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The U.S. Government's Global Hunger & Food Security Initiative

Drivers of Malnutrition in Niger: Analysis of Secondary Data Sources

Summary

This brief provides information about the status, trends, and drivers of malnutrition in Niger, and aims to inform the identification of core priorities for future programming and investment by the United States Agency for International Development (USAID) Niger Office under the Global Food Security Strategy (GFSS). The brief summarizes the findings of a desk review carried out by the Strengthening Partnerships, Results, and Innovations in Nutrition Globally (SPRING) project of available research, policies, program evaluations, and other project documentation. The scope of the review focused on trends, data, and related information on stunting, acute malnutrition, and micronutrient deficiencies at the national and district levels. Where possible, SPRING explored variations and trends in nutrition across regions and population groups, with a focus on the current Resilience in the Sahel (RISE) Zone of Influence: Zinder, Maradi, and Tillaberi regions.

The drivers of malnutrition are complex and interrelated; a multi-sectoral and multi-disciplinary review is required in order to analyze key drivers in a given context. In most settings, it is difficult to identify significant, discrete causes of malnutrition, but it is possible to identify trends, correlations, and likely contributing factors to the burden of malnutrition. A large body of evidence already exists on the nutrition situation in Niger, including several high-quality assessments, which were important sources for this review. Key sources include: *Baseline Study for the Title II Development Food Assistance Programs in Niger* (ICF International, Inc. 2014); Famine Early Warning Systems Network's *Nutrition Causal Analysis in Niger: Report of Key Findings* (FEWS NET 2017); *Resilience in the Sahel-Enhanced (RISE) Project Impact Evaluation: Baseline Survey, Resilience Analysis* (TANGO International 2016); SPRING's *Informing Video Topics and Content on Maternal, Infant, and Young Child Nutrition and Handwashing Situational Analysis and Formative Research in Maradi, Niger* (SPRING 2016); and *USAID Office of Food for Peace Food Security Desk Review for Niger* (Mathys et al. 2017). One limitation to this review was the lack of a recent nationally representative, multi-indicator survey such as the Demographic and Health Survey (DHS). The most recently published DHS was conducted in 2012 and published in 2013; fieldwork for the latest DHS was carried out from July to October 2017, but the results had not yet been released at the time that this brief was prepared (DHS 2017).

The following key drivers emerged from the literature review as likely to be important contributors to poor nutrition in Niger:

- Inadequate availability of sufficient, high-quality, and diverse foods due to shocks, climate change, challenging agroecological conditions, population growth, and underdeveloped food systems.
- Insufficient purchasing power to access sufficient, high-quality, and diverse food due to entrenched poverty, which is exacerbated by ongoing cycles of shocks and crises.
- Frequent childhood illness, likely worsened by poor hygiene and sanitation.

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- The extremely disadvantaged position of women, including inadequate care of mothers and young children, coupled with high levels of early marriage and pregnancy, leading to an intergenerational cycle of malnutrition.
- Cultural and social norms preventing the uptake of practices that lead to improved nutrition.

Overview of Nutrition Situation

Niger faces a nutrition crisis of major proportions; every year, the country faces remarkably high rates of wasting, stunting, and anemia. Nationally, 44 percent of all children under the age of five are stunted, a measure of chronic undernutrition (DHS 2013). Wasting—or acute malnutrition—fluctuates throughout the year due to seasonal changes in food availability and the prevalence of illness, but it typically affects some 10–18 percent of all children at any given point in time, above the threshold for "serious concern" that typically describes a crisis situation under World Health Organization classifications, prompting an emergency response (Republic of Niger 2017). In Niger, anemia, which is an indicator of both poor nutrition and poor health, and which is closely related to iron deficiency in many countries, affects approximately three-quarters of all children under the age of five and almost half of all women (SPRING 2015). No official data are available for micronutrient deficiency, but these rates are also expected to be high (Republic of Niger 2017). Data from the most recent DHS show that the country is affected by a double burden of both under- and over-nutrition: while five percent of women are classified as too thin, nearly one in five (18 percent) is overweight or obese.

A 2017 analysis of wasting conducted by FEWS NET in Maradi and Zinder found high wasting rates among all populations but noted that agro-pastoral communities were particularly vulnerable, with almost one in five children wasted during the lean season (FEWS NET 2011). The high rates of wasting result in an almost constant state of nutrition emergency, with significant resources required to address the immediate needs of identifying and treating malnourished children and addressing seasonal food insecurity. Due to the high burden of acute malnutrition, some sources report that prioritization and resources for preventing undernutrition over the longer term are limited, leading to a lack of progress in reducing chronic undernutrition (SPRING 2016).

While certain populations, such as young children and agro-pastoralist communities, appear particularly vulnerable to acute malnutrition, malnutrition is a crisis that affects all regions and all groups of people in Niger. Likewise, rates of stunting are similar across all regions and livelihood zones. As seen in table 1, high rates of malnutrition are found even among the wealthiest households—which is not completely unexpected given that even better-off households in Niger face regular shocks (such as

Table 1. Percentage of Children Under Five Years of Age Classified as Malnourished According to Two Anthropometric Indices of Nutritional Status (DHS 2013):

Wealth Quintile	Stunting (Height-for-age)	Wasting (Weight-for-height)
Lowest	46.9%	22.2%
Second	48.0%	18.7%
Middle	41.8%	16.3%
Fourth	46.7%	19.2%
Highest	34.5%	13.1%
National	*43.9%*	*18.0%*

a decrease in income, shortage of food, and livestock disease) and lack access to some of the basic elements of good health, such as hygiene and sanitation services (*République du Niger* 2016).

Significant efforts have been made over the past two decades to expand access to health care, treat acute malnutrition, and ensure widespread vitamin A supplementation, and these likely contributed to an impressive reduction in child mortality—a 5.1 percent per year rate of decline in child mortality from 1998 to 2009 (Amouzou, Habi, and Bensaïd 2012). This positive achievement indicates that efforts to prevent stunting and wasting should not replace efforts to treat malnutrition and expand public health services but should instead augment and complement these existing programs.

