WFP
World Food Programme

SAVING LIVES
CHANGING LIVES

# Factors influencing key nutrition and health behaviours: Formative research to support the Cash for Prevention programme in Chad

World Food Programme
Chad Country Office
March 2025

Cover photo: Mother attending a cooking demonstration, Doungoulou, Guéra.
(©Anthrologica/Katie Moore)

WFP
World Food Programme
SAVING LIVES
CHANGING LIVES

# Factors influencing key nutrition and health behaviours: Formative research to support the Cash for Prevention programme in Chad

World Food Programme
Chad Country Office
March 2025

# Acknowledgements

This research was conducted by Anthrologica. Katie Moore (Senior Research Associate) led the in-country research, data analysis and reporting. Leslie Jones (Senior Research Associate) contributed to the data analysis and drafting of the report. Helen Smith (CEO) provided technical expertise throughout the project and oversaw the data analysis and reporting. The work was managed by Juliet Bedford (Director).

The authors would like to thank the WFP Chad Country Office for their engagement with the formative assessment, particularly Martin Ahimbisibwe (Head of Nutrition), Estelle Naountam (National Programme Officer Nutrition), Augustin Ndongmo (Programme Policy Officer Nutrition), Haisset Gnomon Fanga (Programme Officer Nutrition) and Evelyne Kounom (Programme Assistant). We are grateful for the guidance and support of WFP field officers in Mongo and Mao: Delphine Gangnon (Programme Officer), Rolande Naissem (Programme Assistant) and Gabsoubo Gabnoba (Programme Associate). We also extend thanks to Laurent Michiels (Regional HIV and Nutrition Integration Officer) and Leïla Masson (Regional Nutritionist) at the Regional Bureau for Western Africa, and Geraldine Honton (nutrition consultant) from WFP Headquarters in Rome.

We would also like to acknowledge the hard work and commitment of Anthrologica's local partner, BEIRED Sarl, who collected data and provided in-country support: Nisso Kaokamla (Director) and the research team of Dr Zola Ndonita, Elisabeth Fongbaï, Dr Eugene Nderkanzoukou Sawbay, Djabre Djimie, Romain Djenarbe Mbairamadji, Adji Lawal Aziza, and Issa Abdoulaye Azala.

# Executive summary

## Background

**Chad, one of the most vulnerable countries in the Sahel region, faces significant nutrition and health challenges.** In 2023, 7.6 million people required humanitarian assistance, with 2.1 million experiencing severe food insecurity. Alarming nutrition indicators persist: 1.7 million (48.5%) children under five years suffered from acute malnutrition and 31% were stunted; half of households could not afford a nutritious diet. These issues are compounded by poor infant and young child feeding (IYCF) practices, limited access to services and financial barriers.

**To address these challenges, the World Food Programme (WFP) is enhancing preventive nutrition assistance through its country strategic plan.** This includes integrating Cash for Prevention (C4P) of acute malnutrition programming within resilience strengthening efforts and shifting towards local nutritious foods. C4P aligns with the new WHO guidelines, which emphasise context-based approaches – including home diets – to prevent wasting and nutritional oedema among vulnerable groups. C4P interventions, implemented via community nutrition platforms such as FARNE sites (Foyers d'Apprentissage, de Réhabilitation Nutritionnelle et d'Eveil), aim to support communities to prepare diverse, nutritious meals and to link them with health facilities for extended care.

**The overarching goal of this project is to develop and implement a social and behaviour change (SBC) strategy that complements the C4P and resilience programmes.** The strategy will focus on improving dietary diversity among nutritionally at-risk groups, especially pregnant and breastfeeding women and girls, and children. It will also focus on strengthening community capacity and encouraging optimal nutrition behaviours, with a particular emphasis on shock-responsive and gender-sensitive solutions. The strategy will be rolled out in six regions from 2025, beginning in Kanem and Guéra.

**This report presents the formative research, which was conducted across six regions.** It explores the socio-behavioural and structural drivers and barriers to dietary diversity and nutrition practices to inform the SBC strategy. The research also investigated participants' preferences for effective SBC approaches to ensure the strategy that is developed is contextually grounded and actionable.

**Chad (2023)**

**7.6 million**
Population requiring humanitarian assistance

**2.1 million**
Population experiencing severe food insecurity

**1.7 million (48.5%)**
Children under five years suffering from acute malnutrition

**50%**
Households unable to afford a nutritious diet

## Approach and methods

The formative research was qualitative and exploratory. Findings were generated using a combination of a desk review of existing data and literature; key informant interviews (KII); and focus group discussions (FGDs). The research was conducted in six regions in Chad in two phases: Guéra and Kanem (Phase 1) and Barh El Ghazel, Batha, Lac, and Mayo Kebbi East (Phase 2). The WFP Country Office selected study sites in locations based on their geographical location, distance from the town and health centre, and proximity to the market. All included sites are currently implementing or are scheduled to implement C4P and integrated resilience programmes. Phase 1 of the formative research was completed in Kanem and Guéra in August 2024, and light-touch validation workshops were conducted in the remaining four provinces in November 2024. The aim of these workshops was to confirm key findings from the substantive formative research, explore regional similarities and variations, and elicit ideas for SBC engagement and activities.

## Findings

The findings are presented in three sections that reflect the scope of the formative research. Each section of findings is organised according to the themes and sub-themes identified in the data and supported with illustrative quotes. Additional findings for each thematic area from the validation workshops in Barh El Ghazel, Batha, Lac and Mayo Kebbi East are presented separately within each relevant section.

- **Section 1** summarises the desk review including a country context analysis.
- **Section 2** describes detailed ethnographic findings relating to food and nutrition practices, and factors influencing these practices. These include knowledge, socio-cultural and peer network factors, socio-economic influences on food purchasing and consumption, and gender dynamics and decision making.
- **Section 3** summarises perspectives on communication and community engagement relevant to promoting SBC around health and nutrition practices.

## Implications and recommendations

Five key implications were identified from the formative research findings, to ensure the SBC strategy effectively addresses local realities and is actionable. Together, these considerations provide the foundation for designing an SBC strategy that is contextually relevant, actionable and aligned with community needs.

1. Leverage trusted people and sources of information
2. Ensure the SBC strategy is socially embedded and culturally appropriate
3. Build on community awareness of seasonality and knowledge of local nutritious foods
4. Build on existing knowledge of nutrition and hygiene practices
5. Lay the foundations for a gender-sensitive SBC strategy

## 1 Leverage trusted people and sources of information

Leveraging established trusted information sources is the basis of a successful SBC strategy. The formative research findings identified the most trusted individuals and communication channels in each of the six regions. Below is a list of implications, and potential actions, derived from the findings on communication and community engagement preferences.

| Implication | Potential action |
|---|---|
| 1. Leverage established relationships for trust | 1.1 Collaborate with local leaders (religious leaders, village chiefs and community elders), community health workers and mamans lumières[a] as trusted channels for health and nutrition messaging. |
| | 1.2 Involve local leaders in the co-creation of the SBC strategy, activities and messaging to encourage ownership. |
| | 1.3 Invest in the training of local leaders to ensure they convey accurate information, build on their existing knowledge and create a positive local environment for change. |
| | 1.4 Leverage local leaders (e.g., village chiefs, religious leaders, community health workers, and mamans lumières) as trusted intermediaries to facilitate the collection and dissemination of community feedback on C4P implementation. |
| | 1.5 Train local leaders on the importance of feedback mechanisms, including how to support the safe and confidential reporting of concerns related to programme access, inclusion and protection. |
| 2. Strengthen the role of mamans lumières and expand their reach and capacity | 2.1 Provide additional focused training to mamans lumières on nutrition promotion, aligned with the aims of the C4P programme. |
| | 2.2 Create a mechanism for community recognition/ celebration of mamans lumières to sustain their motivation and dedication. |
| | 2.3 Capitalise on the collaboration of mamans lumières with community leaders, traditional healers and community health workers to strengthen health and nutrition promotion. |

a 'Mamans Lumières', which translates to 'light mothers' in English, are community volunteers, primarily women, who play a crucial role in addressing malnutrition and promoting better nutrition practices within their communities.

| Implication | Potential action |
|---|---|
| 3. Work with community health workers (CHWs) as trusted intermediaries | 3.1 Equip CHWs with updated knowledge and information aligned with the aims of the C4P programme. |
| | 3.2 Conduct refresher training and ensure CHWs have relevant materials (visual aids) to convey nutrition-related information. |
| 4. Elevate the role of grandmothers and positive deviant mothers[b] | 4.1 Use respected intergenerational knowledge as an entry point for addressing health and nutrition knowledge gaps. |
| | 4.2 Involve positive deviant mothers and grandmothers as trusted voices to tackle sensitive issues like malnutrition, especially to minimise stigma and encourage open discussion. |
| | 4.3 Develop community storytelling sessions led by grandmothers and positive deviant mothers to share traditional knowledge and integrate good nutrition practices. |

## 2 Ensure the SBC strategy is socially embedded and culturally appropriate

The formative research findings highlight the significant role of social groups and peer networks in shaping nutrition practices and influencing household health and nutrition dynamics. Outlined below are key implications and possible actions to ensure the SBC strategy considers these influences and is tailored to be culturally relevant and contextually appropriate.

| Implication | Potential action |
|---|---|
| 1. Improve understanding of positive deviant mothers' role and support their ability to demonstrate effective nutrition behaviours | 1.1 Use community orientation sessions to clarify the role of positive deviant mothers and differentiate between CHWs and positive deviant mothers. |
| | 1.2 Provide additional training and visual tools (cards and/ or memory aids) to improve advocacy by positive deviant mothers (e.g., on enriched complementary feeding, exclusive breastfeeding and hygiene practices). |
| | 1.3 Create nutrition circles or groups led by positive deviant mothers so they can share their knowledge and practices through recipe sharing/ cooking demonstrations. |
| 2. Leverage the influence of grandmothers and mothers who are trusted for their traditional knowledge | 2.1 Engage grandmothers as allies for evidence-based health and nutrition advice. |
| | 2.2 Involve grandmothers in co-creating the SBC strategy and activities. |
| | 2.3 Encourage intergenerational dialogue sessions where mothers and grandmothers align on best practices for child and pregnant women's nutrition. |

b Caregivers who routinely follow prioritised behaviours and practices to ensure their children have a diverse diet.

## 3 Build on community awareness of seasonality and knowledge of local nutritious foods

The findings related to seasonal variations in food availability and dietary diversity suggest that food insecurity is a major determinant of nutritional outcomes in these communities. Communities already demonstrate an awareness of locally available nutritious foods and have strong communal coping strategies for the lean season. There are several implications arising from these findings for the SBC strategy.

| Implication | Potential action |
|---|---|
| 1. Maximise nutritional value when meal frequency is reduced in the lean season | 1.1 Use SBC campaigns to promote simple nutrient-dense recipes using locally available foods. |
| 2. Build on the strong communal food-sharing traditions and encourage solidarity in the lean season | 2.1 Invite community members and encourage them to act as advocates for food-sharing programmes; encourage households to support each other. |
| | 2.2 Strengthen SBC campaigns to strengthen community support systems by highlighting the importance and value of inter-household support during periods of food scarcity. |
| | 2.3 Encourage organised food-sharing groups or community kitchens. |
| 3. Replicate and raise awareness about community granaries (e.g., in Doungoulou) to store cereals during the harvest, for use in the lean season | 3.1 Use examples of successful community food stores and cereal storage practices in SBC outreach efforts (ideally, community-led). |
| 4. Reduce reliance on less nutritious foods and children's preference for processed food during periods of scarcity | 4.1 Focus on the nutritional value of well-known, locally available foods like okra, sesame and legumes. |
| | 4.2 Consider involving children in co-creating outreach materials featuring balanced diets without completely replacing their preferred foods. |
| 5. Address local food enrichment or formulations | 5.1 Develop and promote simple, cost-effective local food formulations that can be used to enrich complementary foods for young children. |
| | 5.2 Use SBC campaigns to raise awareness about the benefits of local food enrichment and provide easy-to-follow guides for preparing nutrient-rich complementary foods with available ingredients. |

## 4 Build on existing knowledge of nutrition and hygiene practices

The findings indicate a level of awareness and knowledge of hygiene and nutrition practices, particularly for women and children, which creates a strong foundation for SBC. However, the SBC strategy needs to consider the various structural, cultural and socio-behavioural factors that influence sustainability of these practices across the regions. Below are some key implications and suggested actions.

| Implication | Potential action |
|---|---|
| 1. Leverage existing community awareness of causes, prevention and signs of malnutrition | 1.1 Use participatory community workshops to reinforce awareness of malnutrition causes and prevention. |
| | 1.2 Provide visual aids (e.g., MUAC tapes) to enable mothers to recognise malnutrition early. |
| 2. Develop culturally sensitive approaches to address the persistence of some cultural beliefs around malnutrition | 2.1 Use stories or testimonials from households that have successfully prevented and managed malnutrition, to counter harmful practices. |
| | 2.2 Collaborate with traditional healers and community leaders to shift emphasis and messaging towards prevention and biomedical approaches for management. |
| 3. Emphasise WASH messaging to reinforce community recognition of the link between hygiene and malnutrition | 3.1 Integrate and emphasise handwashing and clean cooking environments. |
| | 3.2 Consider working with schools to co-create child-friendly materials for hygiene promotion. |


Food preparation demonstration, Doungoulou, Guéra.

## 5 Lay the foundations for a gender-sensitive SBC strategy

The findings on gender roles and household practices highlight the profound influence of gender dynamics on health and nutrition behaviours. Addressing gender-related social norms and cultural practices that undermine nutrition is an important long-term objective for WFP. While it is unrealistic to expect the SBC strategy to transform deeply entrenched social norms in the available timeframe, the implications outlined here suggest how these challenges might be tackled with more resources and a longer-term commitment.

| Implication | Potential action |
|---|---|
| 1. Address women's overburdened roles by promoting shared responsibilities in childcare and nutrition | 1.1 Work with community leaders to normalise and model men's participation in childcare and household tasks. |
| 2. Engage men as allies for nutrition | 2.1 Promote culturally appropriate ways for men to be involved in household health and nutrition. |
| | 2.2 Involve male champions or role models to share how they contribute to household health and nutrition. |
| 3. Tackle the norms that prioritise men's food needs and promote more equitable food allocation | 3.1 Co-create activities to illustrate the long-term benefits of prioritising women's and children's nutrition. |
| | 3.2 Encourage community discussions by trusted leaders (e.g., village chiefs and religious leaders) to emphasise the importance of equitable nutrition for family health. |
| 4. Encourage joint decision making between men and women for healthcare access and food purchasing | 4.1 Model and promote household-level dialogue sessions to promote shared decision making. |
| | 4.2 Highlight success stories where shared decisions led to improved health or nutrition outcomes for women or children. |
| 5. Address the risks of Gender-Based Violence (GBV) linked to cash distribution to women as recipients of C4P in all regions | 5.1 Tailor the messaging around C4P in SBC tools and activities to ensure women's autonomy is supported and that cash is used for family nutrition and wellbeing, while preventing misuse by other family members. |
| | 5.2 Work with community leaders to promote safe spaces for women to discuss financial decisions and share experiences on managing C4P funds without fear of retribution or control. |
| | 5.3 Ensure SBC campaigns include information on the importance of women's empowerment in financial decision making and messages that challenge GBV and control over cash within households. |

**Recommendations** for strengthening the effectiveness, inclusivity and sustainability of the C4P programme are also presented. These focus on enhancing communication and transparency; improving community engagement; addressing concerns about fairness and inclusion; increasing financial support and programme sustainability; strengthening awareness and behaviour change components; enhancing monitoring and feedback mechanisms; and mitigating risks of Gender-Based Violence.

## Conclusion

This formative research provides critical insights into the complex factors shaping nutrition practices in Chad. The findings emphasise the centrality of socio-cultural, economic, and gender dynamics in influencing health and nutrition behaviours, as well as the importance of leveraging existing community knowledge, trusted networks, and local capacity to drive change. The findings highlight the need for a socially embedded and culturally sensitive programmatic approach that builds on community awareness of seasonal food availability, local nutritious foods and hygiene practices.

The formative research established the foundation for the development of the SBC strategy to complement WFP's C4P and integrated resilience programming to help improve dietary diversity, strengthen community capacity, and promote optimal health and nutrition behaviours. The research also provided insight into ways in which WFP may enhance the effectiveness, inclusivity and sustainability of the C4P programme. Grounded in the lived experiences of participating communities, these implications and recommendations offer a roadmap for WFP and its partners to deliver contextually relevant and impactful interventions that address Chad's urgent nutrition challenges.

# Contents

# Abbreviations

| | |
|---|---|
| ANC | Antenatal care |
| ASRADD | *Alliance Sahélienne de Recherches Appliquées pour le Développement Durable* |
| C4P | Cash for Prevention |
| CBT | Cash-based transfer |
| CHW | Community health worker |
| CSP | Country strategic plan |
| FARNE | *Foyers d'Apprentissage, de Réhabilitation Nutritionnelle et d'Eveil* |
| FGM/C | Female genital mutilation/cutting |
| FNG | Fill the Nutrient Gap |
| IDP | Internally displaced people |
| IFAD | International Fund for Agriculture Development |
| IPC | Integrated Food Security Phase Classification |
| IYCF | Infant and young child feeding |
| MAM | Moderate Acute Malnutrition |
| MICS | Multiple Indicator Cluster Survey |
| MIYCN | Maternal, infant and young child nutrition |
| MQ-LNS | Medium-quantity lipid-based nutrient supplement |
| MUAC | Middle upper arm circumference |
| NGO | Non-governmental organisation |
| OPEC | Organisation of the Petroleum Exporting Countries |
| RePER | Strengthening Productivity and Resilience of Agropastoral Family Farms Project |
| SBC | Social behaviour change |
| SNF | Specialised nutritious food |
| SQ-LNS | Small-quantity lipid-based nutrient supplement |
| SSF | Specially formulated food |
| UNHCR | United Nations High Commission for Refugees |
| UNICEF | United Nations Children's Fund |
| WHO | World Health Organization |

© Anthrologica/Katie Moore

Demonstration and distribution of enriched porridge, Doungoulou, Guéra.

# Introduction

Chad is one of the most vulnerable countries in the Sahel region, with 7.6 million people in need of humanitarian assistance according to the 2023 Humanitarian Response Plan.[1] In 2023, 2.1 million people were severely food insecure, and the March 2023 Cadre Harmonisé reported that 1.7 million children aged under 5 years were suffering from acute malnutrition, with all other forms of undernutrition remaining highly prevalent. Thirty-one percent of children aged under 5 years had stunting, with low height for their age caused by chronic malnutrition.[2] These high rates are associated with poor infant and young child feeding (IYCF) practices, limited access to services and financial barriers. The 2023 Fill the Nutrient Gap (FNG) analysis indicated that 50% of households in Chad were unable to afford a nutritious diet.[3]

Given the multiple and interconnected challenges influencing poor nutrition indicators in Chad, WFP is enhancing its preventive nutrition assistance within its country strategic plan (CSP). This includes a shift towards Cash for Prevention (C4P) programming in resilience and ongoing nutrition-sensitive programming to diversify approaches for prevention whilst reducing demand for specialised nutritious foods (SNF). C4P will be delivered through integrated resilience programming, as part of a package of interventions supported by collaborative interagency programmes.

