

Food systems for safe, nutritious and affordable diets in central Sahel

This article provides the findings and recommendations of a literature review and a series of consultations that were conducted at regional and national levels to gather information on national food systems in three countries of Central Sahel



A beneficiary of cash transfers cultivates cucumber in the Sahel region, Mali

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SAHEL REGION

Key messages:

- The literature review and the regional and national consultations provided an in-depth understanding of local food systems in Burkina Faso, Mali and Niger.
- The integration of nutrition into nutrition-sensitive sectoral policies, strategies and programmes to ensure a diverse, safe and affordable nutritious diet for all was lacking.
- The regional consultations have created strategic opportunities for engaging and collaborating with key stakeholders to transform food systems, build resilience against future shocks and ensure food systems contribute to improved food and nutrition security for all.

Introduction

Over the past 50 years, the countries of the Central Sahel region (Burkina Faso, Mali and Niger) have experienced a significant rise in shocks and stressors which have negatively affected regional food and nutrition security (Re, 2021; Sib, 2021). These include extreme climate events (drought and flooding), recurrent pest infestations and zoonotic diseases, protracted conflict with mass population displacement (Bantchey, 2021) and food price volatility.

In 2020, an already challenging situation was compounded by the COVID-19 pandemic resulting in an expected 2.9 million wasted children under five years of age in the region (the Sahel and West Africa Club /OECD, 2020). More than 50% of households in these countries remain unable to afford a nutritious diet due to factors such as limited food availability, poor supply chains, low economic access, distant or limited access to food markets and conflict (Government of Burkina Faso, 2020; Government of Mali, 2020; Government of Niger, 2020). These factors combined have negatively impacted food insecurity

and malnutrition. To tackle this multi-faceted issue, systematic and multi-sector approaches are required to make safe and nutritious food accessible for everyone, everywhere, all the time.

Based on long-term, successful collaborations with national governments, regional institutions and other food system stakeholders, the World Food Programme (WFP), Action Against Hunger (ACF) and the Permanent Inter-State Committee for Drought Control in the Sahel (CILSS) have together initiated a regional food systems study aiming to inform recommendations to strengthen the food systems in the Central Sahel region.

Gathering information on food systems

The study was carried out between December 2020 and November 2021. It consisted of a literature review and a series of consultations, conducted at regional and national levels, to gather information on food systems.

The literature review was conducted to determine the challenges faced by

current food systems and how these challenges affect access to and the availability and affordability of a nutritious diet in Central Sahel. This review intended to illustrate the links between regional and national food production, availability, market access and functionality, supply chains, purchasing power, food and nutrition security and the environment.¹ The study was structured around three axes that aimed to assess existing value chains and supply chains (axis 1), food policies and governance structures (axis 2) and food and nutrition security, food safety and quality and consumption behaviours (axis 3) (Gueye Niang, 2021).

As part of this study, WFP, ACF and CILSS co-hosted an online regional consultation on transforming food systems for safe, healthy, nutritious and affordable diets in Central Sahel between the 1st and 3rd of June, 2021. The consultation brought together 80 participants from the government, development partners, the private sector and academia from the region with the aim of:

- Developing a common understanding around the study's objectives and approaches for assessing regional food systems
- Developing a common narrative around the key challenges and unused opportunities in national and regional food systems
- Developing and validating recommendations and priority actions for food systems to produce safe, nutritious and affordable diets for all.

Similar consultations were then rolled out in July 2021 at the national level in Burkina Faso, Mali and Niger in order to build the capacity of local professionals, create collaborative partnerships and ensure government 'buy-in' for the formation of optimal food systems.

During the consultations, one study axis was prioritised each day with key regional and national experts providing presentations and leading group discussions.

Key findings

The literature review and the regional and national consultations provided an in-depth understanding of the local food systems in Burkina Faso, Mali and Niger. The main findings categorised by each study axis are summarised below and presented in Box 1 alongside associated recommendations.

Agricultural production in the three countries was primarily focused on cereals which means that most households consumed an energy-only diet. Agricultural investment policies remained mainly focused on cereal production to the detriment of food availability, affordability, access and consumption, dimensions that heavily influence food and nutrition security. However, in recent years, optimised irrigation techniques and an increase in demand for nutritious foods have led to the creation of institutional structures that focus on off-season crops and fresh food production.

Food-processing systems remained underdeveloped due to a comparative lack of technology, equipment and primary processing facilities.

Market functionality was limited and linked mainly to high and/or unstable food prices, poor infrastructure and suboptimal food quality and services. The market price and household affor-

dability of safe and nutritious foods were important determinants of the food choices affecting the food security, nutrition and health of the Burkinabe, Malian and Nigerien populations.