Drivers of Malnutrition in Niger

The primary findings of this review have been organized in line with USAID's Multi-Sectoral Nutrition Strategy, which like the United Nations Children's Fund (UNICEF) conceptual framework for nutrition, identifies the immediate, underlying, and basic causes of malnutrition (UNICEF 2015).

Immediate Causes

Nutrient intake: Threats to children's nutrition begin long before they are born. Approximately one in four Nigerien children are born small for gestational age (SGA)—one of the highest rates of SGA in Africa (Lee et al. 2013). Nearly all of the children who are SGA in Niger are full-term infants, and their size at birth is an indication of poor growth while in the womb, most often due to poor maternal health and nutrition. Short birth intervals may also contribute to poor growth in utero; one-quarter of children are born less than 24 months after their next oldest sibling, and these children experience higher rates of stunting in Niger (DHS 2013).

One explanation for high rates of SGA in Niger may be the prevalence of pregnancy among girls and young women, many of whom have not finished growing themselves, therefore competing with the growing fetus for nutrients. Niger has one of the highest rates of adolescent pregnancy in the world, with 40 percent of girls beginning childbearing before the age of 18 (DHS 2013). The *USAID Food for Peace Food Security Desk Review for Niger* notes that first-born children of adolescent girls are 33 percent more likely to become stunted than those born to older peers (Mathys, Oot, and Sethuraman 2017).

Nutritional deficits persist after birth. Only 34 percent of infants are still exclusively breastfed at the age of two months, and exclusive breastfeeding then declines rapidly between two and six months of age (DHS 2013). The median duration of exclusive breastfeeding is less than one month (DHS 2013). Approximately half of all infants are given water in addition to breastmilk. Formative research carried out in Maradi by SPRING in 2016 found that there is a heavily entrenched belief that children need water in addition to breastmilk due to the dry, hot climate (SPRING 2016).

Although the introduction of complementary foods does not happen until six months or later for most children, the quantity and diversity of diets given to children are poor. Fewer than 10 percent of children under the age of two are fed a minimally diverse diet from four food groups, and just over half (51.3 percent) are fed the minimum number of meals per day (DHS 2013). Diet quality is not just an issue for young children; in Maradi State, USAID's *Baseline Study for the Title II Development Food Assistance*

Programs in Niger found an average household dietary diversity score of just 3.8 out of 12 foods, with most households eating a diet heavy in staples and legumes and very low in more nutrient-dense foods such as meat, eggs, fish, or fruit (ICF International, Inc. 2014).

Formative research conducted by SPRING in 2016 found that many different cultural and social factors influence the diets and eating practices of women and children. For example, a man in a household typically estimates a portion of food to be provided to each wife, and this portion is based on the number of children she has. The man gets his personal bowl, the older children get one bowl of food to share, and all wives—and often neighboring adult women—eat together from a shared bowl. The younger children (under one or one-and-a-half years old) eat with their mothers. Older women, particularly grandmothers, significantly influence the feeding practices of young children (SPRING 2016).

Illness: A detailed assessment of acute malnutrition, carried out by FEWS NET, identified the prevalence of common childhood illnesses, particularly diarrhea, as one of the strongest factors correlated with acute malnutrition in children (FEWS NET 2017). Different illnesses occur more frequently during the rainy or dry seasons, so periodic surveys such as DHS do not provide a clear estimate of the burden of disease for young children. However, families regularly identify diarrhea and fever as the most common illnesses that their children experience. The FEWS NET analysis, which was conducted at two points during the year (postharvest and lean season), found that between 5–21 percent of children had experienced an acute respiratory infection (ARI) in the past two weeks, 12–23 percent had diarrhea, and 21–24 percent had a fever (FEWS NET 2017).

The government of Niger has invested heavily over the past two decades to strengthen primary health care, which is now provided free to pregnant women and children under five. Vaccination rates, while below targets, are relatively good among younger children but then drop off for vaccinations normally given to older children. For example, 84 percent of children receive their first dose of diphtheria-tetanus-pertussis (DPT) vaccine by age one compared with 65 percent of DPT3, which is normally given at the age of one-and-a-half to two years, and 57 percent of measles (DHS 2013). Nevertheless, care seeking and treatment for common illnesses was still quite low at the time of the 2013 DHS—only about half of all children are taken for care when sick (51 percent of children with diarrhea, 53 percent of children with ARI, and 51 percent of children with fever). Among the children taken to a health facility, even fewer actually receive effective treatment. For example, DHS 2013 reports that only 11 percent of children with symptoms of ARI received antibiotic treatment. In addition, SPRING's formative research in Maradi found that parents have little understanding or knowledge of the need to increase food and fluid intake during illnesses (SPRING 2016).

Niger has also rapidly increased its capacity to identify and treat children with acute malnutrition. Approximately 90 percent of health facilities now have the capacity to provide Community Management of Acute Malnutrition (CMAM) services (Maimouna, Chegou, and Eric-Alain 2012). However, the actual coverage of children reached is low. A coverage assessment conducted in five regions in 2012 found that, overall, only about 19 percent of children with severe acute malnutrition are reached with CMAM programs (UNICEF 2012).

Underlying Causes

Food Security: The challenges to food security in Niger are immense and cannot be overstated. Resilience has, very rightly, been a cornerstone of nutrition and food security programming in Niger over the past decade yet continues to remain a challenge. In the past 30 years, Niger has had a food crisis every three years on average. The nature of these shocks vary but are often related to livestock feed deficits, droughts, or increases in food prices, and they can be exacerbated by political unrest and regional insecurity. As a result, households resort to selling off assets or borrowing money, leading to a downward spiral of debt and low yields. Although recent food crises have affected huge swaths of the population, different groups experience these shocks differently. The FEWS NET assessment found that agro-pastoralist households are at a greater risk of wasting during the preharvest season because both food and livestock feed with which to maintain their herds are sparse (FEWS NET 2017).

