transformative) and the different influencing factors (behaviour and norms, environment, policy, and strategy) as well as their intersections, governments can seek cross-country partnerships to replicate certain programs or adapt programs to their own contexts. The stages of resilience also provide a baseline for national strategies that look at resilience as an ongoing process and not a static outcome, bridging the humanitarian-development nexus. The framework must be used in context of the good practices, lessons learned, enabling conditions, and recommendations. Governments should consider using the framework in their national resilience strategies to craft a chronological and holistic resilience plan that is adaptable to changing stressors and needs.

CONCLUSION

This report demonstrates the multifaceted nature of food and agriculture resilience within the Central and West African context. It also highlights ten best practices actively employed by research organizations, non-profits, and WFP partners in the region to implement successful resilience initiatives.

Organizations should strive to move along the humanitarian development nexus toward interventions that are transformative, and long-lasting. The key challenges faced by resilience initiatives are programmatic in nature, and include aligning stakeholders, securing adequate funding, and breaking down organizational silos. Many of the solutions outlined in this report depend on the idea of resilience not simply as an outcome, but as an iterative process.

Considering the geographic and linguistic limitations of our framework, future research may address food and agriculture resilience beyond the Central and West African region, and may extend to South, East, or North Africa. Future research may also address the role of school curriculums, specifically at the primary and secondary level, in promoting resilience at the community level.

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APPENDIX

A-1: List of Interviewed Stakeholders

#	Category	Name of Organization	Interviewee(s)	Date
1	Regional institution	*Inter-etats de lutte contre la sécheresse au Sahel (CILSS)*	Dr. Mahalmoudou Hamadoun, Coordinator of the CILSS Regional Support Programme, Mr. Ector Sédar Houssou, Expert en Sécurité Alimentaire Mr. Issoufou Baoua, Expert analyste en sécurité alimentaire-Cadre Harmonisé Mr. Mohamed Abdallahi OULD Babah, DG of the Institut du Sahel Bamako Mail	24 Feb
2	National government	*Ministère de L'agriculture et du Développement Rural, Republic of Togo*	Mr. Salifou Daoudou, Ministry of Ag Representative	25 Mar
3	Local Authority	*La Commune du Golfe 3 de Lomé*	Madam SG of the council, A director of a primary school	30 Mar
4	INGO	*Action contre la faim*	Ms. Fanta Touré Diop, Conseillère régionale nutrition santé, Mr. Cedric BERNARD, Agro-economist, Mr. Mamadou Diop, Représentant Régional Afrique de l'Ouest et du Centre	9 Mar
5	Academia	*Réseau des Universités du Sahel pour la Résilience (REUNIR)*	Prof. (Dr.) Aboubacar TOGUYENI, Executive Secretary of REUNIR	23 Feb
6	Multilateral Organization	WFP CERFAM	Mr. Teixeira, Director a.i.	18 Feb
7		WFP Togo Country Office	Mr. Aboubacar KOISHA, Mr. Beriname BADJARE	19 Feb
8		WFP	Mr. Adamouounteni ISSAKA, Programme Policy Officer	24 Feb
9		WFP	Ms. PEISHI, Senior Programme Consultant	3 Mar

A-2: Country Specific Recommendations and Good Practices

SUMMARY OF RECOMMENDATIONS - TOGO

Togo has rich soils and arable lands covering 60% of the territory, giving it a comparative advantage in agricultural production. Agriculture is a driving force in the Togolese economy. However, a lack of adequate policies at the national level for input supplies still hinders agricultural production in Togo. Farmers receive very few bank loans. Many farmers use inefficient equipment and do not use fertilizer, which inhibits their production capacity.

Togo is also urbanizing rapidly. Over 60% of the population lives in urban areas. As noted in an interview with the Mairie Golf 3 in Lomé, resilience programming, such as school feeding programs are especially important in urban areas. Children in Lomé commute great distances to go to school and return home at lunch. Often, there is no food at home, so the children lack the energy to return to school. Attendance rates, educational progress, and future opportunities suffer accordingly. The following recommendations will assist Togo in meeting its SDG 2 targets as noted in the WFP-Togo Interim Country Strategic Plan. In partnership with the Togolese government, WFP aims to better monitor food and nutrition security, prevent chronic malnutrition among children, diversify crops, and ensure farmer access to inputs.