Persistent conflict, recurrent climatic shocks and the onset of COVID-19 were major limiting factors for local food systems which resulted in a high variation in the cost of nutritious foods across the three countries. These stressors had negatively affected livelihoods, household purchasing power and nutritious food access and had worsened food insecurity and all forms of malnutrition.

Current food policies and strategies had limited linkages with nutrition-sensitive sectors and the private sector. Although work was ongoing to scale up nutrition-sensitive social protection programmes which integrate food security and nutrition outcomes and target the most nutritionally vulnerable populations, the social protection sector was rarely used as a vehicle to address food and nutrition insecurity in the three countries.

The role of women was a major theme highlighted during the consultations. Women are a major contributor to food systems in Central Sahel (Gnisci, 2016). They account for 89% of agricultural employment in these countries. Working side-by-side, women and men cultivate the same crops and tend to the same livestock for local consumption and selling in markets. However, persistent gender inequalities regarding access to resources, higher value land, credit, agricultural inputs and education continue to hold women back and undermine regional food systems (Tall, 2021). To ensure and secure women's roles within the food system, their access to resources and the existing power imbalances need to be addressed through technical and financial support to women's farming organisations, integrating gender into all national policies related to agriculture, food production and ownership rights and improving data availability disaggregated by gender (Sow, 2021).

Social protection consists of government-led policies and programmes that prevent and protect people from poverty, vulnerability and social exclusion throughout life (Samoura, 2021; Ocampo, 2021). These programmes can improve access to basic services, reduce negative coping skills in response to shocks and improve accessibility to and the affordability of nutritious foods therefore increasing dietary diversity and caloric intake. Social protection is at its most effective when food and nutrition security is embedded in national social protection policies and programmes while beneficiary targeting, transfer amounts and modalities are adapted to the basic and nutritional needs of the most vulnerable populations (women and children) (Gnisci, 2016; Ghoo, 2021).

With this context in mind, the WFP has implemented a multi-pronged approach, the CRIALCES project – Food Crisis Response in the Central Sahel: Nutritional Support and Recovery for Burkina Faso, Niger and Mali (2020-2024) (Ghoo, 2021). This project aligns food production, processing, logistics, markets and consumption to improve the nutritional status of vulnerable populations and to strengthen the resilience of communities. Supply side interventions include providing farmers with productive assets, capac-

ity-building on climate-smart agriculture practices and creating market linkages. The project also addresses food processing by building the capacity of private sector manufacturers, strengthening institutional frameworks and quality management systems for fortified blended foods and food fortification. Demand side interventions include a voucher for locally available nutritious foods and SBCC to improve the dietary practices of and prevent malnutrition among children and pregnant and lactating women. Lastly, the project builds government capacity to systematically measure and analyse the impact of shocks or seasonal changes on the availability and affordability of nutritious foods and to adapt the voucher and project interventions as needed.

Conclusion

The study showed that food systems are central to resolving the food and nutrition security issues within the three countries of Central Sahel and strong political commitment aimed at harmonising supply and demand is also essential to progress. The integration of nutrition into nutrition-sensitive sectoral policies, strategies and programmes to ensure a diverse, safe and affordable nutritious diet for all was, however, lacking.

CILSS, the WFP and ACF are uniquely placed to strengthen food systems for safe, nutritious and affordable diets for all in Central Sahel. The regional consultations have created strategic opportunities for engaging and collaborating with key stakeholders such as the Economic Community of West African States, the Sahel and West Africa Club Secretariat, the Network of Peasant Organizations and Agricultural Producers of West Africa and the Regional Food Crisis Prevention Network to transform food systems, build resilience against future shocks and ensure that food systems contribute to improved food and nutrition security for all.

Preliminary results, key messages and recommendations from the study were presented at the Regional System for the Prevention and Management of Food Crises (PREGEC) meeting in November 2021. The PREGEC cycle, coordinated by CILSS, consists of four regional-level technical consultations conducted annually in March, June, September and November. These consultations focus on current food and agricultural production, forecast agricultural production for the next year and consider the food and nutrition security situation. These consultations offer an opportunity to continue the work laid out in this research article and to communicate policy recommendations to all stakeholders in the region with the aim of improving food systems for safe, nutritious and affordable diets for all.

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¹ All relevant publications on the current state of food systems in Central Sahel were identified through PubMed, BMC, the Organization for Economic Cooperation and Development E-Library, the World Bank Open Knowledge Repository, the African Development Bank Knowledge Platform and Google Scholar. Additional documents and reports on food systems were shared by regional experts from CILSS, the Economic Community of West African States, the Sahel and West Africa Club, the Network of Peasant Organizations and Agricultural Producers in West Africa and the Regional Network for the Prevention of Food Crises.