Resilience is expected to be further challenged in the coming years due to the growing volatility of the local climate. Average temperatures have risen dramatically in the past 50 years, and while rainfall has increased somewhat, rainfall patterns have become more erratic and unpredictable (FEWS NET 2012). Furthermore, the risk of conflict over pastoral grazing rights and increasingly scarce productive land may further worsen the many shocks that households face (ARCC 2014). The government has developed a national adaptation plan of action (2006) and a national framework (2015) for coping with climate change, and Niger is a member of the Climate-Smart Agriculture Alliance. There are many individual projects promoting climate-smart agriculture, but this review did not find evidence that climate-smart agriculture practices are currently promoted systematically or at scale.

Even in a good year, many Nigerien households struggle to meet their food needs. Niger has one main rainy season in June through September, with the main harvest occurring October through December. A typical farming household produces only enough to cover consumption through March, and must then rely on purchases to meet their consumption needs until the next harvest (Mathys, Oot, and Sethuraman 2017). The average household in Niger spends 71.53 percent of its income on food, and this money does not buy a high-quality diet—the majority of food expenditures go toward staple foods, and most households very rarely buy nutrient-dense foods such as meat, fruit, and vegetables due to the cost (WFP 2010). Families often supplement their diets by foraging for wild foods (SPRING 2016). A rapidly growing population is exacerbating these challenges—Niger has the highest fertility rate in the world at 7.6 births per woman of childbearing age (Mathys, Oot, and Sethuraman 2017). Thus, landholding size is decreasing, and already insufficient food and water resources must be stretched farther. Simply put, Niger's inability to feed itself will only worsen due to the fast pace of its population growth and worsening effects of climate change.

Approximately 82 percent of the population relies on agriculture or livestock management for a livelihood (ARCC 2014). Niger's agriculture sector is still vastly underdeveloped, relying on one season of rain-fed crops for most of the year's production. According to a 2009 report from the Food and Agriculture Organization of the United Nations (FAO), less than one percent of agricultural land is irrigated (FAO and SICIAV 2009). Beyond a lack of water, major challenges to food production include a lack of financial resources or access for inputs, such as fertilizer, insecticides, seeds, or technology to increase yields. The

RISE baseline found that fewer than half of households had access to a market for agriculture inputs (TANGO International 2016). A USAID desk review also found a lack of use of good postharvest processing and storage techniques and few longer-term storage facilities such as silos and warehouses across the country (Mathys, Oot, and Sethuraman 2017).

Rural families in Niger face both compromised production and limited market access. Although 65 percent of households in Tillabery and 84 percent of households in Maradi have physical access to a market, the availability of food within these markets is often low, with 38 percent and 57 percent of households surveyed, respectively, reporting that they have experienced reliable availability of food products relative to the season (mVAM 2017). Due to low agricultural production and limited income, many households are unable to access adequate diets either through purchase or production of diverse, nutritious foods. A recently released review of nutrition-sensitive agriculture, *Nutrition-sensitive Agriculture: What Have We Learned and Where Do We Go from Here?* found that household production diversification has a larger impact on diets when market access is limited (Ruel, Quisumbing, and Balagamwala 2017). This emphasizes the need for strategies that immediately increase household production while they strengthen markets over the longer term.

Poverty is a key driver of food insecurity in Niger. Further, the incidence of poverty is highest among households in which the household head is primarily engaged in agriculture (e.g., farming, livestock, or fishing). USAID's Regional Trade report in 2013 found that home production for consumption is not the main source for food—especially among the poorest households—and that grain purchases represent a very large portion of food purchases. This means that households in the GFSS target areas are not consuming their own livestock or animal source foods, are likely selling any nutritious foods that they do produce, and do not have income sufficient to purchase these higher-priced foods. (Blein 2013; USAID 2014).

Feeding and caregiving practices: Most of the literature on caregiving practices in Niger centers around gender roles and social norms related to the support of pregnant women and the care and feeding of young children. Some sources note the particular challenges of improving feeding and caring practices in polygamous households, which make up 36 percent of marriages among women aged 15–49 years (DHS 2013). There is a widely expressed desire for large families in Niger, which has the highest total fertility rate in the world. This often leaves women responsible for caring for children with little support from their spouse, who may divide his attention among multiple households. SPRING's formative assessment report notes that, "men's support for their wives is practically non-existent regarding nutrition and household level chores, especially for breastfeeding women" (SPRING 2016). However, "there seems to be an awareness of the need to spare pregnant women from a heavy workload and to increase their intake of quality food" (SPRING 2016). Further adding to the challenges facing women is the fact that 50–70 percent of men migrate for work, either on a short- or long-term basis (Camber Collective 2014).

Social relationships and influential figures play an important role in the feeding and caregiving practices of women and young children. While several reports note a growing awareness and acceptability of optimal feeding practices, such as exclusive breastfeeding, this knowledge has not necessarily translated into better practices due to the constraints women face. Mothers often say that they find it challenging to implement recommended practices due to pressures from their mothers and mothers-in-law. Qualitative

assessments report that polygamous marriages can prevent women from receiving extra care during pregnancy and breastfeeding because of a husband's desire to avoid stoking resentments among his wives by showing preference to one over another (SPRING 2016). A World Bank report notes that polygamy also drives the desire for more children, as women perceive that they get more attention when they have young children (*La Banque Mondiale* 2014).

Women's labor affects the time and resources that mothers have for caring for children. While the DHS data reveal that only about 29 percent of women in Niger reported working in the past 12 months, women and girls bear a large burden of unpaid household work and typically work longer hours than men (Mathys, Oot, and Sethuraman 2017).

The feeding practices of young children have a lot of room for improvement. In Maradi and Zinder, SPRING found that young children are typically fed from a common bowl with the women of the household (SPRING 2016). In these settings, SRING found that videos demonstrating responsive feeding practices, such as encouraging the child to eat and providing a separate bowl for children, led to marked improvements in responsive feeding practices (SPRING 2016). As noted above, studies found a lack of awareness of the need to provide additional food and fluids to children when they are sick, and that childhood illness is viewed as a regular part of life for a child (Hampshire et al. 2009). This suggests that children may not be getting additional care during illness, which may contribute to the high rates of acute malnutrition.