Through the C4P programme, there will be gradual movement towards locally available nutritious foods (including fresh foods) for the prevention of acute malnutrition, and support will be given to the value chains of local 'healthy foods'. This is aligned with the new WHO guidelines on the prevention and management of wasting and nutritional oedema, which emphasise context-specific interventions. These include multisectoral and multisystem approaches, IYCF counselling and home diets, to prevent acute malnutrition in children aged 6-59 months and pregnant and breastfeeding women.[4]

The C4P programme will use cash as the main modality and will be implemented through existing nutrition platforms, including the integrated resilience project sites and FARNE (Foyers d'Apprentissage, de Réhabilitation Nutritionnelle et d'Eveil (Learning, Nutritional Rehabilitation and Awakening Homes)) sites. The FARNE approach is a peer-to-peer model implemented in remote areas (more than 5 km from the nearest health facility) that teaches mothers how to prepare nutritious meals with diverse foods and engages children to stimulate cognitive development.[5] Supported by WFP cooperating partners, including Alliance Sahélienne de Recherches Appliquées pour le Développement Durable (ASRADD), this community-based model aims to support participants to prevent and address moderate acute malnutrition (MAM). It also creates linkages between vulnerable communities and health facilities to extend care and service provision. Existing programmes supported by WFP will be used to identify and enrol eligible participants into the C4P programme, to provide the cash transfers, and to refer children, pregnant and breastfeeding women who may need further treatment.

## Overall project aim and objectives

The overall purpose of this project is to develop and implement a social and behaviour change (SBC) strategy that will complement the C4P programme, as well as other components of the nutrition strategy in the country strategic plan. The SBC strategy will be co-created with WFP and key stakeholders and will include demand- and supply-side dimensions.

The SBC strategy will be mainstreamed to promote programme uptake and appropriate practices. The strategy will be consistent with WHO guidelines on wasting prevention[c] and will focus on solutions for infant and maternal nutrition that are responsive to the economic, climate and security shocks that Chad experiences. The strategy will support initiatives to: improve the minimum acceptable diet and minimum dietary diversity for women and children through activities that enable access to and affordability of diversified locally available nutritious foods; strengthen community leadership and ownership of integrated management of malnutrition; encourage pregnant, breastfeeding women, children and other vulnerable population groups to practice optimal nutrition behaviours; and generate evidence regarding the integration of SBC with cash and cash-based approaches to prevent malnutrition.

The SBC strategy will be rolled out across six regions (Barh El Ghazel, Batha, Guéra, Kanem, Lac, and Mayo Kebbi East) during 2025, starting with selected locations in Kanem and Guéra. Throughout, the existing cooperating partners that are implementing the nutrition programme in collaboration with government will be supported to implement and monitor the SBC strategy. The development and implementation of the SBC strategy will be reported in a separate document.

## Formative research objectives

The formative research documented in this report was designed to inform the development of the SBC strategy. This research is grounded in applied behavioural science to understand context, the lived experiences of people impacted by the C4P programme, and drivers of and barriers to key nutrition and health behaviours. The research was conducted in six regions in Chad in two phases: Guéra and Kanem (Phase 1) and Barh El Ghazel, Batha, Lac, and Mayo Kebbi East (Phase 2). The findings detailed in this report reflect data from Phase 1, supported with findings from validation workshops conducted in Phase 2.

The formative research explored how nutrition practices, knowledge, and socio-cultural and gender dynamics affect dietary diversity among breastfeeding and pregnant women, infants and young children, and identified barriers and enablers to dietary diversity.

c WHO guidelines emphasise a multisectoral and multisystem approach in delivering preventive interventions (i.e., food, health, WASH, social protection systems); reinforcing IYCF counselling as part of routine care; training and supervision of personnel providing counselling. In areas of or during periods of high food insecurity, SFFs (MQ-LNS or SQ-LNS) may be considered for the prevention of wasting and nutritional oedema for a limited duration for all infants and children 6-23 months of age. Multiple micronutrient powders should not be given to infants and children 6-23 months of age for the specific purpose of preventing wasting and nutritional oedema.

There were three main **objectives for the formative research:**

| Objective 1 | Objective 2 | Objective 3 |
|---|---|---|
| To understand demand-side factors influencing health and nutrition knowledge, attitudes and perceptions, intentions, behaviours and practices among programme participants and their families and within households. | To understand the influence of the supply-side landscape on availability and affordability of local nutritious foods. | To understand stakeholder preferences relating to SBC approaches, activities, materials and communication channels to promote health and nutrition practices. |

## Formative research questions

WFP and Anthrologica agreed on a comprehensive list of research questions to be addressed in the formative research (see Annex 1). These included questions relating to gender roles and decision making, individual behavioural factors, malnutrition prevention, positive deviance practices, SBC and communication preferences, and questions relating to the supply of nutritious food and retailers' perspectives.

## Structure of the report

Following the introduction, the methodology for the formative research is outlined. The findings are organised into three sections: (1) key findings from the desk review, including a country context analysis; (2) findings relating to food and nutrition practices and influencing factors; (3) perspectives on communication and community engagement to promote health and nutrition practices. The conclusion and recommendations focus on key implications of these findings for the SBC strategy development and for strengthening the effectiveness, inclusivity and sustainability of the C4P programme. The report concludes with a brief statement of conclusions and recommendations.

© Anthrologica/Katie Moore

Breastfeeding mother, Doungoulou, Guéra.

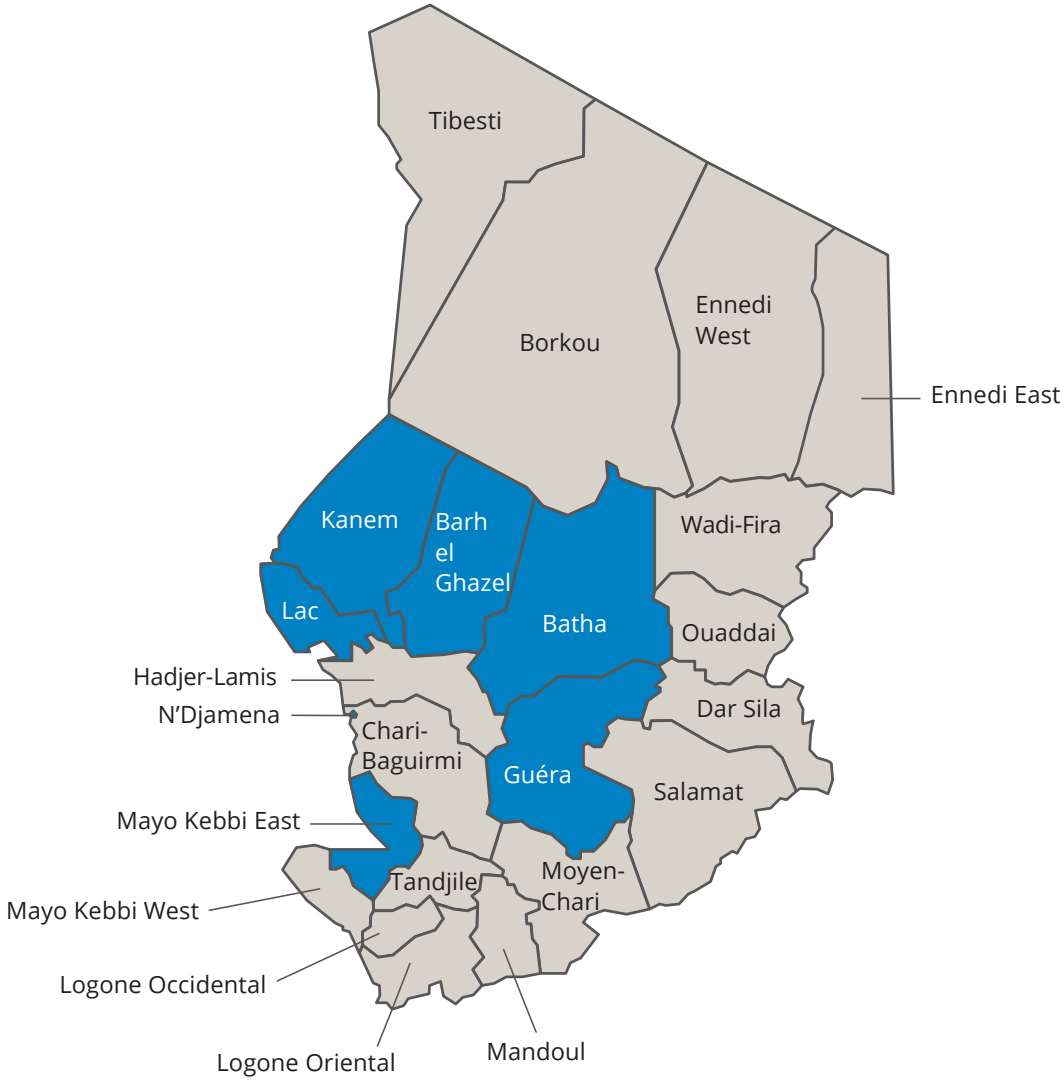
# Methodology

## Study design and location

The formative research was qualitative and exploratory. Findings were generated using a combination of methods: desk review of existing data and literature; key informant interviews (KII); and focus group discussions (FGDs). Using multiple qualitative methods allowed for the verification of data gathered and increased the validity of the study through triangulation. Open inductive qualitative and participatory methods ensured that data, and its interpretation, remain grounded in the lived realities of the participants.

The research was conducted in six regions in Chad (see Figure 1), in two phases: Guéra and Kanem (Phase 1) and Barh El Ghazel, Batha, Lac, and Mayo Kebbi East (Phase 2). The WFP Country Office selected study sites in locations where C4P and integrated resilience programming are currently being or will be implemented. Phase 1 of the formative research was completed in Kanem and Guéra in August 2024, and light-touch validation workshops in the remaining four provinces in November 2024.

### Figure 1: Map of Chad showing the six study regions




Source: Adapted from Freepik.

## Rapid desk review

To inform the development of the research protocol, the research team conducted a rapid desk review of published and grey literature and programme and policy documents. The desk review is available as a separate document, and a summary is provided in section 1 of the findings below. The review provided a solid foundation for the development of the protocol, methodology and data collection tools. It also identified research and evidence gaps that were explored during the fieldwork.

# Phase 1

## Formative research in Kanem and Guéra

### Development of data collection tools

The research team developed a topic guide (Annex 2), informed by the desk review. The topic guide outlined key areas to be covered in the research tools, including IYCF, family dietary practices, gender dynamics that influence household food-related decisions, and retailer capacity to provide fresh foods. Topics also included critical behaviours to be promoted during the C4P programme related to food choices and sourcing, purchasing and prioritisation; food preparation and consumption; inter-household and community dynamics; and malnutrition prevention and treatment seeking. Detailed KII and FGD guides were then developed from this topic guide.

The FGDs included creative and interactive methods designed to facilitate rich discussion. For example, 'gender jumble exercises' were developed to identify gendered roles and responsibilities in relation to nutrition in the household and community. Community leaders also engaged in seasonal mapping exercises to visualise food availability and scarcity in the pre- and post-harvest period. In addition, social network analysis was used to identify the most trusted sources of nutrition information. The tools and questions were tailored to each participant group and the context of the field sites. Draft tools were reviewed by colleagues at the WFP Country Office, Regional Bureau and Headquarters, and their feedback was integrated prior to finalisation.

### Fieldwork preparation

Before starting data collection, a three-day training was convened in N'Djamena for the national research team (comprising researchers from a local research organisation, BEIRED Sarl).[d] The training covered the background and aim of the formative research and the research methodology (including qualitative and participatory methods, research ethics and securing informed consent). The team reviewed in detail each data collection tool to ensure the French and Arabic translations captured the nuances of each question, and the team agreed on appropriate oral translations into local languages (Kanembou, Haoussa and Bolgo). The tools were pilot tested by the team, with attention to testing the participatory methods using role play. Following pilot testing, the tools were refined again, and methodological concerns were addressed to ensure all team members collected consistent and high-quality data.

### Sampling strategy

Phase 1 of the formative research covered four study sites, two in Kanem and two in Guéra. To secure a diversity of views in the two regions where C4P is being implemented, study sites and participants were selected using purposive sampling based on a maximum variation approach. The sampling strategy was designed to reach data saturation, but also to be

d Organisation website: https://beired.org

manageable within the constraints of time and resources. The study sites were identified from the WFP FARNE and resilience site database in the selected regions. Criteria for selecting sites included distance to markets and health centres, as well as different livelihood zones.

Kanem is a transhumance area and pastoral livelihood zone. Study site 1 in Kanem was Tchidi, which is close to a market and has integrated resilience programming. Study site 2 was Blablim, which is further from a market and does not have integrated resilience programming. Guéra is an agropastoral livelihood zone. Study site 1 in Guéra was Doungoulou, which is close to a market and has integrated resilience programming. Study site 2 was Sawa, which was selected because it is further from a market and health facilities and does not have integrated resilience programming.

In each region, 30 data collection activities (14 FGDs and 16 KIIs) were planned, involving between 112 and 140 participants. In total, 58 data collection activities (27 FGDs and 31 KIIs) were conducted across the two regions, involving 266 participants (see Table 1 below).

**Table 1: Data collection activities per participant group (Phase 1)**

| Activity | Participant group | Total per region (planned) | Study total (planned) | Study total (actual) | Total number of participants |
|---|---|---|---|---|---|
| FGDs | Mothers of children aged 0-59 months (including pregnant and breastfeeding mothers) | 4 | 8 | 8 | 73 |
| | Fathers of children aged 0-59 months (including husbands of pregnant and breastfeeding mothers) | 4 | 8 | 8 | 73 |
| | Elderly women (including grandmothers of children aged 0-59 months) | 2 | 4 | 4 | 38 |
| | Community, opinion and religious leaders | 2 | 4 | 4 | 36 |
| | Community health workers | 2 | 4 | 3 | 15 |
| | **Total FGDs** | **14** | **28** | **27** | **235** |
| KIIs | Mamans lumières | 4 | 8 | 8 | 8 |
| | Positive deviant mothers | 4 | 8 | 8 | 8 |
| | Food retailers | 4 | 8 | 7 | 7 |
| | Traditional practitioners/ healers | 2 | 4 | 4 | 4 |
| | District level health officials | 2 | 4 | 4 | 4 |
| | **Total KIIs** | **16** | **32** | **31** | **31** |
| **Study total** | | **30** | **60** | **58** | **266** |

## Participant recruitment

Participant groups for the formative research included: (i) mothers of children aged 0-59 months (including pregnant and breastfeeding mothers); (ii) fathers of children aged 0-59 months (including husbands of pregnant and breastfeeding mothers); (iii) female elders (including grandmothers of children aged 0-59 months); (iv) community, opinion and religious leaders; (v) mamans lumières; (vi) positive deviant mothers; (vii) traditional healers; (viii) community health workers; (ix) food retailers; and (x) district health officials.

Mothers and fathers were identified through existing lists of WFP programme participants and recruited through community leaders, who received instructions from WFP field monitors and cooperating partner staff on the selection criteria. Community, opinion and religious leaders, female elders, mamans lumières, traditional healers, community health workers, food retailers and district health representatives were identified and recruited through WFP field monitors and cooperating partner staff. Snowball sampling was used to identify positive deviant mothers.[6]

Community meetings were arranged in advance of the data collection, and the cooperating partners in all sites informed key stakeholders of the research and invited their participation. A time, date and location were arranged for individuals who agreed to participate in the data collection activities.

## Data collection

Informed consent (oral or written) was obtained immediately before the start of each data collection activity. Before beginning each activity, a full oral explanation of the study was provided, emphasising the voluntary, confidential and anonymous nature of participation. All participants were given the opportunity to ask questions and request further explanations before deciding to take part. Each participant was given an information sheet containing the aims of the research, what participation entailed, the voluntary nature of participation, confidentiality and contact information. Consent was obtained from each participant, including consent for audio recording and use of photography. Each activity was undertaken with sensitivity and with consideration for ensuring confidentiality (see information and consent forms in Annex 3).

Key informant interviews were held with a range of individuals at the community level to provide unique insights and experiences related to local health and nutrition behaviours and practices. Interviews were held with mamans lumières, positive deviant mothers, traditional healers, community health workers, food retailers, and district health officials. The interviews focused on individual nutrition practices, food sourcing and availability, community understandings of malnutrition, and perceptions and experiences of the contextual and social factors that affect purchase and preparation of nutritious foods. Interviews followed a semi-structured interview guide that was used flexibly in response to themes arising during the interviews. Participants led the direction of the conversations, and follow-up prompts and probes were used to obtain greater detail and clarity when necessary. Each interview lasted 60 to 75 minutes. Interviews were conducted in local languages.

Focus group discussions were held with small groups of 8-10 participants to understand norms, influences, and collective understandings that shape health and nutrition experiences, behaviours and practices. Discussions were held with selected community stakeholders: mothers and fathers of children aged 0-59 months; community, opinion and religious leaders; and older women (including grandmothers of children aged 0-59 months). Given the gender dynamics in the communities, FGDs were held with men and women separately and were facilitated by female or male researchers as appropriate. They followed a semi-structured guide and used participatory methods in line with ethical good practices. The discussions

were designed to provide flexibility in terms of composition and dynamics. Each FGD was held in the relevant local language and lasted between two and three hours.

The data collection tools were designed to prompt discussion on key thematic areas. Each data collection session aimed to establish rapport between the researcher and the participant(s) before proceeding to potentially more sensitive issues, such as gender dynamics, food shortages, and malnutrition risks. The research tools also used third-person interviewing techniques, asking, for example, 'What did other people like you in this community think about/do...?'. This technique was effective in eliciting narratives about community-level patterns and social norms without requiring personal disclosure from the interviewees. The 'no names' rule was explained to the research participants, allowing them to mention other people they knew without revealing their names or any personal identifying information. This approach helped build trust with the research participants and highlighted the importance of confidentiality.

The FGDs used a variety of visual and engaging methods to work with community-level groups and encouraged participants to share their experiences and practices in a non-threatening way. Prioritisation exercises, seasonal calendars, and other community mapping techniques were used, as appropriate, to elicit formative and qualitative insights into topics such as barriers to and drivers of appropriate health and nutrition practices, the influence of socio-cultural, peer network, and household norms on food purchasing behaviour, and gender dynamics in relation to food-related decision-making processes.

The direction of the interviews and FGDs was largely determined by the participants and the information they prioritised, although all components of the guides were covered to enable rigorous thematic comparison. This agile approach ensured the empowerment of the participants and the co-production of knowledge. The data collection tools were pilot tested prior to use and were reviewed and refined during fieldwork to enable issues arising to be explored fully.