Good Practices to Optimize Agriculture in Togo

Strengthen national services and systems… to reduce vulnerability of communities (Good Practice 10). *Refining national policies and programs will enable the Togolese government to better support smallholder farmers.*

Short-term resilience efforts should be linked with ongoing government programs so that governments can facilitate the transition to long-term development (Good Practice 9). *Togo's agricultural challenges are systemic in nature, and must be addressed at the government level. Therefore, resilience efforts must be aligned with government programming.*

Facilitate local ownership of resilience programming by identifying and building on resilience capacities of communities (Good Practice 6). *Resilience initiatives in Togo can focus on building capacity at the local level by providing technical support, fertilizer, and updated equipment to smallholder farmers.*

Good Practices to Address Growing Urbanization

Economically and socially empower the most vulnerable groups in a target community, particularly women and girls (Good Practice 7). *Focusing on the most vulnerable populations, such as children, will enable authorities in Togo to build the resilience of entire communities.*

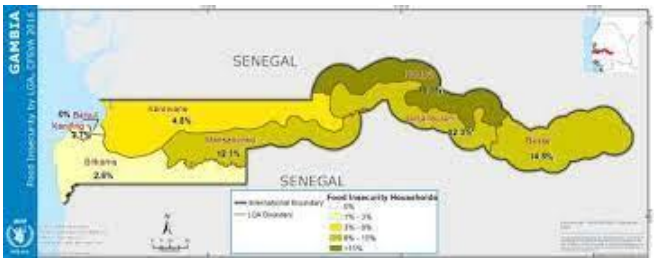
Interventions should focus on saving livelihoods rather than just saving lives (Good Practice 8). *Poverty is a key barrier to resilience, so effective resilience initiatives must ensure that constituents have a secure and dignified livelihood. The school feeding initiatives of the Mairie of Golf 3 in Lomé involve the mothers of students. These "canteen moms" are saleswomen in the community who are encouraged to supply food for the canteens. Therefore, this resilience initiative saves lives while saving livelihoods.*

Concentrate activities around a defined target group (Good Practice 2). *The focus of the school feeding programs in Lomé was primary school-age children, a defined target group. There were spillover benefits, however, for others in the community, such as the canteen moms who facilitated the programs.*

Sources: Businger 2017; Togo First 2020; Free World Maps, n.d.; interview with WFP Togo office, 19 Feb 2021; Interview with Mairie Golf 3, 30 March 2021; WFP Togo interim Country Strategic Plan 2021.

SUMMARY OF RECOMMENDATIONS - THE GAMBIA

Located on the Western seaboard of the continent, The Republic of Gambia (The Gambia) is the smallest country on the African mainland with a population of 2.1 million people, and the country faces high levels of poverty, estimated at 48% of the population, with 10.3% of the population facing acute malnutrition.



These trends are present throughout the small country, but malnutrition and lack of access to productive resources are concentrated in rural areas where agriculture is the primary livelihood activity. The Gambia is not food self-sufficient and must import 50% of its domestic demand. This makes the Gambia **vulnerable to supply chain shocks**, most notably the restrictions in transportation activities and market access because of COVID-19 related lockdowns.

The Gambia faces several hazards that threaten agricultural production, food supply chains, and common livelihood strategies. Specifically, the Gambia is extremely **vulnerable to the impacts of climate change**. Its location on the southern border of the Sahara makes drought and unpredictable rainfall an increasing threat to primarily rain fed agricultural systems. The coastal zone of the Gambia is also vulnerable to impacts of rising sea levels. Salinization of coastal groundwater, erosion of beaches, and inundation of their only deepwater port could perpetuate vulnerabilities by reducing tourism income and complicating food imports. The Gambia was also severely impacted by the 2015 Ebola outbreak and is currently handling the impacts of COVID-19.

Good Practices to Improve the Food System of The Gambia

Utilize open-source and technology and web-based platforms to improve information and data access of government and value chain actors (Good Practice 5). *The government can invest in the safety and accessibility of markets by strengthening collection and dissemination of market information. Similarly, they can support research efforts to develop improved crop varieties and animal breeds to increase production of micronutrient rich foods.*

Facilitate local ownership of resilience programming by identifying and building on resilience capacities of communities (Good Practice 6). *The government may encourage local authorities to support saving associations and risk reserves as well as partner with local research institutes to restore degraded land and resources in a way that centers community-level priorities and needs.*

Economically and socially empower the most vulnerable groups in a target community, particularly women and girls (Good Practice 7). The government can support local authorities and Civil Society to provide women farmers with access to climate information or service, such as an early warning system, in strengthening efforts for gender parity (*cross-cutting recommendation)* and *support to women farmers to access matching grants.*

Sources: A National Guide to Achieving SDG2 by 2030 (2018) WFP; World Food Programme (2020). Gambia. WFP; African Union & FAO (April 2020). Meeting of African Ministers for Agriculture: Declaration on Food Security and Nutrition During the COVID-19 Pandemic; The World Bank Group (2019) The Gambia Agriculture Engagement Note Fostering agriculture-led inclusive growth.

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