Access to water, sanitation, and hygiene (WASH) and health services: Indicators related to WASH are almost universally poor throughout Niger. Just under half of the population had access to basic drinking water services[1] in 2015, and only 13 percent had access to basic sanitation services (WHO 2017).[2] Access is better in urban areas, where 89 percent of households have access to at least basic drinking water, and 44 percent have basic sanitation services (WHO 2017). Although a number of projects have focused on increasing knowledge and awareness of WASH practices, and many, such as SPRING's community video pilot, have shown dramatic improvements in the uptake of WASH behaviors—these behaviors have been difficult to sustain due to poverty and the lack of resources and infrastructure for basic hygiene and sanitation (SPRING Forthcoming; Mathys, Oot, and Sethuramna 2017). Even projects that invest in improving WASH infrastructure, such as latrine construction, have found that low-cost materials do not hold up to the local conditions, and households revert back to their previous practices—primarily open defecation (practiced by 84 percent of the population) (WHO 2017; ICF International, Inc. 2014).

Niger has made impressive gains in expanding access to primary health care and treatment of acute malnutrition. In 2006, the country made health care free for pregnant women and children under the age of five, and it has invested in an extensive community health network made up of paid community health

[1] UNICEF uses the Sustainable Development Goal definition of basic drinking water services to mean if a round trip to collect water takes 30 minutes or less.

[2] Basic sanitation services are improved sanitation facilities—those designed to hygienically separate excreta from human contact—that are not shared with another household.

workers and unpaid health volunteers (*"relais"*). As a result, 80 percent of households are within five kilometers of a health facility (MCHIP 2017). Several sources note that caregivers generally take a positive view of health services, but utilization of them is still low in the GFSS target areas, especially among those residing in communities located far from services because they cannot afford transport and face further restricted access during the rainy season when road conditions are very poor (Mathys, Oot, and Sethuramna 2017). The most frequently cited concern about health care is cost—despite user fee exemptions for pregnant women and children under five, 56 percent of the country's total health expenditures are paid for with out-of-pocket spending (Wright et al. 2016). Other challenges include limited human resources for health, the lack of medicine and supplies in facilities (which may explain the low prevalence of treatment among sick children who are taken for medical care), and women's lack of decision-making control around seeking health care (Wright et al. 2016; UNICEF 2015). One critical challenge is the lack of supervision of community health services, which sources note rarely receive support (MCHIP 2017). The World Breastfeeding Trends Initiative assessment done in 2015 found that training in nutrition for health providers is insufficient despite the availability of official training materials, and training has mainly focused at the level of community health workers and volunteers (WBTi 2015). Group nutrition counselling is typically done at health facilities.

The management of acute malnutrition has been fully taken up by the health system of Niger. Community workers are responsible for identifying and referring malnourished children, and CMAM services are provided by government staff. When caseloads surge, additional support is provided by nongovernmental organizations and agencies of the United Nations. As of 2012, 90 percent of integrated health centers were able to provide CMAM services (Maimouna, Chegou, and Eric-Alain 2012).

Basic Causes

Access to resources: Poverty is widespread throughout Niger, and even households in the highest wealth quintile lack access to some of the most basics elements needed for a healthy life. For example, in 2015, only one-third of the wealthiest households had access to basic sanitation (UNICEF 2015). Niger consistently ranks near the bottom of the Human Development Index, and although the percentage of households in poverty is improving, nearly half (48.9 percent) of Nigeriens live below the poverty line of $1.90 a day (World Bank 2016). An analysis by Save the Children done in 2009 found that, unsurprisingly, poverty was one of the two most important determinants of stunting in Niger (Save the Children, UK 2009). Nigerien households spend over 70 percent of their income on food (WFP 2010). In a recent report, the Maternal and Child Health Integrated Program explained that in Niger, "family financial burdens continue to be a significant barrier to healthcare access" (MCHIP 2017), and households interviewed in the Title II baseline frequently cited costs of accessing health care (both services and transport) as a barrier, along with women's limited decision-making power (USAID 2014).

High poverty rates are driven by rapid population growth, diminishing agricultural returns, gender inequality (single women are significantly more likely to be poor), lack of alternative livelihoods opportunities, and recurring shocks. Agriculture is the most important sector for the economy in Niger; it accounts for over 40 percent of GDP (World Bank 2013). The RISE baselines found that resilience to these shocks is limited; a year later, only one-fifth of households were able to recover from drought and food

price increases, leading to a reduction in assets and high levels of indebtedness (TANGO International 2016). In 2016, the Food for Peace Desk Review found that 25–50 percent of households reported being in debt to neighboring households following the most recent harvest (Mathys, Oot, and Sethuraman 2017).

These cycles of shocks, debt, and ongoing poverty severely limit the ability of development projects to achieve sustainable improvements in the uptake of essential nutrition actions. As a 2009 Save the Children report states, "Although improving people's awareness about child care and weaning practices, and improving the wider public health environment are important to prevent and reduce malnutrition, they can only be effective if the poorest households can afford to put what they learn into practice" (Save the Children, UK 2009).

To date, social protection services for vulnerable households appear to be uncoordinated and ad hoc, delivered both through nongovernmental and governmental agencies. A 2009 review of safety nets in Niger notes that, "although the need to support poor and food insecure households is substantial, safety nets are small, receive limited funding, and are designed for emergency food crises" (Aker et al. 2009). Examples of social protection interventions that were noted in the literature include food-for-work, cash-for-work, direct food aid, school meals, and cash transfers, but food aid is the most prominent source of assistance (Aker et al. 2009). From March to May 2017 alone, some 1.35 million people (6.5 percent of the population) were provided with food aid through the government's national assistance plan for at-risk populations (FEWS NET 2017). An evaluation of unconditional cash transfers in Zinder found significant increases in both household dietary diversity and food consumption scores, with a particular increase in the consumption of vegetables, pulses, and dairy foods (Hoddinott, Sandström, and Upton 2014). Informal safety nets, such as village savings and loans groups, are implemented by a number of projects and show some promise in helping women build a cushion against the next shock (TANGO International 2016).