## Data analysis

Qualitative data generated through interviews and FGDs were analysed using thematic analysis. Given the time and resources available, a rapid qualitative analysis approach was used. During fieldwork, the research team produced comprehensive notes during each interview and FGD and completed rapid analysis summary sheets. Debrief sessions were held at the end of each day of data collection, allowing the research team to continuously share observations and explore emerging themes together. The comprehensive notes and daily iterative analysis were used to identify preliminary themes.

Transcripts were produced by the local research team for a subset of the data collection activities. Audio files were purposively selected for activities the research team identified as particularly rich or engaging and/or where new or outlier ideas were discussed. A coding matrix was created in Microsoft Excel using a combination of codes identified by reviewing the rapid analysis summary sheets and questions covered in the topic guides. The matrix was completed using the contents of the transcripts and comprehensive field notes. Data extraction and coding were carried out by two team members. Emerging themes were critically analysed against the original objectives and key areas highlighted and/or prioritised for investigation.

## Feedback and validation meeting

Once the field work was complete, a virtual feedback and validation meeting was held with WFP Nutrition and SBC team members, a representative from BEIRED Sarl, and colleagues from Anthrologica. The meeting provided an opportunity to share the preliminary findings and discuss priorities for the SBC strategy and activity development.

Phase 2

## Validation workshops in Barh El Ghazel, Batha, Lac and Mayo Kebbi East

Building on the Phase 1 formative research in Kanem and Guéra, a series of validation workshops were held in Barh El Ghazel, Batha, Lac and Mayo Kebbi East. The aim of these workshops was to confirm key findings from the substantive formative research, explore regional similarities and variations and elicit ideas for SBC engagement and activities. In each region, four participatory workshops were planned, one with each of the following groups: (i) WFP field staff and cooperating partners; (ii) district and local authorities, community and religious leaders, and husbands and fathers of women enrolled in the C4P programme; (iii) older women and mamans lumières; and (iv) pregnant and breastfeeding women and mothers of children who were enrolled in the C4P programme. In total, 16 participatory workshops were held across the four regions.[e] Colleagues from WFP regional offices identified and recruited participants in each site, based on the accessibility of study sites and the availability of participants, and supported the organisation of each workshop.

Each participant group was presented with a set of findings from the formative research in Kanem and Guéra, and asked to discuss how those findings might differ in their own region. Field staff from WFP and WFP partners discussed findings relating to food availability; financial challenges to accessing nutritious foods; access to markets; and challenges for retailers and the supply chain. Local authorities, community and religious leaders, and husbands and fathers of C4P participants focused on knowledge of the causes, signs and prevention of malnutrition; access to and awareness of malnutrition interventions; socio-cultural beliefs related to health and nutrition; and the influence of gender roles on household nutrition practices. Older women and mamans lumières reflected on the findings related to the influence of social groups and peer networks on nutrition practices; the influence of gender roles on household nutrition practices; and power, autonomy and agency and household nutrition practices. Women enrolled in the C4P programme discussed regional similarities and variations in the findings relating to nutrition practices for pregnant and breastfeeding women, infants and children; household food consumption practices; and the influence of social groups and peer networks on nutrition practices and sharing between households. All participant groups were asked

### Table 2: Data collection activities (Phase 2)

| Provinces | Total number of workshops | Total number of participants | Female participants | Male participants |
|---|---|---|---|---|
| Barh El Ghazel | 4 | 36 | 21 | 15 |
| Batha | 4 | 38 | 23 | 15 |
| Lac | 5 | 43 | 23 | 20 |
| Mayo Kebbi East | 3 | 39 | 21 | 18 |
| **Total** | **16** | **156** | **88** | **68** |

e Due to scheduling constraints, no workshop was held with WFP staff and partners in Mayo Kebbi East. Two workshops were held with district and local authorities in Lac.

about preferred communication channels, trusted information sources, and potential community engagement activities for SBC around health and nutrition practices.

During Phase 2 fieldwork, the research team completed rapid analysis summary sheets for each workshop and produced comprehensive notes. A coding matrix was created in Microsoft Excel to collate the validated findings and cross reference similarities and differences from each region. The emerging findings were critically analysed against the original dataset and key areas highlighted for the report. The findings from the Phase 2 research are presented under relevant themes in the findings sections, with regional similarities and differences highlighted.

## Limitations

Due to the rapid nature of the formative research, community-level participants were recruited from accessible communities, and some populations at highest risk in more remote areas could not be included. For example, due to access and safety constraints data collection could not be conducted in the initially proposed regions of Salamat and Mayo Kebbi West. The resulting analysis may therefore not fully represent critical social and behavioural determinants that influence nutritional practices and food purchasing patterns in the diverse range of communities WFP assists.

It is possible that participants' responses regarding food assistance were affected by the presence of WFP staff and cooperating partners, potentially promoting social courtesy bias on the assumption this would improve their chances of receiving additional aid. To mitigate this, WFP and partner staff did not actively participate in exercises and discussions related to the C4P programme, including the selection process and participants' feedback on WFP assistance. In addition, the tools were designed to avoid leading questions, and sensitive topics were carefully introduced.

© Anthrologica/Katie Moore

Mother attending a cooking demonstration, Doungoulou, Guéra.

# Findings

The findings are presented across three sections that reflect the scope of the formative assessment. Each set of findings is organised according to the themes and sub-themes identified in the data and supported with illustrative quotes. Where there are discernible patterns in the data by study site, participant group or by gender, these are described. Additional findings for each thematic area from the validation workshops in Barh El Ghazel, Batha, Lac and Mayo Kebbi East are presented separately within each relevant section.

## Section 1

Summarises the desk review including the country context analysis.

## Section 2

Describes detailed ethnographic findings relating to food and nutrition practices, and factors influencing these practices, including knowledge and socio-cultural and peer network factors; socioeconomic influences on food purchasing and consumption; and gender dynamics and decision making.

## Section 3

Summarises perspectives on communication and community engagement relevant to promoting SBC around health and nutrition practices.


Child eating enriched porridge, Doungoulou, Guéra.

Section 1

# Desk review summary

This is a summary of the rapid desk review conducted in the inception phase of the project. The full desk review is available as a separate document. The review draws on published, secondary and programme documents, and is structured around **three key areas outlined below:**

- **Country context analysis including demographic, political and food security situation**
- **Local nutrition practices and treatment-seeking behaviour**
- **WFP's nutrition and resilience programming in Chad**

## Country context analysis

Chad, the fifth largest country in Africa, spans an area of 1,284,000 square kilometres and is divided into 23 regions, 115 departments and 442 communes.[7] This research focuses on six regions: Guéra and Kanem (Phase 1), and Barh El Ghazel, Batha, Lac, and Mayo Kebbi East (Phase 2).

### Demographics

In 2024, Chad's population was estimated at around 19.1 million, with an annual growth rate of 3.0%.[8] French and Arabic are the official languages, along with over 120 other languages and dialects.[8] Major ethnic groups include Sara, Kanembu and Arab.[8] The majority of the population is Muslim (58.4%), followed by Christians (34.6%) and animists (4.0%).[7]

The country has one of the highest fertility rates in the world at an average of 6.2 children born per woman,[9] a birth rate of 39.2 per 1,000 population[8] and significant maternal mortality ratio (1,063 per 100,000 live births)[8] and infant mortality rate (62.5 per 1,000 live births).[8] More than 65% of the population is under age 25.[8] Chad ranks 189 out of 193 on the Human Development Index.[10] HIV prevalence is estimated at 1.1%,[11] with higher rates among women.[12]

Chad hosts 1.1 million displaced people, and there have been significant recent influxes due to conflict, particularly from Sudan.[13,14] Malnutrition is widespread among refugee children, with high rates of acute malnutrition reported.[15]

### Economic, political and security context

Since independence from France in 1960, Chad has faced instability, civil wars and invasions. It is currently led by Mahamat Idriss Deby, following a period of transitional government after the death of his father in 2021.[8] Conflicts continue, particularly in the Tibesti and Lac regions, exacerbating food production challenges and cross-border disruptions. Chad's economy, heavily dependent on oil since joining OPEC in 2003, is affected by climate change and security issues.[7] Governance encompasses both statutory and customary systems, sometimes leading to conflict, particularly over gender equality and land ownership.[16]

### Gender equality

Despite legal frameworks promoting gender equality, there are significant disparities. Chad ranks 163 in gender inequality index,[17] with low female literacy (18%)[18] and low primary school completion rates (28%).[19] Early and polygamous marriages are common, affecting the health and nutrition of women and children.[20]

## Chad (2023)

**19.1 million**
Population

**6.2 children born per woman**
Fertility rate

**62.5 per 1,000 live births**
Infant mortality rate

**>65%**
Population under age 25

**189 out of 193**
Human Development Index rank

According to 2024 data, sixteen percent of women had experienced sexual and/or gender-based violence in the previous year,[21] and female genital mutilation and cutting remains common.[22] Women have limited decision-making power, particularly in health and financial matters.[23] Women's land ownership is restricted, further contributing to malnutrition and dependence on male family members.[21]

### Climate change and food insecurity

Chad is highly vulnerable to climate change,[14] facing desertification, reduced fish stocks and land degradation.[24] Lake Chad has shrunk significantly, affecting food security for millions of people.[25] Recent flooding in 2022 affected 1.3 million people, exacerbating infrastructure damage and problems with access to services.[14,26] Chad's high risk of climate change is affecting coping capacities and contributing to food insecurity.[27] Over two million people were in Integrated Food Security Phase Classification (IPC) Phase 3 (crisis) as of spring 2024, with projections that this number would grow to 2.8 million by the end of August 2024.[28]

## Health-seeking behaviours and local nutrition practices

### Health system in Chad

Chad's health system is organised at three levels: central, intermediate and peripheral. The health district is considered the core of the system.[7] Despite this structure, the use of public health services remains low among all population groups in Chad. Factors contributing to this low utilisation include the limited availability of facilities, frequent stock-outs of drugs, a shortage of qualified medical staff, and the unaffordability of services for much of the population.[7]

Other barriers to accessing health centres include long distances to facilities, poor and often impassable roads, and mistreatment by health workers.[29,30] For women, specific cultural and social factors further inhibit their use of health services, including the need to obtain permission from male family members and discomfort with being attended to by male health workers.[29,30]

Most Chadians prefer to seek healthcare from alternative sources. Illnesses are initially treated at home; if the condition persists, a traditional healer *(marabout)* or a street medicine seller *(Dr Tchoukou)* will likely be consulted.[7,30–32] The formal healthcare system is generally a last resort, especially for women who need their husbands' permission to access such services.[29,32]

Customary beliefs and practices have a significant impact on the treatment and prevention of malnutrition and childhood diseases. Traditional healers are often seen first and use practices such as uvula removal and tooth extraction, which are believed to prevent and cure malnutrition and disease.[29,33] These procedures, carried out in unhygienic conditions, can lead to serious infections and further worsen a child's nutritional status.[29,33] Qualitative research suggests that community attitudes and practices, rather than structural barriers, influence decisions about malnutrition treatment.[29] Traditional beliefs about the causes of malnutrition remain widespread, and traditional practitioners and religious figures are significant barriers to changing nutritional behaviour.[29]

### Access to antenatal care and facilities for childbirth

Use of antenatal care (ANC) services is low, with only 58.9% of women accessing ANC nationally, and significantly fewer women attending more than four ANC visits.[7] According to the 2019 Multiple Indicator Cluster Survey (MICS), only 37.2% of women aged 15 to 49 years who gave birth in the preceding two years did so at a health centre or a hospital.[34] In some areas women preferred to give birth alone or with female relatives due to cultural beliefs and the need for permission from male family members to access healthcare.[31]

### Nutritional status of pregnant and lactating women and children 6-59 months

As reported in the 2022 Global Nutrition Report, Chad is 'off course' to meet all targets for maternal, infant and young child nutrition (MIYCN).[2] Although Chad has made some progress towards achieving the target for stunting, according to the 2022 SMART survey, 28.0% of children under 5 are still affected nationally, with boys (31.6%) notably more affected than girls (21.3%).

Likewise, while the country has made progress towards achieving the target for wasting, 8.6% of children under 5 years of age are still affected per the SMART survey.[35] The 2022 SMART survey found global acute malnutrition prevalence[f] of 17.5% in Batha, 13.6% in Barh El Ghazel, 13.4% in Guéra, 14.2% in Kanem, 13.3% in Lac and 6.2% in Mayo Kebbi East. Table 3 presents IPC projections of acute malnutrition prevalence for children under 5 years in the study provinces for 2024. Rates of malnutrition in five of the six study provinces are well above the national average.[36] The most recent IPC assessment also estimated that 10% of the nearly half a million PLW in the study sites would be acutely malnourished in 2024.[36]

**Customary beliefs and practices have a significant impact on the treatment and prevention of malnutrition and childhood diseases.**

f These are combined rates based on weight for height and/or MUAC and/or oedema.

### Table 3: Acute malnutrition estimates in children aged 6-59 months

| Province | Total number of children aged 6-59 months | No. moderate acute malnutrition (%) | No. severe acute malnutrition (%) | No. global acute malnutrition (%) |
|---|---|---|---|---|
| Barh El Ghazel | 80,224 | 36,240 (45.2%) | 11,361 (14.2%) | 47,602 (59.3%) |
| Batha | 148,177 | 98,766 (66.7%) | 30,326 (20.5%) | 129,092 (87.1%) |
| Guéra | 137,575 | 62,985 (45.8%) | 26,502 (19.3%) | 89,485 (65.0%) |
| Kanem | 107,030 | 51,718 (48.3%) | 17,950 (16.8%) | 69,668 (65.1%) |
| Lac | 137,191 | 72,666 (53.0%) | 13,579 (9.9%) | 86,245 (62.9%) |
| Mayo Kebbi East | 246,307 | 33,340 (13.5%) | 21,635 (8.8%) | 54,975 (22.3%) |
| National total | 3,552,003 | 1,246,806 (35.1%) | 474,082 (13.3%) | 1,720,888 (48.5%) |

Source: IPC Analysis Portal: https://www.ipcinfo.org/ipc-country-analysis/details-map/en/c/1156793/. Chad: Acute Malnutrition Situation October - December 2023 and Projections for January - May 2024 and June - September 2024. Totals and percentages may vary slightly due to rounding.

#### Infant and young child feeding practices

Infant and young child feeding practices in Chad are suboptimal, with only 16.2% of infants aged 0 to 5 months being exclusively breastfed.[34] The percentage of newborns exclusively breastfed is even lower in Batha (12.5%) and Barh El Ghazel (15.2%). The rates are slightly higher in Kanem (16.4%), Lac (16.7%), Guéra (19.3%) and Mayo Kebbi East (27.0%).[34] Practices such as giving water and other liquids to newborns are common, often due to misconceptions about milk quality and quantity.[31,32] The median duration of breastfeeding is 21 months,[34] and complementary foods are often introduced too early, sometimes as early as age one to two months.[37] Feeding practices are influenced by cultural beliefs, leading to significant differences in dietary diversity between male and female children.[32,38]

According to the 2019 MICS, the percentage of children ages 6-23 months who received a minimum acceptable diet was 11.2% nationally; 23.4% received a minimum diverse diet and 34.2% received a minimum meal frequency.[34] The 2022 SMART survey reflects higher results across the board, with notably higher results in minimum meal frequency (Table 4).

#### Diet and dietary practices

Diets in the Sahel zone of Chad are heavily starch-based, with millet, maize, rice and sorghum being common foods.[37] Traditional sauces made with vegetables, poultry or meat accompany these staples and provide some variety to the diet.[39] However, fruit and vegetables are rarely consumed.[37] Gender norms strongly influence feeding practices, with men often receiving larger and more varied portions of food.[40] Pregnant and lactating women and children face various dietary restrictions due to cultural beliefs, which can negatively affect their nutritional status.[20,29,31,41]

**Table 4: Dietary diversity, frequency and acceptable diet in children aged 6-23 months**

| Province | N | Minimum dietary diversity | | Minimum meal frequency | | Minimum acceptable diet | |
|---|---|---|---|---|---|---|---|
| | | n | % | n | % | n | % |
| Barh El Ghazel | 128 | 19 | 14.8 [8.1-25.5] | 112 | 87.5 [81.7-91.6] | 18 | 14.1 [7.4-25.0] |
| Batha | 206 | 100 | 48.5 [38.3-58.9] | 163 | 79.1 [68.7-86.8] | 67 | 32.5 [24.1-42.3] |
| Guéra | 186 | 84 | 45.2 [33.1-57.8] | 153 | 82.3 [68.3-90.9] | 53 | 28.5 [19.7-39.3] |
| Kanem | 178 | 15 | 8.4 [4.2-16.0] | 152 | 85.4 [79.1-90.0] | 14 | 7.9 [4.0-14.8] |
| Lac | 248 | 78 | 31.5 [22.4-42.2] | 207 | 83.5 [77.5-88.1] | 71 | 28.6 [20.0-39.2] |
| Mayo Kebbi East | 149 | 75 | 50.3 [38.0-62.7] | 134 | 89.9 [79.5-95.4] | 67 | 45.0 [32.8-57.1] |
| National | 3,874 | 1,445 | 42.5 [38.7-46.4] | 3,296 | 84.9 [82.4-87.1] | 1,180 | 33.8 [30.2-37.5] |

Source: Ministére de la Santé Publique et de la Prevention. 2022. Tchad: Enquête nationale de nutrition et de mortalité retrospective SMART 2022 (Rapport final - Décembre 2022).

## WFP's nutrition and resilience programming in Chad

WFP nutrition and resilience programming in Chad entails the delivery of a package of interventions in locations with high exposure to food and nutrition insecurity. The package ranges from agricultural asset creation activities to MAM treatment and preventive nutrition actions using both in-kind and cash-based transfer (CBT) approaches, with the aim of empowering vulnerable communities to sustainably address food and nutrition insecurity.