Box 1 Key findings and recommendations by study axis

Axis 1: Analysing food systems and value chains for safe, nutritious and affordable diets for all in Central Sahel

Strong, productive and competitive food production and processing systems are essential for safe, nutritious and affordable diets for all in Central Sahel.

1. Create strong agricultural production systems through mechanisation, risk management, capacity-building, improving infrastructure and developing policies, strategies and frameworks conducive to equity.
2. Safeguard productive and competitive production systems through female inclusion, improving women's land rights and the expansion of financial resources for women-led farmers' organisations.
3. Develop local processing systems that use drying, cooking, roasting and frying to preserve, process and package high-quality nutritious products by providing food companies with real-time hands-on training, modern and high-tech equipment and food safety and quality management while improving governance, infrastructure and involving the private sector.
4. Achieve economies of scale by developing coordination systems and harmonising standards, procedures and research and development for agricultural inputs and products for regional integration and competitiveness.
5. Improve the market infrastructure with a holistic approach that integrates supply and demand. This approach should place more emphasis on engaging with local governments, the private sector and civil society to address food issues through nutrition-focused policies and institutional/governance structures. It should also advocate for a multi-sector approach centered on rural development, urban planning, waste management and food processing.

Axis 2: Analysing international, regional and national food system policies, strategies and regulatory frameworks favourable to safe, nutritious and affordable diets for all in Central Sahel

Harmonisation and the strong coordinated implementation of regional and national policies, strategies and regulatory frameworks that place the nutritional needs of all at the centre, with specific attention to the most nutritionally vulnerable groups, women and children, are required for safe, nutritious and affordable food systems in Central Sahel.

1. Harmonise and strengthen the implementation of regional policies, strategies and regulatory frameworks that promote diversified and safe production, processing and distribution. Encourage intra-regional trade and ensure regional responsibility and governance for safe, nutritious and affordable diets.
2. Strengthen food systems through the development of nutrition-sensitive agricultural policies and programmes that place the nutritional needs of its population at the centre, promote fiscal and trade restrictions on sugary drinks, provide nutritious school meals and use widespread social behaviour change communication (SBCC) to improve the consumption of nutritious foods.
3. Create an enabling environment for digital innovations including policies, institutional support, capacity-building and infrastructure development to ensure that smallholders in developing countries benefit from these innovations.
4. Develop strong, inclusive, transparent and evidence-based policy processes to help to prevent or manage issues which are essential to achieving better food systems. For this, clear and well-defined goals, based on a comprehensive assessment and analysis of nutritional gaps and weaknesses in the food system need to be identified as is enabling and collaborative institutional and policy environments, processes and incentives that promote appropriate forms of collaboration between the sectors related to nutrition.
5. Leverage social protection in the fight against food and nutrition insecurity by developing methodologies to target the most vulnerable populations based on clearly defined and transparent inclusion criteria, by promoting the inclusion of nutrition and health within social safety nets, by creating political frameworks focused on social protection and food and nutrition insecurity and by developing monitoring and evaluation tools that measure the effectiveness and efficiency of social protection programmes on food security and nutrition also looking at the short- and medium-term resilience of beneficiary households.

Axis 3: Analysing the role of food systems favourable to food and nutrition security in Central Sahel

Multi-sector policies and programmes that align supply and demand and focus on agricultural development, food and nutrition security, job creation and social protection can create accessible and affordable food systems that respond to endemic food and nutrition insecurity in Central Sahel.

1. Strengthen multi-sector programmes and policies that harmonise supply and demand and focus on the agricultural development of nutritious foods, food and nutrition security and purchasing power and social protection to create accessible and affordable food systems that respond to food and nutrition insecurity.
2. Increase incentives for the availability, access and consumption of safe, diverse and nutritious foods through climate-smart agricultural production and the trade and distribution of fruits and vegetables, pulses and protein-rich foods as these are largely underutilised as a source of food and income.
3. Include measures that protect and empower the poor and women through safety nets that allow people to access nutritious food during shocks, the lean season or when household income is low while ensuring land rights, equitable access to productive resources and market access.
4. Support smallholder farmers to diversify their sources of income outside of on-the-farm employment, including agribusiness, to increase household income, the availability of nutritious food and to reduce negative coping behaviours.
5. Refocus efforts to prevent malnutrition towards local food systems by improving the existing infrastructure for nutritious foods, increasing diversity in food production, improving awareness of infant and young child feeding practices and providing fortified blended foods and integrated assistance such as food assistance programmes especially in fragile areas, during lean periods and for internally displaced people who do not have access to activities that generate income.

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