Cultural and social norms: USAID's Food Security Desk Review writes that, "gender inequality is significant in Niger and deeply rooted in cultural traditions. Women have lower educational attainment rates, lower income levels, lower asset levels, and lower decision-making authority than men" (Mathys, Oot, and Sethuraman 2017). Niger has a Gender Inequality Index score of 0.695, ranking 157th out of 188 countries for gender inequality (UNDP 2016). In general, women are far less likely to work in the formal sector and are underrepresented in leadership positions either at the local, regional, or national level. This, combined with the high rates of early marriage and pregnancy and low levels of education, keep women and families trapped in a cycle of malnutrition (Mathys, Oot, and Sethuraman 2017).

Women's ability to make decisions is severely constrained, even around issues that, in many countries, are often the domain of women. Only 12 percent of women report being able to participate in three key decisions: traveling to see family, health care, and major household purchases—these rates are similar across the three target districts (DHS 2013). Men reportedly make decisions around many aspects of women's lives, including breastfeeding, household meals, and children's health care. The modern contraceptive use rate was just 8 percent as reported in the 2013 DHS, and a Food for Peace project implemented by Mercy Corps found that the main constraint to the adoption of family planning practices was the refusal of some men to use modern contraception (Mercy Corps 2016). Some projects have tried to use this to their advantage, making efforts to inform and engage men around nutrition issues. The importance of family planning cannot be overemphasized. Households face a low resource base, and the

distribution of these limited resources across more and more family members continues to have negative implications on the health of household members through reduced resources for food and health care. Increasing men's awareness of this cycle as well as women's empowerment to make decisions around their own health has the potential to reduce the cycle of malnutrition that so many households face.

Young women—who are often mothers of young children in Niger—are in a particularly disadvantaged position. About three out of every four young women were married by the age of 18 (DHS 2013). Despite a legal age of 15 for marriage among girls, 26 percent are married before they reach 15—in fact the median age of marriage is just 15.7 years. Nearly one-fifth of married adolescent girls are in a polygamous marriage (DHS 2013). Early marriage is reportedly practiced in order to prevent pregnancy out of wedlock, and because marriage and number of children confers social status on women (Save the Children, UK 2017). With low family planning rates (8 percent), it is easy to see how young women become pregnant before their bodies are prepared to bear children—furthering the cycle of malnutrition as they likely give birth to SGA or stunted infants.

The challenge of gender inequality appears to be a major driving force affecting all aspects of health, nutrition, and food security. Although changing gender norms and power structures requires longer timelines and substantial investment, current literature underscores that improvements in nutrition will not be possible without significant improvements in a woman's control over resources and decisions that affect her own health and that of the baby in her womb, and more broadly, her household's livelihood and well-being.

Policy environment: In recent years, the government of Niger has boosted its commitments and policies related to nutrition, and nutrition coordination holds a prominent position, housed under the Office of the Prime Minister. The central framework for food security and nutrition is the 3N Initiative (I3N) *"les Nigériens Nourrissent les Nigériens"* ("Nigeriens feed Nigeriens"), chaired by the president. The initiative is supported by a series of action plans to accelerate results, which prioritize improvements in water access, agricultural production, and resilience. In fact, eight out of eleven key priorities in the plan for accelerated results focus on the agriculture sector or markets. The remaining three priorities focus on the prevention and management of food crises, management of acute malnutrition, and overall capacity building. In 2006, Niger created a National Adaptation Plan of Action to address climate change, and the United Nations Development Programme (UNDP) has announced plans for funding to further support the process of climate change adaptation in the country (Adaptation Action 2011; Climate Change Adaptation 2017).

Niger was one of the Scaling up Nutrition (SUN) movement's "Early Riser" countries, joining in 2011. In 2016, Niger launched its first multi-sectoral nutrition policy, the National Multi-sectoral Nutrition Security Policy, and has established a specific budget line for nutrition to track spending. The estimated cost of the plan is $24 million for nutrition programs—mainly nutrition-specific (SUN 2017). Within the framework of the nutrition policy, the Ministry of Public Health has developed a Strategy for the Prevention of Chronic Malnutrition. The government has also prioritized communication for nutrition, targeting infant and young child feeding practices and "Essential Family Practices" through community health workers and *relais*. The country has a multi-stakeholder SUN platform under the Ministry of Public Health, which serves

as an umbrella for specific networks for civil society, members of parliament, and academia. It is unclear how active these bodies are.

In the next five years, I3N plans to increase its emphasis on rural poverty and inequality, with a greater focus on women. Although not specifically mentioned as focus areas in I3N, the government of Niger has also made community health a centerpiece of their development efforts with the establishment of a paid cadre of community health workers, now numbering approximately 2,500, and an increase of task-shifting to some 4,000 community health volunteers. However, it does not appear that the initiative plans to tackle early marriage and pregnancy, which are key drivers of malnutrition in Niger, as mentioned above.

Despite the progress in developing an enabling policy environment for nutrition, in 2016, the Hunger and Nutrition Commitment Index described Niger's commitment to nutrition as "low," ranking it 22nd out of 45 African countries. Areas for improvement given include enforcement of the legal framework, such as the Rural Code of 1993 and other laws that protect and benefit women, and the collection of regular data on nutrition, which is currently lacking (HANCI 2014).