In recent years, WFP has strengthened its strategic positioning as a major humanitarian actor in Chad.[42] Within the 2019-2023 CSP, WFP maintained operational flexibility by adapting integrated assistance to meet dynamic needs.[43] The use of CBTs in 2022 increased response speed and flexibility, benefiting local economies. In 2023, 540,000 people received nutritional support through CBTs and SNF, with a recovery rate from malnutrition of 98%.[44] The *Evaluation of Chad WFP Country Strategic Plan 2019-2023* highlighted the positive impacts of integrated programmes, including increased resilience to climate events, improved food security, reduced rural migration, and increased household income and social capital.[42] In 2023, 240,800 people benefitted from integrated resilience programming.[44]

### Integrated programmes: positive impacts in Chad

**Increased resilience to climate events**

**Improved food security**

**Reduced rural migration**

**Increased household income and social capital**

**Programme participants in 2023**

**240,800 people**

## FARNE programming

FARNE sites are community-based interventions that focus on prevention of wasting through use of locally available nutritious foods and supplementation of children with MAM through use of SNF. FARNE sites use several approaches, including a positive deviance approach that highlights families with well-nourished children who are thriving despite facing challenges similar to those experienced by malnourished children.[45] These families learn together and share effective practices with others, supported by lead mothers in the community known as 'mamans lumières'. FARNE sites are located more than 5 km from health services but based in vulnerable communities to extend services closer to the people that need them most. They are comprised of up to 60 children and their caregivers in various malnutrition hotspots. The programme emphasises environmental and personal hygiene as well as nutrition education,[5] leading to significant improvements such as higher exclusive breastfeeding rates, early initiation of breastfeeding and better hygiene practices.[45]

## Implementation challenges

WFP has faced significant funding constraints, which affected its ability to reach target populations.[44] For example, IDPs did not receive food assistance in the second half of 2023 due to limited funding. Similarly, only 55% of the most vulnerable refugees received planned assistance.[44] Market monitoring showed that WFP distributions, such as oil, were being resold locally, reducing the effectiveness of the programme.[46] That the country is landlocked and has poor infrastructure and weak supply chain capacity also challenges humanitarian operations. Despite efforts to ensure local procurement, regional instability and food inflation have continued to affect local food availability. While WFP managed to procure 76% of its food distributions locally in 2023, supply constraints persist.[42]

The influx of Sudanese refugees and Chadian returnees from April 2023 further strained resources, requiring WFP to adapt its strategies.[42] Operational challenges with CBTs included difficulties in contracting with local retailers due to documentation issues, delays in reimbursements, and the resale of WFP commodities such as lentils and peas in local markets.[42,46]

### Gender, accountability and protection: Gaps and priorities

WFP prioritises gender equality and women's empowerment, but the benefits of programming for women were found to be lower than for men.[42] The evaluation of the 2019-2023 CSP identified gaps in integrated support and malnutrition prevention for women. Efforts to mainstream protection and accountability faced challenges, including limited use of feedback mechanisms and issues with the accessibility and effectiveness of the Prevention of Sexual Exploitation and Abuse hotline. In 2023, WFP expanded and diversified feedback mechanisms, resulting in an increase in feedback reports and improved service responses.[44]

### WFP's strategic focus (2024-2028)

The CSP for 2024-2028 focuses on emergency preparedness and response, the humanitarian-development nexus and strengthening national capacities.[43] WFP aims to reach 4.79 million direct participants, with a gradual shift from emergency response to resilience programmes. The CSP emphasises the use of CBTs, building resilience through land conservation and ecosystem restoration, and integrating disaster risk reduction and climate adaptation measures. Nutrition assistance will focus on vulnerable populations with specialised health and nutrition support, while resilience programming will link smallholder farmers to school feeding programmes and support climate-smart initiatives.

**The country specific plan (CSP) for 2024-2028 focuses on emergency preparedness and response, the humanitarian development nexus and strengthening national capacities. WFP aims to reach 4.79 million direct participants, with a gradual shift from emergency response to resilience programmes.**

Section 2

# Food and nutrition practices and influencing factors

The food and nutrition practices and influencing factors that were studied include the following:

- **Nutrition practices for women and children**
- **Food availability and seasonality**
- **Socio-economic influences on food purchasing and consumption**
- **Influence of social groups and peer networks on nutrition practices**
- **Influence of gender roles on household nutrition practices**
- **Factors important in preventing malnutrition**
- **C4P programme considerations**

## Nutrition practices for women and children

### Common infant feeding practices

Across the study sites in Kanem and Guéra, infant feeding practices included a reliance on breastfeeding and the introduction of complementary foods at different stages. Exclusive breastfeeding was common for the first six months, although there were some reports of mothers being too tired to practice exclusive breastfeeding and reports that husbands did not want their wives to breastfeed.

In addition, despite widespread acknowledgment of the importance of exclusive breastfeeding, older women said that water was frequently given to infants from an early age. This is consistent with the findings from the initial desk review.

After a child reaches 6 months of age, water, enriched porridge, and other soft foods are introduced. Mothers in both Kanem and Guéra reported feeding infants an enriched porridge *(bouillie)* made from local ingredients including peanuts, millet, and beans. Some mothers also reported providing soups (fish or meat) or milk beginning at six months. Overall, family foods appeared to be gradually introduced but with a focus on porridge and nutrient-rich additions to support infant development.

### Infant feeding

Batha, Barh El Ghazel, Lac and Mayo Kebbi East

Across the four regions, discussions echoed those in Kanem and Guéra, where exclusive breastfeeding was referred to as a core practice that reduces health risks for infants. In Lac, participants emphasised the nutritional benefits, particularly in the early months, and described community awareness campaigns that focus on exclusive breastfeeding. However, in Mayo Kebbi East, exclusive breastfeeding was less common as women suggested that the burden of managing the household did not allow them time to 'serve' the baby. Participants in all regions also highlighted the importance of complementary feeding after six months, often including enriched porridge.

## Diets of children under five years and taboos

The dietary patterns of children under five across Kanem and Guéra revealed a range of foods, with a base of cereals and starchy vegetables. Common foods provided to children under two included bouillie, sorghum, okra, macaroni, mango, and *boule*. Boule, a dietary staple in Chad, is a dough most often made from millet (though some participants referred to maize and cassava boules) and served with sauces made of local crops such as okra, seaweed and *savonnier*.[g]

By the time children reach 2 years, their diets generally align with those of adults, reflecting a transition to a broader variety of foods typically consumed within the household. Notably, there were multiple references throughout data collection to children being fed processed snacks such as doughnuts, cookies, and spaghetti, which were frequently included in their meals. There were few dietary beliefs or taboos acknowledged, though some participants warned that children should not eat the savonnier sauce because it can lead to an upset stomach.

The positive deviant mothers who participated in the research activities also relied heavily on bouillie as the cornerstone of their young children's diets. Although these mothers showed an understanding of the importance of good nutrition, many were limited in their ability to provide a diverse diet to their children, particularly during the lean season. This was well illustrated in an interview with a positive deviant mother from Doungoulou:

Q: Why do you think your child is different from most other children?
A: He's different because I take good care of him.
Q: How?
A: I feed him constantly, I give him the porridge made from sesame paste, I wash him morning and night, and things like that.
Q: What do you feed him, apart from porridge?
A: Apart from porridge nothing.
Q: Why nothing else?
A: It's because of a lack of resources.

**(Positive deviant mother, IDI, Doungoulou)**


Mothers attending a cooking demonstration, Doungoulou, Guéra.

g *Savonnier* is a fruit-bearing tree that grows in Chad. The fruits are used to replace sugar in porridge and also used as soap to wash clothes and utensils.

### Children's diets

#### Batha, Barh El Ghazel, Lac and Mayo Kebbi East

The diets of children under five years were broadly similar across the four regions and comparable to those in Kanem and Guéra. Children begin transitioning to solid foods after six months, with the progressive introduction of traditional staples like millet, porridge, and other grain-based meals.

In all regions, children often eat the same meals as adults, especially after the age of two. As in Kanem and Guéra, economic constraints were reported to limit access to diverse, nutrient-rich foods, and food is less available during the rainy season. However, in Barh El Ghazel, participants described a focus on diversifying children's diets, influenced by organisations like WFP and by the availability of commercial foods, such as cow's milk, biscuits, and spaghetti. Participants in Batha suggested that basic, local foods were central to their children's diets, with special foods like spaghetti and fruit seen as rare treats due to their cost. Mayo Kebbi East families reported relying on processed foods like canned *diédé* (spaghetti made locally from flour) when food is scarce; this was less common in Kanem and Guéra. Participants in Lac appeared to have a flexible approach to children's food choices, with no strict rules or taboos. In Lac, meat was often prepared as soup for younger children, something rarely mentioned in other regions.

## Diet of pregnant and breastfeeding women and taboos

The dietary practices of pregnant and breastfeeding women were largely consistent across the study sites in Kanem and Guéra. Most eat the same foods as the rest of the family, with few recommended or forbidden foods. Some traditional beliefs were identified that affected diet during pregnancy, such as avoiding spicy foods and Maggi seasoning cubes. Multiple participants suggested that pregnant women should avoid honey because it can cause miscarriage. Fathers and older women in Doungoulou and Sawa recognised the increased dietary needs of breastfeeding women, and a maman lumière interviewed in Doungoulou noted that breastfeeding mothers need more frequent meals. However, older women in Blablim and Doungoulou said some women worry that they may put on too much weight during pregnancy, leading to larger babies; this was viewed by some as undesirable as it could lead to a more difficult childbirth.

### Diet of pregnant and breastfeeding women and taboos

#### Batha, Barh El Ghazel, Lac and Mayo Kebbi East

There were notable differences between the regions in relation to pregnant women's diets. In Barh El Ghazel and Batha, pregnant women appeared to have more freedom to choose what they ate than in Kanem and Guéra, where food choices were more strictly dictated by cultural norms. In Mayo Kebbi East, specific food preferences, such as cravings for crickets, fish, and sorrel, seemed unique to the region and were not discussed elsewhere. In Lac, participants reported that pregnant women eat differently from other women to avoid malnutrition or 'overweight' (larger) babies at birth, similar to findings reported in Kanem and Guéra.

## Food availability and seasonality

### Seasonal variations in food availability and dietary diversity

Across Kanem and Guéra, household food consumption practices were said to be dictated by seasonal variations in food availability. While families enjoyed some variety of fresh produce immediately following the harvest, participants confirmed a significant decline in the availability of fresh foods, especially fruits and vegetables, as the lean season approached. During these periods, families often relied on stored staples like millet. This limits dietary diversity and affects overall nutritional status.

The reported post-harvest diet was largely consistent across the study sites. Communities highlighted staple crops such as millet, sorghum, maize, sesame, and groundnuts, often prepared as boule and bouillie. Millet boule was most typically eaten for lunch and dinner, accompanied by sauces made from okra or seaweed, while millet and sesame bouillie was commonly consumed in the morning, particularly for young children and breastfeeding women.

Some participants, including mothers and health workers, noted that in the post-harvest period, children's needs and preferences meant that their meal would differ from that of the rest of the family or that they would share the family meal supplemented by their preferred foods such as porridge and macaroni. One community leader in Tchidi confirmed:

'After the harvest, families generally eat millet, maize and sorghum. The children like to eat rice, macaroni, spaghetti and maize, so sometimes we sell some of it [the crops] to buy food we don't have at home. But the rest of the family eats the same things'.

**(Community leader, FGD, Tchidi)**

In Sawa, participants noted that food availability was usually better in the post-harvest season but that challenges exist during the rainy season. In October, maize, potatoes, groundnuts and fruits like guavas and watermelons were available. However, from March to September, food shortages were common, and reserves were often exhausted. Participants also noted that low rainfall and pests have adversely affected the food supply in Sawa in recent years.

P1: There is nothing available here, even with your money you won't find anything to buy.
P2: We've been living in poverty for some time now. This year in particular, production is very low. Sorghum production varies between 25 and 100kg. That's why, for example, on Mongo market day, we collect money for those who need sorghum and then give it to someone to buy for us. Because here in the village we don't have a cereal stock.
P3: We have yet another problem, the presence of striga[h] – a crop pest – in our plots.

**(Community leaders, FGD, Sawa)**

h Striga, also known as *tadou*, is a parasitic weed which grows on exhausted soil that can no longer produce good grain. When it sprouts, striga prevents good crop production.

In Doungoulou, available foods in the post-harvest season included peanuts, sesame, sorghum, millet, cowpea, cucumber, sweet potato, tomato, okra, sugar cane, locusts, *poids de terre* (a harder form of groundnut), watermelon and melon. A member of a fathers' focus group confirmed:

'We thank God because we have a little more food than we need. Except that in this lean season it's a bit difficult. What has helped us a lot in our village is that we have a store [from the RePER project[i]] and we put aside a little of our food like millet so that at times like these we can get by, except that the harvest wasn't good this year'.

**(Father, FGD, Doungoulou)**

In Tchidi, a mother in one focus group discussion explained, 'During the rainy season, most of the community eats rice, macaroni and spaghetti, while others eat millet. The sauces we use to accompany our food are sorrel and fresh okra'. Another mother continued:

'During the rainy season, there's not enough nutritious food. We eat what we have, because it's a hard time of year… the community's situation becomes very difficult. You find something like 1000F, 500F and you can only buy rice and sorrel leaves. Everyone lives according to their ability'.

**(Mother, FGD, Kanem)**

Food availability was said to be even more limited in Blablim than in other areas, with participants there describing a particularly challenging year. A common refrain was 'there is no food here'.

### Food availability and dietary diversity

#### Batha, Barh El Ghazel, Lac and Mayo Kebbi East

The workshops held in Barh El Ghazel, Batha and Lac revealed that, like Kanem and Guéra, these regions all face food insecurity. This leads to limited dietary diversity and reliance on starchy staple foods like millet and sorghum during the lean season. However, there appeared to be distinct regional differences: Barh El Ghazel relied heavily on imported food and, although the *ouaddis* (seasonal riverbeds) were fertile, they remained underutilised due to a lack of manpower. In Lac the unique security crisis, displacement, and dependence on humanitarian aid further reduced food availability compared to other regions. In contrast, participants in Batha reported that households had access to a broader range of foods despite economic challenges. In Mayo Kebbi East, the availability of out-of-season crops, facilitated by solar-powered water systems, allowed for greater dietary diversity compared to other regions. However, participants noted that during the dry season they often prepared lighter meals, such as okra sauce, due to food shortages.

### Effect of seasonal variations in food availability on meal frequency

Multiple participants across Kanem and Guéra highlighted the differences between their meal frequency during the lean season and that in the post-harvest season, noting that the number of meals was directly affected. During the post-harvest season, most families consumed three

i RePER (Strengthening Productivity and Resilience of Agropastoral Family Farms Project) is a collaborative project of the Government of Chad, IFAD, and others. It aims to support efforts to modernise Chad's agricultural sector and improve food security and nutrition. Among the project's activities is the establishment of community stores where staple crops can be stored for later purchase during the harvest season.

meals a day with some measure of diversity. However, as food became scarcer, households often then reduced their intake to two meals a day or even just one, often consisting primarily of millet or other starches. Children (and in some cases the elderly) were reported to be prioritised during periods of scarcity, with families trying to provide them with more food and more nutritious options such as beans and sesame.

P1: At this time of year, we only eat boule and nothing but boule.
Q: How often do you eat at this time of year?
P1: We eat once a day.
P2: In the morning we eat bouillie and in the evening we eat boule. But most households are vulnerable, so they eat once a day.

**(Community leaders, FGD, Sawa)**

### Food availability and meal frequency

#### Batha, Barh El Ghazel, Lac and Mayo Kebbi East

As in Kanem and Guéra, families in Barh El Ghazel and Mayo Kebbi East reported that they normally ate three meals a day in the post-harvest season but reduced their consumption to two meals during the lean season. As in Kanem and Guéra, participants in Batha faced financial and seasonal constraints on food access, but Batha's seasonal food shortages were even more acute. In Lac, communities reported facing acute food insecurity year-round but even more so during the lean season, when it is often a struggle to eat even twice a day. The region's heightened food insecurity appears to be linked to environmental and economic factors unique to Lac.

## Socioeconomic influences on food purchasing and consumption

### Impact of poverty and limited income-generating opportunities on food access

Participants across all study sites consistently highlighted poverty as a major barrier to a varied and nutritious diet, largely due to high levels of unemployment and limited income-generating opportunities. As a traditional healer in Tchidi stated, 'The biggest obstacle is unemployment; there's not enough work'. Fathers in a FGD in Sawa echoed this sentiment, listing key barriers to healthy eating as: 'poverty'; 'lack of resources'; 'unemployment'; 'lack of initiative'.

Pregnant women and mothers in Blablim highlighted how a 'lack of money' affected the quantity of food but also their ability to buy preferred foods. Mothers in a FGD there emphasised that the absence of money affected even their basic ability to eat:

P1: It's the lack of money that does it. If you have the money, you can afford anything you want.
P2: We don't, that's why we don't eat.
P3: It's the lack of money that does it all, we don't have money, we can't afford what we want...
P4: It's because of the lack of money; if you have money, you can cook macaroni, spaghetti, even rice.

**(Mothers, FGD, Blablim)**

High food prices compounded the impact of low income on food access. Fathers in Blablim identified food prices as the biggest challenge to maintaining a healthy diet, noting particularly high prices for foods imported from other regions and countries. One maman lumière from Doungoulou said her family could eat well if there was a good harvest, but lean season prices

made nutritious food less accessible. In Blablim and Sawa, participants noted the prohibitive cost of staples such as corn and millet.

Participants also suggested that prices in local markets were higher than in larger towns, which could lead to people purchasing food in other areas, even if this was impractical. For example, community leaders in Sawa noted that food prices were lower in Mongo than locally; similarly, in Tchidi, a positive deviant mother described traveling to the market in Mao because of the lower food prices. However, the cost and travel difficulties often offset the savings made in the larger markets.

### Coping strategies when food or money is scarce

To cope with economic pressures, several participants reported relying on credit from retailers when money was short. Others identified financial assistance, such as that provided by WFP through ASRADD, as crucial for supplementing household income and facilitating the purchase of nutrient-rich foods such as avocado, bananas and milk. A traditional healer in Doungoulou acknowledged that financial assistance (via the C4P programme) could improve diets, explaining that if community members could buy goats to produce milk, they would have a more stable supply for children. He suggested that the support would also allow them to buy staples like millet and supplements like macaroni to feed their children.

Some respondents mentioned practices around storing harvested foods or incorporating processed ingredients into meals, though they did not discuss specific techniques. Findings from Kanem and Guéra indicate that in the post-harvest season, preservation of food for future consumption was prioritised. One participant in Sawa explained, 'After harvesting, we decide together what to eat or keep'. Participants articulated challenges with long-term security and storage of dried goods like cereals and discussed the need for fences to protect household food supplies. They also referred to a need for greater investment in community infrastructure including construction of warehouses to store harvested products and repair of water pipes to improve irrigation, essential for agriculture. The difficulties experienced by communities during the lean season implied a need for improved preservation and storage methods to extend the usability of seasonal crops.

The role of community resources was highlighted, with several participants in Doungoulou referring to a community store built by the IFAD-led RePER project, where staples like millet and other grains are available to store during the harvest season and can be purchased at a reduced price. One father explained that a coro (2.5 kg container) of millet that sold for 500 CFA (USD 0.81) in Mongo could be purchased for 300 or 350 CFA (USD 0.48 to 0.56) through the RePER store. Many participants stressed the importance of initiatives like the C4P programme and the RePER project in Doungoulou in reducing financial barriers to nutritious foods.

Economic constraints also meant households resorted to selling portions of their harvest to cover essential costs, limiting the diversity and quantity of food they could retain for their own consumption. In Tchidi, fathers said they used harvest sales to purchase more expensive items such as macaroni, rice and manioc for their children.

Communities in both regions relied on family and community support, and participants highlighted the importance of solidarity and food sharing as a coping mechanism in times of need. One father in a FGD in Tchidi explained, 'Families often help one another during times of need, ensuring that everyone benefits from shared resources'. A positive deviant mother in Sawa noted that although it was preferable to sell the lettuce and vegetables grown in the cooperative garden, 'Sometimes we must share it between us to feed our families'. It was noted, however, that when food was scarce and consumption was reduced, so too was sharing between families.