Opportunities for Investment

Nutrition, food security, and resilience have been a core focus of donors' and implementing partners' efforts in Niger for many years. Although prioritization of nutrition by the government has lagged, a strengthened policy environment and investments in nutrition-sensitive programming, such as community health, have moved nutrition to the center of development programming. Many of the suggestions that arose from this desk review are not new: partners have, very rightly, been focusing on these issues for many years (see annex 2 for a summary of current development activities related to nutrition, agriculture, and resilience in Niger). However, nutrition has improved very little despite these efforts—likely because the basic, more structural causes of malnutrition are not improving. While there is still a great need for improvements in nutrition-related behaviors and services, particularly around WASH and infant and young child feeding, major change is unlikely if the precarious situation of women (especially young women) and the ongoing cycle of poverty, low agricultural productivity, and crises are not addressed in a meaningful way. Based on the information available in this review, the following opportunities for investment have been identified:

1. **Continue to expand programming that builds the resilience of communities and systems**. The relentless cycle of shocks and emergencies are driving high rates of poverty and indebtedness among much of the population. Resilience programming has become a common theme of development programming in Niger—and for good reason. Resilience programming should take a broader systems view, going beyond household and community resilience to strengthen safety nets and the underlying food, health, and water structures on which communities rely. In addition, this programming must consider the different needs and barriers of agricultural communities versus agro-pastoralists. Unless the recurrent, significant shocks to food production are addressed, it is unlikely that efforts to achieve stable levels of food security or reduce poverty will be successful.
2. **Further scale up climate-smart programming**. Although Niger is a member of the Climate Smart Agriculture Alliance, the literature reviewed here did not demonstrate widespread promotion of climate-smart agriculture practices. Climate shocks are expected to increase in the coming years,

further exacerbating erratic rainfall patterns and potentially increasing the occurrence of both floods and droughts. Investments in understanding the most effective climate-smart agriculture practices, expanding access to improved and resilient seeds, strengthening early warning and response systems, and increasing the availability of irrigation and water conservation schemes are key strategies to explore. Households in extreme poverty are less able to take risks in their food production, so promotion of climate-smart agriculture needs to be delivered using best practice principles of social and behavior change that address the very real barriers these families face.

3. **Address recurrent food insecurity and the lack of dietary diversity**. The country is starting from a low baseline level of agricultural development, so even basic assistance is needed such as access to inputs, the introduction of low-cost food processing and storage techniques, and the promotion of improved livestock management practices. Because access to water is a major challenge, USAID could consider the promotion of drought resistant seeds and the expansion of irrigation. However, given the high levels of poverty, the poorest households would unlikely be able to benefit from this sort of programming without additional support, such as vouchers, cash transfers, or other forms of social protection.
4. **Invest in nonagriculture livelihoods**. At the national level, the government of Niger and USAID should continue to invest in areas with a higher potential for food production. However, where the resource base is poor, development activities should focus on alternative livelihood strategies to complement subsistence agriculture, as small-scale farming is insufficient to reduce poverty or improve nutrition. As described above, productivity is greatly constrained except where water is available, soils are poor, land size is shrinking, and there are limited processing and storage facilities. Only by addressing all of these issues, as well as gender inequities in agriculture—a very tall order—could agriculture begin to help households break the cycle of poverty. The scope of this review did not enable us to identify specific alternate livelihoods, however, it clearly emerged that investing in agriculture alone will be insufficient to improve nutrition in Niger.
5. **Strengthen the delivery of facility- and community-based health services**. Reducing childhood morbidity—both through prevention and rapid treatment—is essential for reducing the extremely high levels of acute malnutrition. Although access to health services has quickly expanded in Niger, there remain many challenges around the quality of service delivery, as many children who are taken for care receive no treatment. To ensure sustainability, USAID's investments should seek to partner with the government of Niger to build the capacity of health centers and their staff, including improving supplies and supply chains, training, and supportive supervision of staff, with a particular emphasis on strengthening supervision and support of community-based providers and volunteers. Strengthening family planning services, with particular efforts to reach adolescents and young women, is both an important strategy for reducing malnutrition through delayed pregnancy and improved birth spacing as well as an opportunity for the integration of complementary nutrition activities. The strengthening of health services should be complemented by comprehensive behavior-centered strategies that promote health and hygiene behaviors to prevent illness, improve proactive care-seeking, and encourage appropriate feeding practices during illness. Finally, activities should explore "scale-up, scale-down" models of service delivery to build the capacity of the health system to anticipate and manage routine increases in caseloads, such as the annual spike in children requiring

CMAM services, so that all routine childhood illnesses, including severe acute malnutrition, can be managed through the health system. In agro-pastoralist communities, alternative models may need to be explored for reaching children with severe acute malnutrition.

6. **Emphasize livelihood opportunities for women**. Qualitative assessments find that women in many communities are able to manage their own incomes, and community savings groups are generally accepted. Programs can build on examples such as Save the Children's promotion of *habbanayé*, a small ruminants scheme that has been successful in providing income and strengthening the role of women in programming areas within Maradi. Other Food for Peace programs demonstrated success in increasing women's revenue and savings through savings and livestock groups. These activities must be paired with efforts to shift gender norms around women's control over resources and increasing opportunities for women and men to make decisions jointly regarding household expenditures and use of assets.[3] Any programming that seeks to address gender inequality in Niger must first be guided by formative research to ensure the use of context-appropriate methods, such as the incorporation of religious and community leaders. It is also important to constantly monitor these programs for unintended consequences. Although programs that emphasize women's control of resources may be met with resistance, equipping women with resources to break the cycle of malnutrition—starting with a malnourished adolescent girl bearing a child—is essential for successful long-term outcomes in nutrition.
7. **Invest in infrastructure and services for WASH**. Access to clean drinking water and basic sanitation services are lacking even for the wealthiest members of the country; building the supply of these services is critical to improving the health of the population. Focusing on households with pregnant women and children under 2 years of age, investing in safe disposal of feces, creating safe and clean play spaces, disinfecting drinking water, and handwashing with soap and water from tippy taps are important components to decreasing diarrhea and improving health and nutrition. Access to these services should be coupled with education to improve knowledge of good practices.
8. **Promote improved nutrition-related practices and address barriers to change, using a multi-sectoral approach to social and behavior change**. Many projects seek to improve nutrition and health practices, and some recent activities have targeted adolescent girls, such as the Safe Spaces project (UNFPA 2013). Sustaining these changes has been a challenge, however, due to deep poverty and systemic barriers such as ingrained norms, weak infrastructure, and inadequate service delivery. Behavior change is needed in a number of areas related to nutrition: infant and young child feeding; care-seeking for and feeding of sick children; family planning; women's empowerment; joint household decision-making; water, sanitation, and hygiene; dietary diversity; and agriculture practices, such as adopting improved storage or climate-smart agriculture. Supporting behavior change in a coordinated way, using multiple channels, is more likely to be effective. Investments in behavior change need to involve both supply-side interventions related to improved access as well as demand-

[3] One example of such programming, from another country context, is the "Journeys of Transformation" approach in Rwanda (CARE/Promundo), which used a 17-week curriculum focused on gender and economic empowerment that engaged both men and women. (Promundo and CARE International in Rwanda 2012).

side interventions through behavior change campaigns promoting small, doable actions. It is also important that these channels work with local leaders to communicate the necessity of female empowerment. Even though changing gender norms is difficult, it is essential if nutrition is to improve. A woman must be empowered to make more decisions—many of which include health-care-seeking behaviors for herself and her children, including family planning. Activities that seek to encourage joint household decision-making and increase men's involvement in supporting children and mothers are imperative, and must be informed by local formative research.

Annex 1: Table of Relevant Indicators

	Maradi	Tillaberi	Zinder	National
Water, sanitation, and hygiene (WASH)				
Percentage of households with improved drinking water source (in the house) (DHS 2013)	**-**	**-**	**-**	**67.00**
Percentage of households with improved toilet (DHS 2013)	**-**	**-**	**-**	**9.30**
Stunting				
Percentage of children under five who are stunted (<-2Z) (INS 2016)	37.30	38.90	38.10	**43.90**
Percentage of children under five who are stunted (<-2Z) (DHS 2013)	53.50	38.10	52.00	**43.90**
Wasting				
Percentage of children under 5 who are wasted (<-2Z) (DHS 2013)	19.00	15.60	18.80	**18.00**
Underweight				
Percentage of women with body mass index (BMI) < 17 (DHS 2013)	6.10	3.50	8.60	**5.30**
Obesity				
Percentage of women with BMI >= 25 (DHS 2013)	9.20	21.00	6.50	**17.80**
Breastfeeding				
Percentage of children age 0–5 months exclusively breastfed (DHS 2013)	-	-	-	**23.00**
Median duration of months of exclusive breastfeeding (DHS 2013)	0.70	0.50	0.50	**0.60**
Infant and young child feeding (IYCF) practices				
Percentage of all children 6–23 months fed 4+ food groups (DHS 2013)	7.50	11.30	4.90	**9.80**
Prevalence of diarrhea				
Percentage of children under age 5 who had diarrhea in the two weeks preceding the survey (DHS 2013)	10.70	15.10	17.00	**14.10**
Teenage pregnancy				
Percentage of women aged 15–19 who have begun childbearing (DHS 2013)	44.00	38.00	52.00	40.00
Women's health				
Percentage of women receiving no antenatal care (DHS 2013)	11.10	9.10	19.30	**14.40**
Percentage of women delivering in health facilities (DHS 2013)	26.70	29.30	19.90	**29.80**
Women's empowerment				
Percentage of women who have made 3 decisions (DHS 2013)	13.60	15.90	15.60	**12.30**
Number of indicators worse than national average	**6**	**3**	**9**	**-**

Annex 2: Summary of Nutrition, Agriculture, Food Security, and Resilience Programming in Niger

Organization/ Project	Mission/Goal	Location(s) in Niger *(Blank if not specified)*	Funding/Partners
***Action Contre la Faim* (ACF)**	Since 1997, *Action Contre la Faim* has worked in Niger to improve livelihoods of vulnerable populations and facilitate their access to markets. It also works on improving water points and sanitation facilities for the rural population. The organization established programs on food security management, nutrition, water and sanitation, and advocacy.	Maradi Tahoua	Catalan Agency for Development Cooperation (ACCD), COFRA Foundation, European Commission Humanitarian Office (ECHO), European Union, Office of United States Foreign Disaster Assistance (OFDA), Spanish Agency for International Development Cooperation (AECID), Swiss Cooperation, the United Nations Children's Fund (UNICEF), World Food Program (WFP), and private funds
AGRANDIS	AGRANDIS is a regional nutrition program with two components: (1) prevention and treatment of acute malnutrition in three target countries; and (2) investment in orange-fleshed sweet potato in two target countries. Through AGRANDIS, Hellen Keller International is working to strengthen the capacity of weak government health systems and vulnerable communities through three country projects, one of which is in Niger.		Implemented by Hellen Keller International, funded by USAID and the Margaret A. Cargill Foundation
CARE Niger	CARE Niger was established in 1974 in response to famine. The program currently focuses on health and nutrition, natural resource management, education, local governance, conflict resolution, women's empowerment, microfinance, disaster risk	Diffa region Maradi region Tillabery region	The Disasters Emergency Committee (DEC); European Commission; the governments of Denmark, Niger, Norway, and