### Poverty, limited income-generating opportunities and coping strategies

#### Barh El Ghazel, Batha, and Lac

Participants from Barh El Ghazel, Batha and Lac, also identified poverty, unemployment, and limited income-generating opportunities as key barriers to food access. Barh El Ghazel faced extreme poverty, high food prices, and significant out-migration. Unlike elsewhere, participants there said families may sell gold jewellery for money to buy food. In Batha, there seemed to be a lack of structural support for farmers and a greater dependence on credit, and participants mentioned the critical need for micro-credit to improve income stability and post-harvest market outcomes.

Lac's security crisis has disrupted traditional agricultural practices and increased reliance on humanitarian aid. Participants in Lac said that some mothers may purposely not give their children nutritional supplements, such as Plumpy'sup, to qualify for food assistance. Participants in Lac also referred to selling food supplements to generate income as an additional coping mechanism during lean times. They also said that inter-household food sharing was a critical communal coping strategy in response to limited food supplies, mirroring findings from Guéra and Kanem.

### Distance, transport and limited market access

Because of the limited food availability in the study areas, community members often suggested that they were compelled to travel to markets in other locations to find sufficient nutritious foods. In Blablim, Sawa, and Tchidi, and, to a lesser degree, Doungoulou, participants reported that there are no local markets. Due to the lack of local options, participants described traveling long distances (7-10 km or more) to access well-stocked markets and healthy food options.

In Blablim, participants remarked that the distance between the village and markets in other locations was a major barrier to food access. Some reported that most food was available in Djanra market, while others said they travelled as far as Mao (35 km). A maman lumière in Blablim explained that she would travel four to five hours to reach a well-stocked market: 'The market is very far, you leave here by donkey at 7.00 am and you must arrive between 11 am and 12 pm. It's a long way, but we have no choice, because there's nowhere closer to here'.

The challenges were similar in Sawa and Doungoulou, where positive deviant mothers reported traveling to Mongo market (one reported walking 5 km) to find foods to maintain a diverse nutritious diet for their families:

'The most difficult thing is going to Mongo often to look for food, as there's nothing here.'

**(Positive deviant mother, KII, Sawa).**

Transport options were said to be limited, costly, or non-existent, making journeys to markets more difficult. Participants in Tchidi discussed the lack of appropriate transport to navigate the terrain to the market in Mao:

P1: Some foods you can't find here, we don't have a market here. The route is sandy, not everyone has the means of transport (donkeys, horses, camels and others).

P2: As they say, there aren't enough shops on site to buy our rations, but to go to Mao, our means are limited. Everything depends on a person's capacity.

**(Religious and community leaders, FGD,Tchidi)**

### Market access

#### Barh El Ghazel, Batha and Lac

As in Kanem and Guéra, participants in Lac, Barh El Ghazel and Batha reported multiple challenges to their ability to access markets, though the extent and nature of challenges varied between and within regions. For example, it was reported that in northern Barh El Ghazel, markets were difficult to access because roads were precarious and transportation costs were a barrier, whereas in the south, markets were more easily accessible and better stocked. In Batha, market access was hampered by security challenges and seasonal isolation. In some parts of Batha, the isolation was prolonged, and road travel was particularly hazardous. In Lac, poor infrastructure and limited resources affected market access, and the security crisis exacerbated these issues, disrupting access and putting residents at physical risk. This created more vulnerable and isolated communities.

## Ability to produce food locally

Households use their homegrown crops, including peanuts, beans, and vegetables, to complement their meals when possible. Participants from agricultural communities like Doungoulou reported eating foods they cultivated themselves, reflecting a reliance on homegrown produce:

'After the harvest, we eat peanuts, beans, millet, sesame… All that we plough, we eat. Everything we plough is what we eat. Our children under two eat enriched porridge (peanut paste, millet flour mixed with beans and potatoes). The rest of us, on the other hand, eat red millet boule'.

**(Traditional healer, KII, Doungoulou)**

A positive deviant mother in Doungoulou also described growing her own food and selling some produce but retaining some for consumption:

A: Yes, I do market gardening.
Q: What varieties are available in your garden?
A: There's okra, sorrel, eggplant and moringa.
Q: Do you produce for consumption or for sale?
A: If you produce a lot, you sell some of it, but it stays for consumption.

**(Positive deviant mother, IDI, Doungoulou)**

However, community members trying to produce their own crops through home gardening and small-scale farming often faced multiple obstacles related to climate change, pests, water shortages, lack of inputs, limited equipment and infertile soil. Fathers, mothers and traditional healers in Doungoulou all confirmed that they need agriculture-related assistance.

Participants identified several factors that impaired their ability to grow their own food. In Blablim, Tchidi and Sawa, poor soil was cited. One community leader from Blablim said the village had 'practically no arable land' and explained that community members had to travel to Karca in the Lake Chad region to grow crops. Limited rainfall and related shortage of water for irrigation were also mentioned, as was a lack of inputs such as fertilizer. One father in Sawa noted the need for fertilizer, but in most areas participants reported that soil conditions precluded farming and gardening.

Participants in Sawa and Tchidi suggested that pests had destroyed the little they were able to grow. In Tchidi, a maman lumière said her household did not have adequate fencing and animals ate her crops. In Sawa, multiple participants said that crops had been destroyed by *tadou.*

P2: For more than 10 years now, our community has been experiencing a drop in production. This can be explained partly by poor rainfall distribution and partly by attacks by pests and the effects of climate change.
P3: The presence of pests on red sorghum…
P4: The obstacles facing the community are the enemies of cultivation. This year, here in our village, we're facing the problem of falling production.

**(Community leaders, FGD, Sawa)**

Even in Doungoulou, where fertile land was said to be available for small-scale farming and gardening and participants reported being able to grow their own food, their efforts were still restricted by a lack of farming equipment, other agricultural inputs like fertilizer, seeds and pesticides, and water. One mother in a focus group in Doungoulou explained that there was only one borehole in the village, and it was 'no good'.

### Local food production

#### Batha, Barh El Ghazel and Lac

As in Guéra and Kanem, insufficient rainfall and pests affected communities' ability to produce food across Lac, Barh El Ghazel and Batha. In Lac, security issues and displacement, referenced above, also disrupted agricultural practices. However, participants from Lac highlighted the unique inclusion in their diets of spirulina, a highly nutritious algae that grows around Lake Chad.

### Retailer challenges in sourcing, transporting and storing nutritious foods

Retailers face significant barriers to stocking diverse, nutritious foods, particularly fresh items, due to high costs, sourcing and transport challenges, and limited storage facilities that lead to spoilage. In Sawa, distance and expense were cited as primary obstacles, with retailers traveling as far as Cameroon, N'Djamena, Abéché and Mongo to obtain supplies. One retailer who participated in the research noted that while meat was 'permanently' available, other items were more challenging to secure. In Tchidi, seasonal shortages further complicated the situation, and another retailer explained that fresh foods were particularly scarce from March to May. In Blablim, distance was also a major issue, with some retailers traveling to Gourou or Lake Chad for supplies and, for larger quantities, even to Niger or Nigeria by public transport. Retailers from Blablim suggested that improved transport options and financial means to expand their range of products would help them overcome these challenges and improve food availability in the community. Retailers in Tchidi, Blablim and Sawa all mentioned the lack of storage capacity, including lack of appropriate storage equipment, as a material barrier to their ability to provide fresh foods to customers.

**Retailers face significant barriers to stocking diverse, nutritious, fresh foods.**

### Retailer and supply chain barriers

Batha, Barh El Ghazel and Lac

Although all the regions included in the research faced food supply chain challenges, Barh El Ghazel's were unique due to the region's reliance on long-distance imports. This raised costs, and the distance and difficult transport conditions led to loss of food quality and nutritional value. In Batha, as in Kanem and Guéra, retailers faced financial constraints and difficulties storing and preserving fresh foods. However, participants in Batha emphasised the role of electricity and cooperative organisation to improve food preservation, not mentioned elsewhere. In Lac, security concerns and geographic isolation, particularly due to Boko Haram's presence, exacerbated supply chain disruptions, creating a more difficult retail environment than in Barh El Ghazel, Batha, and Kanem.

## Influence of social groups and peer networks on nutrition practices

### Encouraging examples of nutrition practices amongst positive deviant mothers

Across all study sites positive deviant mothers demonstrated positive nutritional behaviours such as exclusive breastfeeding and complementary feeding of enriched porridge which they learned from mamans lumières and demonstrations at the FARNE sites. The adherence to exclusive breastfeeding and infant and young child feeding recommendations among these mothers was notable. The narratives from the positive deviant mothers also highlighted their commitment to improving their children's nutrition through a range of diverse foods, including fruits, vegetables, and animal products like fish and meat, provided the family had the means to source these foods. Mothers in Blablim reported incorporating items including fish, meat, and a variety of snacks into their children's diets; positive deviant mothers in Doungoulou shared similar insights:

'I breastfeed my children exclusively for the first six months, then I give them water with other foods. It's mainly enriched porridge made from beans, peanuts and red millet. Sometimes meat soup… We also now give eggs. Before, we didn't give eggs to children because it was thought that they would become deaf and dumb. But now we give them without any problem. I wash my children well and we sleep under mosquito nets.'

**(Positive deviant mother, KII, Doungoulou)**

### Role of positive deviant mothers

Batha, Barh El Ghazel, Lac and Mayo Kebbi East

Positive deviant mothers across all regions were described as 'role models', sharing the goal of improving maternal and child nutrition in their villages and at the FARNE sites through common practices such as promoting exclusive breastfeeding, complementary feeding, and the use of local, nutritious foods. They also emphasised the importance of antenatal care, vaccinations, and hygiene. In Lac, participants suggested that the promotion of ANC by positive deviant mothers was having a direct effect on the number of women delivering in the health centre.

### Grandmothers' influence on family dynamics and household decisions

Grandmothers have significant influence on family dynamics and maintaining tradition. Grandmothers were said to be a symbol of continuity and respect and had a role in anchoring the family to cultural values and providing wisdom.

P1: We sit next to her so that she can give us advice, tell us old stories… She immerses us in the fictional world through stories, anecdotes, myths, and legends.
P2: She draws our attention to what's wrong in the house, tells us to wash the children and keep the yard clean.

**(Older women, FGD, Tchidi)**

Grandmothers were also conduits of intergenerational knowledge about food, health and nutrition including traditional food preparation, food preservation, and the nutritional value of foods. Participants suggested that they played an important role in providing guidance around child nutrition, for example in the preparation of porridge. In FGDs, older women confirmed that the nutrition and breastfeeding advice they gave their daughters and daughters-in-law was widely accepted. In Blablim, older women agreed that young mothers 'listen to us and do what we say'; 'mothers take our advice into account. If she doesn't know, the grandmother can teach her'.

Several women reported that grandmothers help protect and manage household resources, including food, which gives them a measure of influence over the family's nutrition-related decisions. This oversight role ensured that their advice about food quantities, nutritional value, and meal preparation was followed. They may also guide food management, particularly during times of scarcity, to ensure food supplies last. In this way they indirectly provided advice on nutrition and food security.

### Role of grandmothers

Batha, Barh El Ghazel, Lac and Mayo Kebbi East

Grandmothers appeared to play a significant role in advising on child nutrition, health, and traditional caregiving in the four regions, comparable to Kanem and Guéra. However, in Batha and Lac, the roles of grandmothers were more extensive, and they were reported to place greater emphasis on modern health practices. In Batha, grandmothers encouraged healthcare utilisation, including antenatal care and vaccinations, and preventive practices such as using mosquito nets. In Lac, participants reported that grandmothers focused on malnutrition prevention, encouraging uptake of interventions like those from WFP and ASTRADD. This was a shift from the more traditional roles seen in Kanem and Guéra, where advice and practices were centred around cultural knowledge and self-sufficiency.

## Influence of gender roles on household nutrition practices

### Clearly defined women's and men's roles in health and nutrition

In Kanem and Guéra, women, especially mothers, held primary responsibility for food-related tasks and childcare, including meal preparation, food shopping and ensuring the health and nutritional needs of children were met. Even when ill, women were typically expected to fulfil these duties, with men providing care only rarely. As an older woman in Doungoulou explained:

'In the morning, she [the mother] prepares the bouillie and gives it to the family, then she washes the children before going to the field. Once she's back with the bundle [from the field] and the vegetables, she must prepare dinner and present it to the family. Once the children have finished eating, she spreads out the mosquito nets and makes them sleep under them – that's the role and responsibility of a mother'.

**(Older women, FGD, Doungoulou)**

In contrast, men's role in children's health and nutrition was said to be largely supervisory and centred on decisions about resource allocation and food distribution and selection. Men were consistently described as the primary earners, providing household income that women then used to buy food and manage household supplies. An older woman in Tchidi explained:

'At the start of the morning, the woman wakes up her children and prepares them something to eat. She orders the boys to go to Koranic school and the eldest daughter to wash the pots and cups. The mother of the household tells herself that she is responsible for organising the house. She, together with her eldest daughter, must manage the food that the husband has bought'.

**(Older women, FGD, Tchidi)**

Cultural expectations seemed to define this division of labour, emphasising that men and boys were the primary earners but remained minimally involved in day-to-day household management. This sentiment was particularly strong in Tchidi, where women described a strict expectation that boys and men should not cook, and that food purchasing, preparation and kitchen management were regarded as exclusively a mother's duty. As a positive deviant mother concluded, 'At home, I prepare the food because I don't have daughters who can cook. My older children are boys, and in our culture, boys do not cook'.

**Women held primary responsibility for food-related tasks and childcare. In contrast, men's role was said to be largely supervisory and centred on decisions about resource allocation and food distribution and selection.**

### Gender roles and household nutrition practices

#### Batha, Barh El Ghazel, Lac and Mayo Kebbi East

In general, household gender roles in the four regions were very similar to those observed in Kanem and Guéra. Men primarily controlled financial resources while women handled food preparation and household responsibilities. However, some regionally specific practices were identified. In Batha, women's financial dependency on men was reported to have grown, compared to the greater financial autonomy they enjoyed in the past. Historically, women were given an agreed sum every day to spend on household needs as they thought appropriate. Now, however, women participants confirmed that they must ask their husbands for money, even for small purchases like salt. In Mayo Kebbi East participants described stricter male authority and postpartum labour demands, which further complicated women's roles and exacerbated malnutrition risks.

In all four regions there were gender differences in food allocation, with men typically prioritised in food distribution within the household. This contrasted with Kanem and Guéra, where no such practices were discussed. In Barh El Ghazel, Batha and Mayo Kebbi East, traditional norms dictated that the best portions of food be given to the male household head, whilst women and children received less-desirable parts or had to wait until the men had eaten. In Mayo Kebbi East, food allocation rules were particularly rigid: women were not allowed to eat until the men had eaten and could not eat the same quantity or quality of food.

In Lac, however, children were prioritised in food allocation based on their need for sufficient nutritious food to grow and stay healthy. Participants in Lac also mentioned that men in the region may eat out rather than at home, a practice not seen in other regions. In Barh El Ghazel, participants described a shift towards more equitable nutritional practices, with some husbands now sharing meals equally with their wives and children.

## Gender dynamics in household decision making

In Kanem and Guéra, traditional gender norms strongly influenced household decision making authority, with men typically retaining financial control and women managing household affairs using the funds made available to them. Across the four study sites, men were viewed as the primary decision makers, and their financial control translated into overall authority. As a community leader from Sawa explained: 'it's the man who has the last word'. However, there were signs of evolving practices in Sawa, where some men supported collaborative resource management and decision making. One male community leader described his approach: 'For me it's simple, I take part [of the harvest] and part I leave to the woman to manage herself'.' Another suggested, 'After harvesting, we decide together what to eat or keep'.

Decision making about healthcare access reflected varying degrees of male dominance. In Doungoulou and Tchidi, men made most healthcare decisions, although women may have input. In Sawa and Blablim, both parents were more likely to be involved in decisions about healthcare access, although men often retained the final say.

Authority over food purchases and meal planning similarly varied across and within the field sites. In some cases, women controlled food selection and meal planning for the family, while in

others, men decided. When asked if women can decide for themselves about food preparation and purchasing, a community leader from Tchidi responded, 'Yes! There are these kinds of practices. But it depends on the husbands. Some men don't accept these kinds of practices. But there are men who can't control their wives, their only thing is to follow'.

Even when women did make decisions regarding food, their choices were often limited by the resources provided by the men of the household. As a father in Doungoulou noted, 'When the man gives the money for the food ration, it's the woman herself who has to go out and buy food to take home'. A mother in Blablim clarified the boundaries of women's decision-making power, saying, 'There are no obstacles to women deciding on the family diet. But the culture does not allow women to decide on other things in the family besides food, which the man also accepts. The woman is weighed down by her husband'.

### Constraints on women's autonomy and agency

In many of the participating communities, women's autonomy was described as restricted by the expectation that they had to seek permission from their husbands before making most decisions, such as selling goats and other animals. As mothers in a focus group in Blablim emphasised, 'If you don't ask [your husband], he won't accept'. Women who attempted to make independent decisions often faced stigma. This highlights the deep-rooted cultural barriers that inhibit women's agency. Women feared that exercising autonomy may label them as disrespectful or irresponsible, potentially leading to social ridicule for their husbands. As one mother in Tchidi explained, 'When a woman makes her own decision, people refer to her husband as a husband who has turned his head, he is bewitched'. It was well understood that while men may assert that they consult with women on certain decisions, they ultimately maintain the final say when disagreements arise.

The influence of community elders, particularly grandmothers, can further restrict a woman's agency when older women reinforce traditional norms prioritising male authority and constraining women's roles within the household. Negative community perceptions of independent women further complicated this dynamic; community leaders in Tchidi expressed sentiments such as, 'These types of women, there are many of them, some decide on their own but most don't succeed'; 'Women who make their own decisions are free women [divorced]'; 'When a woman decides on her own without her husband's consent, that's not called a wife'. Those who challenged established gender roles often faced social scrutiny and stigma, and this acted as a deterrent for others to exercise any autonomy and decision-making power in both nutritional and overall domestic contexts.

There were indications that women may gain some autonomy when managing externally provided financial resources, such as the assistance provided by WFP. However, the relatively small amount of assistance limited their empowerment. Access to income-generating activities was highlighted as essential to enhancing women's decision-making power. However, across all sites, men broadly expressed a desire to maintain traditional power dynamics. This was particularly pronounced in Doungoulou, where male community leaders voiced concerns that women's empowerment could disrupt established norms.

P6: If women have power, they exaggerate too much, they want to show off. And we men can't stand that. And that can lead directly to divorce.

P5: Women are ungrateful, and if they have power, they'll be even more unbearable. Managing them at home is going to be really difficult.

**(Community leaders, FGD, Doungoulou)**

### Women's power, autonomy and agency

Batha, Barh El Ghazel, Lac and Mayo Kebbi East

In all four regions, as in Kanem and Guéra, women's autonomy and decision-making power were described as being constrained by traditional gender norms. However, there were notable differences in the degree of women's participation in household decision making. Women in Barh El Ghazel appeared to experience the most restrictions and were said to have little agency over household decisions. In Mayo Kebbi East, participants suggested that while men have absolute authority, household practices are more flexible, with husbands and wives engaging in joint decision making. In Batha, men also retained overall decision making power, but women's ability to voice concerns and participate in decisions related to their children's health had increased. Lac was unique in that women contributed financially to the household – something not observed in other regions. Despite this, their autonomy remained limited by traditional gender roles, with men retaining the final say in financial and household matters.

## Factors important in preventing malnutrition

### Awareness of the causes, signs and symptoms and prevention of malnutrition

Participants in all study locations were broadly aware of the causes of malnutrition. There was some variation in descriptions of the causes of malnutrition, but factors commonly mentioned included poverty, hunger, and poor hygiene practices. In Tchidi, malnutrition was attributed to a lack of food and inadequate consumption by children, while in Sawa, issues like poor family planning, closely spaced pregnancies, lack of hygiene, and seasonal food insecurity were reported. In Doungoulou, malnutrition was also linked to local risk factors such as unhygienic conditions, malaria, and giving children unheated leftover food. Across all regions, poverty and limited access to clean water were persistently emphasised as contributing to malnutrition.

Participants reported that they appreciated awareness-raising efforts that emphasised the importance of cleanliness and proper hygiene to prevent malnutrition, along with family planning and prenatal care. A district health official in Tchidi explained, 'For malnutrition, we also take care of women in pregnancy.... After delivery, there is a post-natal consultation, we encourage them to use family planning to space their births so that they don't have unwanted pregnancies'. Despite increased nutrition literacy, food scarcity and poverty continued to hinder implementation of known preventative measures in many communities.

In Sawa, participants in the mothers' focus group knew the signs of childhood malnutrition and some were able to detect them easily. Many mothers are aware of the significance of a child's middle upper arm circumference (MUAC) measurement. The health centre director in Sawa suggested that some mothers were actively monitoring their children's health using MUAC tapes. However, despite this increased awareness, multiple participants referred to gaps in knowledge regarding nutrition and infant feeding practices, underscoring the need for continuous education and outreach.

Consistent with participants' understanding of the causes of malnutrition, prevention activities across the study sites were centred around improving hygiene practices, raising awareness, and encouraging family planning. Common strategies to prevent malnutrition included exclusive breastfeeding, preparing enriched porridge for children using local ingredients,

and maintaining cleanliness in both homes and personal care. Communities emphasised the importance of following health workers' advice, taking children to health centres for early medical care, and practicing good eating habits.

'It takes a conscious effort on the part of parents to take good care of their children and give them nutritious, complementary foods after the family meal. Then, the child needs enriched porridge, a little soup and a little egg too. That way, he'll develop quickly'.

**(Maman lumière, KII, Doungoulou)**

### Knowledge of causes and prevention of malnutrition

#### Batha, Barh El Ghazel, Lac and Mayo Kebbi East

Community understanding of the causes and prevention of malnutrition were similar to those expressed in Kanem and Guéra, including poverty, poor hygiene, and limited access to nutritious foods and clean water. However, important differences were identified. In Barh El Ghazel participants referred to early weaning and dietary deficiencies (of milk, for example, which was reported to be in short supply in the area) as important causes of malnutrition. Participants in Mayo Kebbi East focused on poverty and hygiene as the main causes of malnutrition, but they also emphasised the role of prenatal care and of discouraging harmful infant feeding practices.

## Lack of access to health and malnutrition treatment and services

Access to health and malnutrition interventions and services was reported to be hampered by various barriers, including the lack of available supplements, distance and lack of transportation to the health centre. While health centres were known to offer treatment for severe acute malnutrition and moderate acute malnutrition, participants reported that insufficient supply of Plumpy'Sup could hinder recovery for some children.

### Access to health and malnutrition treatment and services

#### Batha, Barh El Ghazel, Lac and Mayo Kebbi East

Participants in Batha and Barh El Ghazel referred to similar challenges in accessing treatment and health services for malnutrition to those reported in Kanem and Guéra. In Batha, there was particular emphasis on reducing travel distances to malnutrition services and promoting family planning. Participants in Barh El Ghazel emphasised that the region's larger geographical area increased the difficulty of reaching all communities with health services and malnutrition awareness programmes. Participants in Mayo Kebbi East suggested there were greater gaps in awareness of malnutrition interventions and in access to those interventions than seen in Kanem and Guéra. Participants highlighted that many villages could not access malnutrition interventions as health centres lacked the capacity to provide malnutrition treatment or routine MUAC screening.

## Persistent cultural beliefs about malnutrition

Despite general awareness of malnutrition interventions, cultural beliefs also continue to play a complex role in the management of malnutrition in Kanem and Guéra. Some traditional notions, such as the belief in *'chitane'* or evil spirits as causes of malnutrition, were thought to have declined due to recent awareness campaigns. However, for some parents, engagement with traditional healers remains the first line of care for children's health

concerns, including malnutrition. Although there were no reports of the practices of removing the uvula or teeth as identified in the literature review, traditional healers did report continued use of some practices that would likely impede recovery or cause additional health problems.

'I don't really have any activities to help parents prevent malnutrition. I cut one of the child's nerves in the forearm so that the dirty blood, black blood flows for a few minutes. Then I make the child drink lukewarm water mixed with natron [sodium bicarbonate]. Once this has been done, the child is cured'.

**(Traditional healer, KII, Doungoulou)**

### Cultural beliefs

#### Batha, Barh El Ghazel, Lac and Mayo Kebbi East

Cultural beliefs, such as the belief in *chitane*, also persisted in Barh El Ghazel, Batha, and Mayo Kebbi East, as in Guéra and Kanem. Participants referred to food taboos and reliance on traditional healers, although they noted that awareness campaigns were slowly encouraging parents to access biomedical treatments for malnourished children. In Lac, participants implied that traditional healers were less important and there was greater reliance on biomedical care and health centres, although access remained limited by distance and poverty. Participants indicated a preference for formal examinations provided at the health centre to diagnose illness, such as taking a child's blood for testing.


MUAC measurement, ASRADD partner providing health and nutrition education, Doungoulou, Guéra.

# C4P programme considerations

This section presents participants' responses to specific questions about the C4P programme. However, it was apparent from their responses that some participants were referring to assistance programmes, or elements of assistance programmes, other than C4P. For example, one mother in Tchidi explained, 'C4P assists us with cash for food security, enriched flour to prevent malnutrition, Plumpy'Nut to take care of our malnourished children, and awareness-raising to change behaviour in terms of hygiene'. However, neither Plumpy'Nut nor enriched flour is part of the C4P programme.

## Knowledge and perceptions of the C4P programme

Some community members were aware of the C4P programme, and it was recognised as providing cash and supporting vulnerable groups such as pregnant women, breastfeeding mothers and children. Despite general awareness of the programme, however, some participants said they had little information about how the programme works. Participants reported that information sessions were held by WFP and ASRADD, but not all individuals felt equally informed, particularly men or those who are not intended participants in the programme. Participants expressed an appreciation for cash assistance in general, noting its significant impact on improving family well-being, especially in terms of food security and nutrition.

Across Tchidi, Blablim, and Sawa, participants consistently reported that financial assistance had improved their diet and access to food. Women confirmed that they could buy more food and vary their family's diet, and were purchasing higher-quality items such as milk, eggs and beans. In Tchidi and Blablim, where implementation of the C4P programme had started, participants expressed satisfaction with how the programme was organised. The distribution process was described as safe, equitable and well-structured. Overall positive attitudes in these areas suggested that the C4P programme design and implementation were generally well-received. Findings from Blablim highlighted the community's positive engagement in programme discussions, with participants noting the establishment of a community-level committee to oversee the programme.

However, some non-recipients felt the programme was unfair as only certain groups (pregnant and breastfeeding women, children) were eligible. Women in a FGD in Doungoulou explained, 'What we don't like is the fact that some find, and others don't'. Health workers in Sawa agreed, 'It's unfair to give only to certain women and leave the others'. The exclusion of some segments of the community from the programme caused frustration, particularly in cases where people felt themselves equally vulnerable but did not meet the programme's inclusion criteria.

## Challenges and gaps in the C4P programme

Participants identified the level of communication from WFP and other cooperating partners as a key challenge in C4P implementation. Community members wanted further information about the programme processes, and without clearer communication they reported feeling inadequately informed, confused and frustrated.

The amount of assistance was also an issue. In Tchidi, Blablim and Doungoulou, several participants, including pregnant and breastfeeding women, suggested that the amount provided was not enough to fully meet the needs of their families, and there were repeated requests for increased financial assistance. In Sawa, several participants, especially women, suggested that the financial assistance was provided for too short a

period to have a lasting impact, particularly in addressing long-term food security or supporting income-generating activities.

### Suggestions for improvement

Participants across all locations highlighted the need for greater community engagement in decision making about the programme. They suggested involving community leaders and chiefs, health workers, and local committees more actively in the participant selection process. This would promote transparency and ensure those most in need were prioritised. There was a call for better engagement of men and other community members to foster broader community support and understanding of the programme's goals.

Consistent with the challenges identified in Sawa, several participants in Tchidi and Blablim (where the C4P programme rollout had started at the time of the research) expressed a desire for increased and more frequent or ongoing cash transfers to provide consistent support, particularly given the cyclical nature of food insecurity. In Sawa and Doungoulou (where the C4P programme rollout had not commenced at the time of the research) participants expressed the need for clearer, more consistent communication from WFP and cooperating partners. In all study sites, participants said that vulnerable community members needed to be better sought out and included. Health workers in Blablim concluded that 'WFP needs to change its strategy a little, to see who is vulnerable and who is not. Some people aren't vulnerable [but are included], and some vulnerable people aren't benefiting.

### C4P programme considerations

#### Batha, Barh El Ghazel, Lac and Mayo Kebbi East

In all four regions, communication related to C4P programme implementation relied on existing local networks (e.g., village chiefs, health centres). Across the regions, participants shared challenges related to the clarity of information provided, follow-up by staff, and perceived fairness in participant eligibility. In Barh El Ghazel and Lac, where programme implementation was more established, participants reported issues related to participant selection and payment delays. In Batha and Mayo Kebbi East, where the programme was in an earlier phase, participants said community members struggled to understand and engage with the programme. In Lac, participants identified interpersonal conflicts arising amongst women excluded from the C4P programme. This echoed the issues of 'unfair' selection reported in Kanem and Guéra. However, in Lac the perceived exclusion of some women seemed to fuel resistance to C4P awareness-raising efforts.


Mother and daugher, Doungoulou, Guéra.

Section 3

# Perspectives on communication and community engagement for promoting health and nutrition practices

In this section, the study examined perspectives on communication and community engagement for promoting health and nutrition practices, as below:

- **Trusted sources of health and nutrition information**
- **Preference for personal and direct communication**
- **Continuous community engagement reinforces health and nutrition messages**

## Trusted sources of health and nutrition information

Trust emerged as a critical factor in Kanem and Guéra, influencing the community's reliance on certain individuals or organisations for health and nutrition information. Participants expressed a preference for seeking advice from individuals with whom they had an established relationship, such as local leaders and elders, community health workers and mamans lumières. A small minority of participants appeared cautious of those they considered to be 'outsiders', unless these individuals had cultivated a sustained rapport with the community. This preference for trusted relationships was exemplified by organisations like ASRADD and WFP, both of which had fostered long-term partnerships within communities.

Religious leaders were frequently mentioned as trusted sources of health and nutrition information, often seen as authoritative due to their spiritual leadership. Many community members perceived spiritual guidance and health advice as interconnected, reinforcing the roles of these leaders in disseminating health messages. As one community leader in Tchidi affirmed, 'Above all, we are religious people. God has asked us to respect and follow your leaders if they don't ignorantly interfere in your religion. That's why we put our leaders first in everything we do'.

Trust in these leaders was derived from their positions of authority and respect within the community and from their essential role in guiding community decision-making processes related to health and nutrition. In Blablim and Sawa, mothers, fathers and health workers noted their trust in religious leaders because 'they live with us' and possess vital information. One community health worker in Blablim emphasised, 'In my opinion, we need to rely much more on religious leaders to convey messages about malnutrition, health centre attendance, and hygiene'.

Community health workers were also widely recognised as key contributors to raising awareness about health, hygiene, nutrition, and prenatal care, often working in collaboration with organisations such as ASRADD, WFP and UNICEF. Trust in these health workers was consistently high across all participant groups, particularly amongst mothers and pregnant women who reported that they relied heavily on community health workers and mamans lumières for guidance. A mother in Blablim remarked, 'We want to be informed by mamans lumières and relais communautaires'. This was echoed by a group of mothers in a FGD in Tchidi: 'In this village, we get information about health and nutrition from the nurses, from the mamans lumières and from the community focal points'. Participants in Tchidi and Sawa frequently identified community health workers as

their primary source of health and nutrition information, attributing their trust to these health workers' ongoing relationships with the families they serve.

Traditional healers, community and religious leaders, fathers and older women also valued and trusted information provided by community health workers. However, these participant groups often considered multiple trusted sources of information. One father from Blablim explained, 'Usually, it's the wise men, the community leaders, who take on the task of advising people to eat healthily. After them we go to the health workers'.

Participants also highlighted the significance of mamans lumières in the community's health communication strategy, recognising them as reliable information sources who facilitated health education. A traditional healer in Tchidi highlighted the role of a specific maman lumière, stating, 'There's a woman, she's a maman lumière, and we've made her responsible for raising awareness in the community about malnutrition. She's used to raising awareness in the community, and she always tells the truth'. Mamans lumières themselves explained their role as community leaders focusing on family health, hygiene practices, nutrition education and child welfare. They described engaging in various health promotion activities, including household visits and awareness-raising sessions to share advice on hygiene and nutrition. One maman lumière in Doungoulou confirmed, 'I was trained in the preparation of enriched porridge, hygiene, and in raising awareness among households'. These activities positioned them as vital actors in the community's overall nutrition education efforts, and they expressed pride and dedication in their work, often motivated by the positive health outcomes they observed in the children and wider community. As one maman lumière in Doungoulou noted, 'I love the work I do, and it gives me pleasure to see the children in good health'. Another in Blablim confirmed, 'We recognise [the impact of our work] by the physical change we see in the child'.

Trust and acceptance of mamans lumières was reported across participant groups. In Sawa, health workers acknowledged the importance of mamans lumières in awareness-raising. In Tchidi, their network was often mentioned alongside ASRADD and WFP, indicating that the community viewed the mamans lumières as equally trustworthy information sources.

Grandmothers and mothers were also recognised as key sources of advice on food and nutrition. These women were known to have a wealth of intergenerational knowledge, particularly around pregnancy and early childhood care, and they were highly respected within the household. As one participant noted when asked about trusted information sources, 'It's grandma, because we copy from her'. It was suggested that advice about malnutrition may be more readily accepted from mothers and grandmothers than from other community members, due to stigma around malnutrition. As an older woman in Sawa explained, 'If the advice comes from the parent, she accepts it, but if it comes from someone else, like neighbours, close relatives, or friends, she takes it as mockery'.

Organisations such as ASRADD, WFP and UNICEF were mentioned as sources of nutrition and health information, for both community members and health workers. One health worker confirmed, 'We trust ASRADD because they have contact with us. They also call us'. Direct personal engagement fostered confidence and rapport within the community, encouraging individuals to seek advice on health matters from such organisations. Trust also appeared to be linked to the tangible support and benefits organisations provided, including training for community health workers and mamans lumières, materials for the preparation of enriched porridge, and MUAC measurement tapes for malnutrition screening.

### Trusted information sources

Batha, Barh El Ghazel, Lac and Mayo Kebbi East

The most trusted local figures (traditional leaders, village chiefs, *'relais communautaires')* were consistent across the four regions. Health centres were also universally acknowledged to be trusted sources of information, particularly on nutrition and child health. NGOs and facilitators were more frequently cited as trusted sources in Barh El Ghazel and Mayo Kebbi East compared to Lac and Batha. Informal venues like markets and mosques were particularly valued in Barh El Ghazel and Lac.

## Preference for personal and direct communication

Participants in Kanem and Guéra identified radio as a valuable tool for delivering health- and nutrition-related messages to the community. However, some participants noted that while radio could theoretically serve as a useful communication channel, limited access was a key barrier.

Many participants highlighted the value of more personal and direct forms of communication, such as public criers, door-to-door visits, and community meetings. These methods were perceived to be more effective due to the face-to-face engagement. As one positive deviant mother in Blablim asserted, 'To convey messages properly, you have to go from door-to-door'.

Participants preferred household-level communication to promote understanding, especially when combined with visual aids. A community health worker explained, 'For us, the relais communautaires, we opt to go household-to-household awareness raising. We pass on the message to the women through the image boxes [flip charts/booklets]. We show them an image and then comment on it'. This approach of using visual materials to illustrate healthy behaviours was consistently reported to improve understanding, especially in communities with low literacy levels.

### Communication preferences

Batha, Barh El Ghazel, Lac and Mayo Kebbi East

Across the four regions, participants agreed that communication tools like radio were preferred. However, the use of radio appeared to vary significantly according to coverage and accessibility, with some areas relying heavily on it (e.g., most of Batha, Lac) and others facing barriers to its use (e.g., Lamka in Batha).

Religious venues, such as mosques, were particularly emphasised as important spaces for sharing information in Lac and Barh El Ghazel but were less frequently mentioned in the other two regions.

Participants in Lac and Mayo Kebbi East noted the importance of respecting hierarchical communication models and expressed a preference for information delivered this way. In these models, information originates with the highest status and most respected individuals in the community, such as village chiefs and Imams, and is passed down to, and shared by, health workers.

Some groups, like those in Barh El Ghazel and Batha, highlighted social networks like WhatsApp for ease of dissemination, others (e.g., Mayo Kebbi East) did not mention digital platforms.

## Continuous community engagement reinforces health and nutrition messages

Consistent community engagement and awareness campaigns were widely recognised as instrumental for promoting behaviour change around nutrition, hygiene and exclusive breastfeeding. Across the study sites participants reported that community-based communication – delivered through a mix of channels including radio broadcasts, public criers, and door-to-door visits – was important to reach diverse population groups.

Participants highlighted that advocacy and education sessions organised by key community figures (such as mamans lumières and health workers) and supported by community leaders further strengthened these engagement and awareness campaigns. Sessions often incorporated hands-on activities like cooking classes, which helped drive positive hygiene and nutrition practices at the household level. A maman lumière in Tchidi explained:

'The key activities that we are carrying out in this locality are: raising awareness among mothers and children on the various themes mentioned above, screening children and mothers and preparing porridge. We bring together women and children from 15 villages for this activity. There has been a visible change in the mothers: hand washing before and after meals, the use of nappies and so on'.

**(Maman lumière, KII, Tchidi)**

These awareness-raising activities were described as a continuous effort to reinforce key messages over time, rather than one-off isolated events. Many participants stressed that regular awareness-raising was critical to achieving lasting positive changes in nutrition for children, mothers, and families. One mother in Tchidi noted, 'You have to get everyone together to raise awareness and raise it again and again, and you have to keep raising awareness'.

**Across the study sites participants reported that community-based communication – delivered through a mix of channels including radio broadcasts, public criers, and door-to-door visits – was important to reach diverse population groups.**

## Community engagement

### Batha, Barh El Ghazel, Lac and Mayo Kebbi East

Participants in all regions emphasised the importance of community-based, inclusive communication involving trusted figures and a range of activities. These included socio-cultural and sporting events (Barh El Ghazel and Lac), women's association-led activities (Batha), and interactive training for women leaders and youth leaders (Mayo Kebbi East). However, there were regional differences in the platforms used, challenges faced, and the need to focus on long-term engagement.

Participants in Mayo Kebbi East highlighted the need for consultations with all stakeholders to ensure engagement was visible. In Lac participants placed more emphasis on mosque-based gatherings and socio-cultural events for community mobilisation. In both Barh El Ghazel and Mayo Kebbi East participants advocated for involving fathers and youth leaders more actively in nutrition initiatives to ensure community-wide engagement. In Lac and Batha, the important role of community committees and associations in sustained community engagement was noted. However, challenges related to the lack of compensation for volunteers on these committees was also highlighted, and it was suggested that motivation for voluntary but influential community members should be addressed.

While participants in Kanem and Guéra prioritised consistent messaging and practical demonstrations, those in other regions stressed the need for material support to consistently engage community, stressing the importance of linking engagement to livelihood support (e.g., small livestock, market gardening). In Barh El Ghazel and Lac, for example, participants emphasised the need for tangible support (e.g., seeds, warehouses, pumps and training centres) to ensure sustained engagement.




ASRADD partner delivering health and nutrition education, Doungoulou, Guéra.

# Conclusion and recommendations

This formative research provides critical insights into the complex factors shaping nutrition practices in Chad. The findings emphasise the centrality of socio-cultural, economic, and gender dynamics in influencing health and nutrition behaviours, as well as the importance of leveraging existing community knowledge, trusted networks, and local capacity to drive change. The findings highlight the need for a socially embedded and culturally sensitive programmatic approach that builds on community awareness of seasonal food availability, local nutritious foods and hygiene practices.

The formative research established a foundation for the development of the SBC strategy to complement WFP's C4P and integrated resilience programming to help improve dietary diversity, strengthen community capacity, and promote optimal health and nutrition behaviours. The research also provided insight into ways in which WFP may enhance the effectiveness, inclusivity and sustainability of the C4P programme. Grounded in the lived experiences of participating communities, these implications and recommendations offer a roadmap for WFP and its partners to deliver contextually relevant and impactful interventions that address Chad's urgent nutrition challenges.

This conclusion is arranged in two sections; the first focuses on implications of the formative research for the development of SBC strategy; the final section focuses on recommendations for the C4P programme.

## Implications for the development of the SBC strategy

Building on the formative research findings, the research identified five key implications for the development of the SBC strategy, to ensure it effectively addresses local realities and is actionable. These implications highlight the importance of leveraging trusted people and sources of information, embedding the strategy within social and cultural contexts, and building on community awareness of seasonality and local nutritious foods. They also emphasise the need to capitalise on existing knowledge of nutrition and hygiene practices and lay the groundwork for a gender-sensitive approach. These considerations provide a foundation for designing an SBC strategy that is contextually relevant, actionable, and aligned with community needs.

1. **Leverage trusted people and sources of information**
2. **Ensure the SBC strategy is socially embedded and culturally appropriate**
3. **Build on community awareness of seasonality and knowledge of local nutritious foods**
4. **Build on existing knowledge of nutrition and hygiene practices**
5. **Lay the foundations for a gender-sensitive SBC strategy**

## 1 Leverage trusted people and sources of information

Leveraging established trusted information sources is the basis of a successful SBC strategy. The formative research findings identified the most trusted individuals and communication channels in each of the six regions. Below is a list of implications, and potential actions, derived from the findings on communication and community engagement preferences.

### Implication 1

Leverage established relationships for trust

**Potential action**

- **1.1** Collaborate with local leaders (religious leaders, village chiefs, and community elders), community health workers and mamans lumières as trusted channels for health and nutrition messaging.
- **1.2** Involve local leaders in the co-creation of the SBC strategy, activities and messaging to encourage ownership.
- **1.3** Invest in the training of local leaders to ensure they convey accurate information, build on their existing knowledge and create a positive local environment for change.
- **1.4** Leverage local leaders (e.g., village chiefs, religious leaders, community health workers, and mamans lumières) as trusted intermediaries to facilitate the collection and dissemination of community feedback on C4P implementation.
- **1.5** Train local leaders on the importance of feedback mechanisms, including how to support the safe and confidential reporting of concerns related to programme access, inclusion and protection.

### Implication 2

Strengthen the role of mamans lumières and expand their reach and capacity

**Potential action**

- **2.1** Provide additional focused training to mamans lumières on nutrition promotion, aligned with the aims of the C4P programme.
- **2.2** Create a mechanism for community recognition/celebration of mamans lumières to sustain their motivation and dedication.
- **2.3** Capitalise on the collaboration of mamans lumières with community leaders, traditional healers and community health workers to strengthen health and nutrition promotion.

## Implication 3

Work with community health workers (CHWs) as trusted intermediaries

### Potential action

**3.1** Equip CHWs with updated knowledge and information aligned with the aims of the C4P programme.

**3.2** Conduct refresher training and ensure CHWs have relevant materials (visual aids) to convey nutrition-related information.

## Implication 4

Elevate the role of grandmothers and positive deviant mothers

### Potential action

**4.1** Use respected intergenerational knowledge as an entry point for addressing health and nutrition knowledge gaps.

**4.2** Involve positive deviant mothers and grandmothers as trusted voices to tackle sensitive issues like malnutrition, especially to minimise stigma and encourage open discussion.

**4.3** Develop community storytelling sessions led by grandmothers and positive deviant mothers to share traditional knowledge and integrate good nutrition practices.


Mother and daugher, Doungoulou, Guéra.

## 2 Ensure the SBC strategy is socially embedded and culturally appropriate

The formative research findings highlight the significant role of social groups and peer networks in shaping nutrition practices and influencing household health and nutrition dynamics. Outlined below are key implications and possible actions to ensure the SBC strategy considers these influences and is tailored to be culturally relevant and contextually appropriate.

### Implication 1

Improve understanding of positive deviant mothers' role and support their ability to demonstrate effective nutrition behaviours

#### Potential action

- **1.1** Use community orientation sessions to clarify the role of positive deviant mothers and differentiate between CHWs and positive deviant mothers.
- **1.2** Provide additional training and visual tools (cards and/or memory aids) to improve advocacy by positive deviant mothers (e.g., on enriched complementary feeding, exclusive breastfeeding and hygiene practices).
- **1.3** Create nutrition circles or groups led by positive deviant mothers so they can share their knowledge and practices through recipe sharing/ cooking demonstrations.

### Implication 2

Leverage the influence of grandmothers and mothers who are trusted for their traditional knowledge

#### Potential action

- **2.1** Engage grandmothers as allies for evidence-based health and nutrition advice.
- **2.2** Involve grandmothers in co-creating the SBC strategy and activities.
- **2.3** Encourage intergenerational dialogue sessions where mothers and grandmothers align on best practices for child and pregnant women's nutrition.

## 3 Build on community awareness of seasonality and knowledge of local nutritious foods

The findings related to seasonal variations in food availability and dietary diversity suggest that food insecurity is a major determinant of nutritional outcomes in these communities. Communities already demonstrate an awareness of locally available nutritious foods,[j] and have strong communal coping strategies for the lean season. There are several implications arising from these findings for the SBC strategy.

### Implication 1

Maximise nutritional value when meal frequency is reduced in the lean season

**Potential action**

**1.1** Use SBC campaigns to promote simple nutrient-dense recipes using locally available foods.

### Implication 2

Build on the strong communal food-sharing traditions and encourage solidarity in the lean season

**Potential action**

**2.1** Invite community members and encourage them to act as advocates for food-sharing programmes, and encourage households to support each other.

**2.2** Strengthen SBC campaigns to strengthen community support systems by highlighting the importance and value of inter-household support during periods of food scarcity.

**2.3** Encourage organised food-sharing groups or community kitchens.

### Implication 3

Replicate and raise awareness about community granaries (e.g., in Doungoulou) to store cereals during the harvest, for use in the lean season

**Potential action**

**3.1** Use examples of successful community food stores and cereal storage practices in SBC outreach efforts (ideally, community-led).

j Locally available foods varied between study sites, but generally included millet, maize, sorghum, rice, beans, nuts, tomatoes, okra, moringa, sorrel and leafy greens. An element of the localisation process for the SBC strategy will be development of a list of locally available nutritious foods in individual sites.

## Implication 4

Reduce reliance on less nutritious foods and children's preference for processed food during periods of scarcity

### Potential action

**4.1** Focus on the nutritional value of well-known, locally available foods like okra, sesame and legumes.

**4.2** Consider involving children in co-creating outreach materials featuring balanced diets without completely replacing their preferred foods.

## Implication 5

Address local food enrichment or formulations

### Potential action

**5.1** Develop and promote simple, cost-effective local food formulations that can be used to enrich complementary foods for young children.

**5.2** Use SBC campaigns to raise awareness about the benefits of local food enrichment and provide easy-to-follow guides for preparing nutrient-rich complementary foods with available ingredients.


Caregiver and child, Doungoulou, Guéra.

## 4 Build on existing knowledge of nutrition and hygiene practices

The findings indicate a level of awareness and knowledge of hygiene and nutrition practices for women and children, which creates a strong foundation for SBC. However, the SBC strategy should consider the various structural, cultural and behavioural factors that influence sustainability of these practices across the regions. Below are some key implications and suggested actions.

### Implication 1

Leverage existing community awareness of causes, prevention and signs of malnutrition

**Potential action**

- **1.1** Use participatory community workshops to reinforce awareness of malnutrition causes and prevention.
- **1.2** Provide visual aids (e.g., MUAC tapes) to enable mothers to recognise malnutrition early.

### Implication 2

Develop culturally sensitive approaches to address the persistence of some cultural beliefs around malnutrition

**Potential action**

- **2.1** Use stories or testimonials from households that have successfully prevented and managed malnutrition, to counter harmful practices.
- **2.2** Collaborate with traditional healers and community leaders to shift emphasis and messaging towards prevention and biomedical approaches for management.

### Implication 3

Emphasise WASH messaging to reinforce community recognition of the link between hygiene and malnutrition

**Potential action**

- **3.1** Integrate and emphasise handwashing and clean cooking environments.
- **3.2** Consider working with schools to co-create child-friendly materials for hygiene promotion.

## 5 Lay the foundations for a gender-sensitive SBC strategy

The findings on gender roles and household practices highlight the profound influence of gender dynamics on health and nutrition behaviours. Addressing gender-related social norms and cultural practices that undermine nutrition is an important long-term objective for WFP. While it is unrealistic to expect the SBC strategy to transform deeply entrenched social norms in the available timeframe, the implications outlined here suggest how these challenges might be tackled with more resources and a longer-term commitment.

### Implication 1

Address women's overburdened roles by promoting shared responsibilities in childcare and nutrition

**Potential action**

- **1.1** Work with community leaders to normalise and model men's participation in childcare and household tasks.

### Implication 2

Engage men as allies for nutrition

**Potential action**

- **2.1** Promote culturally appropriate ways for men to be involved in household health and nutrition.
- **2.2** Involve male champions or role models to share how they contribute to household health and nutrition.

### Implication 3

Tackle the norms that prioritise men's food needs and promote more equitable food allocation

**Potential action**

- **3.1** Co-create activities to illustrate the long-term benefits of prioritising women's and children's nutrition.
- **3.2** Encourage community discussions by trusted leaders (e.g., village chiefs and religious leaders) to emphasise the importance of equitable nutrition for family health.

### Implication 4

Encourage joint decision making between men and women for healthcare access and food purchasing

**Potential action**

- **4.1** Model and promote household-level dialogue sessions to promote shared decision making.
- **4.2** Highlight success stories where shared decisions led to improved health or nutrition outcomes for women or children.

**Implication 5**

Address the risks of Gender-Based Violence (GBV) linked to cash distribution to women as recipients of C4P in all regions

**Potential action**

**5.1** Tailor the messaging around C4P in SBC tools and activities to ensure women's autonomy is supported and that cash is used for family nutrition and wellbeing, while preventing misuse by other family members.

**5.2** Work with community leaders to promote safe spaces for women to discuss financial decisions and share experiences on managing C4P funds without fear of retribution or control.

**5.3** Ensure SBC campaigns include information on the importance of women's empowerment in financial decision making and messages that challenge GBV and control over cash within households.


Child, Doungoulou, Guéra.

**Grounded in the lived experiences of participating communities, these implications and recommendations offer a roadmap for WFP and its partners to deliver contextually relevant and impactful interventions that address Chad's urgent nutrition challenges.**

## Recommendations for strengthening the delivery of the C4P programme

The recommendations outlined below aim to enhance the effectiveness, inclusivity and sustainability of the C4P programme. They focus on addressing communication gaps; improving community engagement; fostering transparency and fairness; and ensuring that financial assistance meets the needs of the most vulnerable households, while promoting long-term resilience and social cohesion.

### Enhance communication and transparency

- Develop clear, consistent and accessible communication materials about the programme, including its objectives, eligibility criteria and selection process.
- Conduct targeted information sessions for men and non-recipients to foster broader community understanding and support for the programme.
- Use trusted local networks (e.g., village chiefs, health workers and mamans lumières) to disseminate information and ensure equitable access to updates about the programme.
- Extend existing feedback mechanisms for regular feedback and follow-up to address participant concerns and improve engagement, and allow community-based actors to respond to questions.

### Improve community engagement

- Actively involve community leaders, health workers and local committees in the participant selection process to increase transparency and fairness.
- Facilitate community discussions and decision-making platforms to identify and prioritise the most vulnerable households.
- Strengthen the role of community oversight committees to monitor programme implementation and address grievances.
- Seek out opportunities for engagement at regular and widely attended community gatherings (such as market days).

### Address concerns about fairness and inclusion

- Reassess and refine the eligibility criteria to ensure that vulnerable populations, including those currently excluded, are identified and supported.
- Create opportunities for non-recipients to benefit indirectly, such as through community support initiatives or group-based training sessions.
- Mitigate interpersonal conflicts by fostering community solidarity and understanding through tailored SBC campaigns.

### Increase financial support and programme sustainability

- Assess the adequacy of current cash transfer amounts and explore options for increasing financial assistance to better meet household needs.
- Extend the duration of cash transfers or explore phased disbursements to address cyclical food insecurity and provide longer-term impact.
- Consider linking cash transfers to complementary initiatives, such as income-generating activities or local food enrichment programmes, to promote sustainable improvements in food security and nutrition.

### Strengthen awareness and behaviour change components

- Expand awareness-raising efforts to include hygiene, nutrition, and financial literacy components, ensuring alignment with the programme's goals.
- Develop tailored messages for men to encourage their engagement in programme support and shared household responsibilities.
- Provide practical demonstrations of how cash transfers can improve dietary diversity and child nutrition, leveraging local resources.

### Enhance monitoring and feedback mechanisms

- Establish a robust monitoring system to regularly evaluate participant selection processes, disbursement effectiveness, and programme outcomes.
- Use feedback from participants and non-participants to continuously refine programme implementation and address any emerging challenges.
- Create platforms for community feedback and discussion on the C4P programme, allowing beneficiaries and non-beneficiaries alike to express concerns, share ideas, and ensure the programme is meeting community needs.
- Incorporate community decision-making structures into the ongoing design and evaluation of the C4P programme, ensuring that all relevant stakeholders have a voice in its adaptation and success.

### Mitigate risks of Gender-Based Violence (GBV)

- Include GBV-prevention messaging as part of the programme's communication and awareness campaigns.
- Ensure that women's control over cash is safeguarded by engaging men and community leaders in discussions on women's empowerment and financial decision making.
- Create safe spaces for women to discuss concerns about cash use and provide confidential mechanisms for reporting and addressing GBV risks.

# Annex 1: Formative research questions

### Overarching

- To determine key environmental, social and individual barriers to/drivers of appropriate health and nutrition practices among caregivers of children 6-23 months and pregnant and lactating women.
- To explore the influence of socioeconomic context (including seasonality and access to foods, access to information and health/nutrition services) on health and nutrition knowledge, behaviours and practices.
- To explore the influence of socio-cultural, peer network and household norms on food purchasing and consumption behaviours and practices (including maternal diet and taboos, community beliefs).

### Gender

- To explore gender roles within the household (including management of resources, decision making on use of resources) and outside (economic activity, workload) and their influence on food purchasing and consumption behaviours and practices.

### Individual level

- To explore individual level self-efficacy, beliefs, knowledge and attitudes towards healthy diets, dietary diversity and malnutrition prevention (including women's self-efficacy/agency to make decisions in relation to health and nutrition practices).
- To explore stakeholder views on access to and affordability of local nutritious foods.

### Malnutrition

- To identify with key stakeholders the most significant factor in prevention of malnutrition (affordability, seasonality, access, market availability, knowledge, culture, prevalence of acute malnutrition).
- To explore stakeholder perspectives on various delivery mechanisms in prevention of malnutrition interventions (including screening, treatment).

### Positive deviance

- To identify children in the community in good health, and caregivers with good nutrition practices (positive deviants) and explore simple actions and practices that can be adopted by others.

### SBC/communication

- To explore stakeholder preferences for SBC approaches, activities, materials and communication (current preferred communication channels: radio, social networks, interpersonal communication/women's group/association, community/health agent) for promoting health and nutrition practices.
- Including perspectives on current SBC approaches used at FARNE sites and by UNICEF at health facilities – to what extent do they go beyond message dissemination? What is needed for WFP to diversify the SBC approach? What are the challenges and opportunities?

### Retailers

- To identify retailer knowledge of and attitudes towards nutritious foods and their benefits, and their capacity to nudge customers towards increasing demand for nutritious food.
- To explore challenges faced by retailers in procurement and supply of local nutritious foods (ensuring supply can meet generated demand).

# Annex 2: Topic guide

## A – Nutrition practices

**Food availability and sourcing**

- What is the local availability of different types of food (e.g., vegetables, fruits, meat, fats and oils, staple foods, dairy products)?
- How does the availability of different types of food vary during the different seasons (e.g., rainy and dry season, lean season)?
- What are the current sources of food typically consumed with a focus on fresh foods (e.g., farming, market, distributions, etc.)?
- Who is responsible for food sourcing decisions at the household level?

**Food preferences**

- What are people's perceptions of fresh food?
- What is the availability of preferred foods in the local community and local market?
- What is the ability of households to purchase preferred foods and to purchase fresh foods?

**Food preparation**

- Who is responsible for food preparation and cooking at household level?
- What is the common food preparation process (e.g., type of water used for washing vegetables, length of cooking time for vegetables, meat, etc.)?
- How much time is spent on food preparation?

**Food consumption**

- How many meals are eaten per day at the household level (with a focus on children under 2 and under 5, pregnant and breastfeeding women, adults)?
- What are the types of food used for different meals (vegetables, fruits, meat, fats and oils, staple foods, dairy products)?
- How is food shared among household members (e.g., who eats first, who receives the largest portion, who shares plates, changes during times of food shortages)?

**Nutrition-related services**

- What nutrition-related services are available to the community (e.g., health centres, humanitarian assistance, community-based services)?
- What is the perception and use of nutrition-related services as described by mothers and fathers, community resource persons and health workers and district stakeholders?

**Barriers and drivers of appropriate health nutrition practices and behaviours**

- What are the structural factors that influence health and nutrition practices (availability, time, location of market/retailer)?
- What are the economic factors that influence health and nutrition practices (affordability, cost, assistance provided)?
- What are the environmental factors that influence health and nutrition practices (climate change, humanitarian crisis, etc.)?
- What are the socio-cultural factors that influence health and nutrition practices (social or gender norms, socio-cultural beliefs for example influencing infant nutrition, etc.)?
- What is the perception and knowledge of recommended nutrition practices and behaviours, particularly among mothers and fathers of children aged 0-59 months and community influencers, including essential nutrients and their importance?
- What are the existing coping strategies to deal with food shortages and how are these perceived (healthy/unhealthy)?

## B – Malnutrition

**Nutrition literacy among local population**

- What is the understanding and knowledge of the concepts of nutrition, malnutrition, nutritious food, nutritional needs? (Gender perspectives)
- What are the views and attitudes of key population groups, including mothers and fathers, towards healthy nutrition?
- What is the knowledge and self-efficacy of fathers and mothers and the wider community to prevent malnutrition?
- What are the traditional beliefs and socio-cultural norms that influence nutritional practices and behaviours (including food taboos)?

**Malnutrition causes, prevention and management**

- What are the population groups (age, gender, ethnicity) most at risk of malnutrition?
- What are the causes and explanations of malnutrition described by key population groups?
- When is malnutrition most prevalent at community level?
- What are the structural factors influencing treatment seeking behaviour (availability, time, location of health provider)?
- What are the economic factors influencing treatment seeking behaviour (affordability, cost, treatment provided)?
- What are the socio-cultural factors influencing treatment-seeking behaviour (women's agency on treatment decision-making, socio-cultural beliefs for example influencing treatment for infant malnutrition, etc.)?
- What are community-based initiatives and solutions to prevent malnutrition?

## C – Gender dynamics

**Gender roles within the household**

- Who is responsible for children's nutrition and health at household level?
- Who has access to and manages resources at household level including food?
- Who takes the decision on the use of resources including food and income?
- How do existing food sharing practices within the household affect different age and gender groups?

**Gender roles at community level**

- What is the access to livelihoods and income for different gender groups?
- How is the workload for different gender groups described by mothers, fathers and community leaders, resource persons and health workers?
- What are the key issues affecting women and girls in the community?

# Annex 3: Information sheets and consent forms

## Information sheet (for all adult participants)

**Formative Assessment: Cash for prevention project in Chad**

This information sheet and consent form is for WFP programme participants in Lac, Kanem, Barh El Ghazel, Batha, Guéra and Mayo Kebbi East. The formative assessment is commissioned by WFP Chad and being implemented by Anthrologica.

**Why have I been chosen to take part in this assessment?**

We are conducting an assessment to understand more about the Cash for Prevention project (C4P) being implemented in Chad. The purpose is to learn about how programme participants like you access, prepare and consume foods, what you think about the cash for prevention project and how you make use of the cash transfer from WFP. It is important that we include a variety of different people, and you are being asked to take part in this assessment because you can help provide key information on this topic.

**Do I have to take part in this assessment?**

Taking part is completely your choice. If you decide not to take part, there will be no negative impact and your participation in the C4P project will not be affected. If you decide to take part, you will be asked to give your consent by signing the consent form at the end of this document. You can choose to drop out at any time, for any reason. There will be no negative consequences if you decide to drop out.

**What happens if I agree to take part?**

You will be asked to take part in a group discussion or a one-to-one interview to talk with a researcher about types of food that are available and consumed in the community, your thoughts on WFP's project and how you make use of the cash transfer. We will also discuss information needs related to food and nutrition, and your suggestions for improving healthy eating and community activities for malnutrition prevention and management. The discussion will be informal, and you should feel free to discuss anything you wish relating to the questions. Interviews will take about one hour, and group discussions will take no more than 90 minutes and will be held in a private place.

**How will my information be recorded?**

We will ask for your permission to make an audio recording of the discussion or interview. If you do not want to be recorded, handwritten notes will be taken instead.

**How will the information I give be kept private?**

All information collected in this assessment will be kept secure on a password-protected computer and will only be available to the team directly involved in the assessment. Your identity will be kept anonymous – that is, your name and details will not be included in any notes, reports, or voice recordings. Reports on this research may include quotes from your statements to the research team. However, these quotes will not be linked to your name or any other information that could identify you.

**What are the possible disadvantages of taking part?**
We do not expect there will be any disadvantages to taking part in this assessment. However, some of the questions may be sensitive and you may feel uncomfortable to discuss certain issues. You always have the option to not answer any questions, to stop the discussion or interview or to withdraw completely from the research if you feel uncomfortable.

**What are the benefits of participating?**
Participation in this research will not directly benefit you but it will help WFP to improve how it supports programme participants in the future. There will be no compensation for taking part, but refreshments will be provided during group discussions.

**How will I hear about the results of the assessment?**
After the assessment team has completed the assessment, you can be informed about its outcomes. If you wish to be contacted, please share your contact details with the team following the activity. Your details will be kept safe in a password-protected computer until the end of the assessment.

**Who can I contact if I have questions, concerns or complaints about the assessment or the assessment team?**
If you have any questions, you can ask them now or later. If you wish to ask questions later, you may contact: Martin Ahimbisibwe, WFP Chad Country Office Nutrition Unit Manager.
Email: martin.ahimbisibwe@wfp.org.
Telephone: +235 98983133.

This assessment has been reviewed and approved internally by WFP and externally by the Secretariat of the National Bioethics Committee of Chad, which makes sure that assessment participants are protected from harm. If you have any concerns or complaints about the assessment or the assessment team, you can contact the WFP Chad Country Office team. (See contact details above)

*Once you have read this information sheet, or had the contents read to you, and fully understood this information, please consider if you would like to take part. If you agree, please sign or add your thumb print to the consent form. Thank you.*

## Consent form for all adult participants

**Formative Assessment: Cash for prevention project in Lac, Kanem, Barh El Ghazel, Batha, Guéra and Mayo Kebbi East, Chad**

I confirm that I have read this form, or had it read and explained to me and I have had chance to ask questions.

I understand that my participation is voluntary and I am free to withdraw at any time without giving a reason and without negative consequences. Should I not wish to answer any questions, I am free to decline.

I understand my personal details will be kept confidential, my responses will be anonymised and I will not be identifiable in any report or presentation.

I agree to take part in the assessment.

If I cannot write, I voluntarily agree to participate in this study by putting my thumbprint or by agreeing that a witness will underwrite and sign on my behalf.

| | | |
|---|---|---|
| Participant name (print) | Participant signature / thumbprint | Date |
| Name of research staff conducting consent discussion (print) | Research staff signature | Date |
| Witness name* (print) (*Needed only if participants cannot read or write) | Witness signature* | Date |

## Use of photography consent form

The purpose of this form is to give permission for the assessment team / WFP to take photographs of the activity (discussion, workshop) that you will participate in, some of which may contain your image or part of your image, and use these in reports or other materials produced from this assessment.

**Agreement for use of photography**

I have read this form, or had it read and explained to me.

By signing this form I confirm that:

I give permission for the research team to take photographs of me.

I grant full rights to use the images resulting from the photography, and any reproductions or adaptations of the images for reporting, advocacy or related purposes. This might include their use in printed and online reports, and on the website of WFP or Anthrologica. I understand that any photograph used will not be associated with my name or personal details.

| | | |
|---|---|---|
| Participant name (print) | Participant signature / thumbprint | Date |
| Name of research staff conducting consent discussion (print) | Research staff signature | Date |
| Witness name* (print) (*Needed only if participants cannot read or write) | Witness signature* | Date |

# References


1. United Nations Office for the Coordination of Humanitarian Affairs. (2023). *Plan de Reponse Humanitaire Revise: Tchad.* https://humanitarianaction.info/plan/1141/article/tchad-hrp-2023#page-title
2. Development Initiatives. (2022). *Global Nutrition Report—Country Nutrition Profiles: Chad.* Global Nutrition Report. https://globalnutritionreport.org/resources/nutrition-profiles/africa/middle-africa/chad/
3. World Food Programme. (2023). *Fill the Nutrient Gap Chad* [Unpublished draft report].
4. World Health Organization. (2023). *WHO guideline on the prevention and management of wasting and nutritional oedema (acute malnutrition) in infants and children under 5 years.* https://www.who.int/publications/i/item/9789240082830
5. World Food Programme. (2024, April). *Guide mise en oeuvre nutrition communautaire [Internal Document].*
6. Triatmaja, N. T., Mahmudiono, T., Mamun, A. A., & Abdullah, N. A. (2023). Effectiveness of Positive Deviance Approach to Reduce Malnutrition among under Five Children: A Systematic Review and Meta-Analysis of Interventional Studies. *Nutrients,* 15(8), 1961. https://doi.org/10.3390/nu15081961
7. Ministère de la Santé Publique et de la Solidarité Nationale. (2022). *Annuaire des Statistiques Sanitaires 2020*. https://www.inseed.td/index.php/blog-with-right-sidebar/document/category/13-annuaire-statistique
8. US Central Intelligence Agency. (2025, February 13). *Chad*. The World Factbook. https://www.cia.gov/the-world-factbook/countries/chad/
9. *World Bank Open Data.* (n.d.). World Bank Open Data. Retrieved 29 April 2024, from https://data.worldbank.org
10. United Nations Development Programme. (2024). *Human Development Insights.* https://hdr.undp.org/data-center/country-insights#/ranks
11. World Bank. (n.d.). *World Bank Open Data: Prevalence of HIV - Chad.* World Bank Open Data. Retrieved 14 May 2024, from https://data.worldbank.org
12. World Bank. (n.d.). *World Bank Open Data: Women's share of population ages 15+ living with HIV.* World Bank Open Data. Retrieved 14 May 2024, from https://data.worldbank.org
13. UNOCHA. (2023, November 3). *Chad—Humanitarian situation in the East, as of 02 November 2023.* https://reliefweb.int/report/chad/chad-humanitarian-situation-east-02-november-2023
14. ACAPS. (2024). *Chad: Food security crisis* [Briefing note]. https://www.acaps.org/fileadmin/Data_Product/Main_media/20230104_ACAPS_briefing_note_Chad_food_security_crisis.pdf
15. News, V. O. A. (2024, February 19). *Malnutrition Plagues Sudanese Refugee Children.* Voice of America. https://www.voanews.com/a/malnutrition-plagues-sudanese-refugee-children-/7493831.html
16. Bosiaga, R. (2024, August 28). Women in Chad defy discrimination and violence to assert their rights to own and control land. *The Associated Press.* https://www.ap.org/news-highlights/spotlights/2024/women-in-chad-defy-discrimination-and-violence-to-assert-their-rights-to-own-and-control-land/
17. United Nations Development Programme. (2024). *Human Development Report 2023/2024. Breaking the gridlock: Reimagining cooperation in a polarized world.* https://hdr.undp.org/content/human-development-report-2023-24

18. *Literacy Rate by Country 2024.* (n.d.). Retrieved 4 May 2024, from https://worldpopulationreview.com/country-rankings/literacy-rate-by-country
19. INSEED. (n.d.). *République du Tchad.* Institut National de la Statistique, des Etudes Economiques et Démographiques. Retrieved 14 May 2024, from https://www.inseed.td/
20. Girls Not Brides. (n.d.). *Taking action to address child marriage: The role of different sectors. Food security and nutrition.* https://www.girlsnotbrides.org/documents/432/6.-Addressing-child-marriage-Food-Security-and-Nutrition.pdf
21. World Bank. (2024). *Chad Gender Landscape* [Text/HTML]. https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099933307032273664/IDU1ee975ada125ee1472419c051dc328c781571
22. World Bank. (n.d.). *Female genital mutilation prevalence (%).* World Bank Gender Data Portal. Retrieved 13 February 2025, from https://genderdata.worldbank.org/en/indicator/sh-sta-fgms-zs
23. *Women participating in decisions related to health care, purchases, visiting family, and cooking (%).* (n.d.). World Bank Gender Data Portal. Retrieved 13 February 2025, from https://genderdata.worldbank.org/en/indicator/sg-dmk
24. World Bank. (n.d.). *World Bank Climate Change Knowledge Portal: Chad.* Retrieved 6 May 2024, from https://climateknowledgeportal.worldbank.org/country/chad
25. Bank, A. D. (2024, February 20). *African Development Bank Group, Lake Chad Basin Commission sign MOU to restore Lake Chad Basin* [Text]. African Development Bank Group; African Development Bank Group. https://www.afdb.org/en/news-and-events/press-releases/african-development-bank-group-lake-chad-basin-commission-sign-mou-restore-lake-chad-basin-68811
26. World Bank. (n.d.). *Chad's economic recovery: Navigating challenges and building resilience to floods?* World Bank Blogs. Retrieved 4 May 2024, from https://blogs.worldbank.org/en/africacan/chads-economic-recovery-navigating-challenges-and-building-resilience-floods
27. European Commission. (n.d.). *INFORM Climate Change Tool.* Disaster Risk Management Knowledge Center. Retrieved 30 April 2024, from https://drmkc.jrc.ec.europa.eu/inform-index/INFORM-Climate-Change/INFORM-Climate-Change-Tool
28. Système d'Information sur la Sécurité Alimentaire et d'Alerte Précoce du Tchad. (2024). *Cadre Harmonisé d'identification des zones à risque et des populations en insécurité alimentaire et nutritionnelle au Sahel et en Afrique de l'Ouest (CH).* https://sisaaptchad.org/wp-content/uploads/2024/05/TCHAD_Fiche-de-communication_CH_Mars_2024_VF.pdf
29. Oversee Advising Group. (2023). *Étude sur les determinants et barrieres des bonnes pratiques nutritionnelles au tchad.* https://reliefweb.int/report/chad/etude-sur-les-determinants-et-barrieres-des-bonnes-pratiques-nutritionnelles-au-tchad
30. Laouan, F. Z. & Cooperative ARG. (2023). *CARE Analyse Rapide Genre Tchad, Zones du Lac, Sud, Est et N'Djamena* [Internal Document].
31. Magen, C. (2012). A*nalyse qualitative des Causes de la Malnutrition, Grand Kanem Chad.* https://www.actioncontrelafaim.org/wp-content/uploads/2018/01/nutritioncausalanalysis-linknca-grandkanemtchad2012.compressed.pdf
32. Marshak, A., Luc, G., Radday, A., & Young, H. (2021). *Seasonality of Acute Malnutrition and its Drivers in Sila Province, Chad: A mixed methods analysis.* https://fic.tufts.edu/publication-item/seasonality-of-acute-malnutrition-and-its-drivers-in-sila-province-chad-a-mixed-methods-analysis/
33. Callimachi, R. (2012, December 23). Traditions in Chad harm, kill underfed children. *San Diego Union-Tribune.* https://www.sandiegouniontribune.com/sdut-traditions-in-chad-harm-kill-underfed-children-2012dec23-story.html
34. INSEED & UNICEF. (2019). *Chad—Multiple Indicator Cluster Survey 2019.* https://datacatalog.worldbank.org/search/dataset/0061586/Chad---Multiple-Indicator-Cluster-Survey-2019

35. Ministère de la Santé Publique et de la Prévention. (2023, January 20). *Tchad: Enquête nationale de nutrition et de mortalité retrospective SMART 2022.* https://reliefweb.int/report/chad/tchad-enquete-nationale-de-nutrition-et-de-mortalite-retrospective-smart-2022-rapport-final-decembre-2022
36. Integrated Food Security Phase Classification. (2024, January 31). *Chad: Acute Malnutrition Situation October—December 2023 and Projections for January—May 2024 and June—September 2024.* https://www.ipcinfo.org/ipc-country-analysis/details-map/en/c/1156793/?iso3=TCD
37. Action Contre la Faim. (2017). *Mise en place d'un programme d'éducation nutritionnelle adapté aux aliments locaux: Kanem et Barh-El-Gazel.* https://reliefweb.int/report/chad/rapport-d-tude-mise-en-place-d-un-programme-d-ducation-nutritionnelle-adapt-aux-aliments
38. Luc, G., Keita, M., Houssoube, F., Wabyona, E., Constant, A., Bori, A., Sadik, K., Marshak, A., & Osman, A. M. (2023). Community Clustering of Food Insecurity and Malnutrition Associated With Systemic Drivers in Chad. *Food and Nutrition Bulletin,* 44(2_suppl), S69–S82. https://doi.org/10.1177/03795721231189970
39. Together Women Rise. (2016, November 8). C*ustoms and Cuisine of Chad.* https://togetherwomenrise.org/customsandcuisine/customs-and-cuisine-of-chad/
40. Benoudji, C., Le Masson, V., & Fanorde, E. (2018). *Etude sur le Genre et la Résilience.* Oxfam. https://policy-practice.oxfam.org/resources/gender-and-resilience-in-chad-a-study-on-kanem-lac-and-beg-provinces-620601/
41. UNICEF. (2016). *Accès aux Soins PCIMA des Populations Transhumantes.* https://www.acutemalnutrition.org/en/resource-library/Fk934vll8OQkuSeUI68Q4
42. World Food Programme. (2023). *Evaluation of Chad WFP Country Strategic Plan 2019-2023.* https://www.wfp.org/publications/evaluation-chad-wfp-country-strategic-plan-2019-2023
43. World Food Programme. (2024). *Chad country strategic plan (2024–2028).* https://docs.wfp.org/api/documents/WFP-0000154822/download/?_ga=2.205241746.383180653.1715326994-764986700.1715326993
44. World Food Programme. (2023). *Chad Annual Country Report 2023: Country Strategic Plan 2019—2024*. https://docs.wfp.org/api/documents/WFP-0000157762/download/?_ga=2.129048078.383180653.1715326994-764986700.1715326993
45. Bechir, M., Makhlouf, H., Philippe, M., Koularambaye, A., & Telefot, P. B. (2022). Assessment of nutritional intervention at the community level: Case of the learning, nutritional rehabiltation and awakening homes (FARNE) program implemented in Guéra, Chad. *European Journal of Biomedical and Pharmaceutical Sciences,* 9(10), 34–42. https://www.ejbps.com/ejbps/abstract_id/9168
46. World Food Programme. (2024). *Rapport de Suivi des Marchés Est et Sud: Zones d'accueil des réfugiés Soudanais et Centrafricains. Période: Mois d'avril 2024 [Internal document].*


WFP
World Food
Programme