Organization/ Project	Mission/Goal	Location(s) in Niger *(Blank if not specified)*	Funding/Partners
	reduction, and emergency preparedness and response. Niger is the birthplace of CARE's successful and often-replicated Village Savings and Loan Associations program, which economically empowers women and raises their social and political status. The project is known as *"Mata Masu Dubara"* (MMD): "ingenious women" or "women on the move."		the United Kingdom; UNICEF; USAID; World Food Program; and private donors
Center for Human Services (CHS) of the University Research Company, LLC	CHS built on work by its earlier Quality Assurance Project (funded by USAID) to create and implement a pediatric malnutrition recuperation program. The project rapidly expanded nutritional recuperation services for acutely malnourished children in 15 district hospitals. In addition, it built local capacity to improve behavior change and communication, screenings, referrals, and recuperation.		American Jewish World Service OFDA, and UNICEF
Concern Worldwide	Concern Worldwide has been working in Niger since 2003, when it established a primary school education program in the Tahoua region. Its work in Niger focuses on health, nutrition, and food security through an integrated resilience-building program that combines livelihoods, health, nutrition, WASH, and education programs in one specific geographical area covering 29 villages.	Tahoua region	Irish Aid and other private funds
***Deutsche Gesellschaft für Internationale Zusammenarbeit* (GIZ) GmbH**	The Program for Rural Development and Productive Agriculture: Promotion of Productive Agriculture (PROMAP) is in Niger from 2013 to 2018. The program advises Niger's Ministry of Agriculture on the development and implementation of an appropriate small-scale irrigation policy. The program develops specific training modules and courses for private and public sector agricultural service providers, enabling them to offer professional advice to farmers.		German Federal Ministry for Economic Cooperation and Development (BMZ)

Organization/ Project	Mission/Goal	Location(s) in Niger *(Blank if not specified)*	Funding/Partners
***Dispositif National de Prévention et Gestion des Catastrophes* (DGPGN)/National Disaster Prevention and Management System**	Concerned by the alarming situation of disasters threatening the environment, Nigerien authorities established a disaster prevention and management mechanism. The purpose of the system is to: (1) inform and communicate to citizens regarding the food and nutrition situation and disasters; (2) develop strategies for prevention, risk reduction, mitigation, and management of food, nutrition, and disaster crises; (3) coordinate and monitor the implementation of these strategies; (4) ensure coherence and effectiveness of short- and medium-term actions aimed at improving food and nutrition security, reducing chronic vulnerability, and increasing the resilience of populations; (5) carry out short and medium-term interventions for the prevention, mitigation, and management of disasters and food crises; and (6) facilitate consultation and advocacy.	National	AECID, *Cooperation Allemande*, GIZ, European Union, OCHA, OFDA, UNICEF, USAID, the United Nations Development Program (UNDP), and the World Bank
Food and Agriculture Organization of the United Nations (FAO)	The priority areas for collaboration between the FAO and Niger are to: strengthen the resilience of populations vulnerable to food and nutrition insecurity; increase, diversify, and promote agricultural, livestock, forestry and fisheries production; and establish an institutional and political environment that favors agricultural development, with food and nutrition security.		United Nations
GOAL	GOAL has been working in Niger since the country suffered a severe food crisis in 2005. It works to prevent loss of life and reduce poverty by delivering health, food security, and livelihood initiatives. It also works towards ensuring that the poorest and most vulnerable in our world and those affected by humanitarian crises have access to the fundamental rights of life, including but not limited to adequate shelter, food, water and sanitation, health care, education, and economic opportunities.	Tahoua region Zinder region	The Bank of Ireland, European Union, Irish Aid, Microsoft, UK Aid Direct of the United Kingdom's Department for International Development (DFID), United Nations (UN), USAID, World Health Organization, and the World Food Program

Organization/ Project	Mission/Goal	Location(s) in Niger *(Blank if not specified)*	Funding/Partners
GRET	GRET has been present in Niger since 2006. They began implementing an infant nutrition program in 2009, and in 2010, added a nutrition education component and began building the technical and marketing capacities of Misola's and STA's infant formula production units.		Government of France
Handicap International	Handicap International's main goal in Niger is to have a positive impact on the lives of people with disabilities and/or vulnerable people by reducing risk and preventing disabilities, improving access to services, and promoting a more inclusive society. Handicap International works in the region of Maradi to protect and reduce the vulnerability of malnourished children and their families. This project also includes work in preventing potential disability in malnourished children. Over the next two years, 10,500 severely and moderately malnourished children and 400 children at-risk or suffering from developmental delays are expected to benefit from this project.	Maradi	*Agence Française de Développement (*Afc), Belgium Development Cooperation (DGCD), the European Union, the Ministry of Foreign Affairs of Luxembourg, UNHCR (the United Nations Refugee Agency), UNICEF, USAID, and the United States State Department Office of Weapons Removal and Abatement (WRA)
Hellen Keller International (HKI)	Helen Keller International has played an important role at the national, regional, and community levels in Niger. HKI has been a key partner to the Niger Ministry of Health for vitamin A supplementation and the promotion of nutrient-rich diets through social behavior change communication based on research of culturally-appropriate and available foods. HKI was also instrumental in updating the diarrhea management policy to include zinc. HKI conducted several USAID-funded child survival and OFDA projects. It is currently a partner on the USAID Sawki Development Food Aid Program. It has recently been awarded a new OFDA project in Diffa for community malnutrition management.	Maradi Zinder Soon to include Diffa	Various donors

Organization/ Project	Mission/Goal	Location(s) in Niger *(Blank if not specified)*	Funding/Partners
HELP International	HELP has been involved in Niger since 2005. In its current five projects, it is supporting approximately 145,000 people. In addition to focusing on health and securing food supplies, HELP implements projects focused on generating income and assisting refugees.	Diffa region Maradi region Dosso region Zinder region	BMZ, German Federal Foreign Office, European Civil Protection and Humanitarian Aid Operations (ECHO), UNICEF, Welthungerhilfe, and World Food Program
***Initiative d'accélération des Objectifs du millénaire pour le développement au Niger* (IAOMD)**	This four-year project is part of the fast track initiative for the Millennium Development Goals (MDGs). The project targets 801,000 children and 844,000 women of childbearing age living in municipalities with high rates of chronic malnutrition. They are targeted with essential nutrition interventions such as community mobilization and behavior change on maternal and infant nutrition; essential family practices, including birth spacing; nutrition education; market gardening; sanitation; hygiene; and strengthening of health services. The project also includes the distribution of micronutrient supplementation, improved access to water, and the promotion of growth at community level. Health services are strengthened to provide quality prenatal and postnatal care.	Zinder	European Union and UNICEF
International Fund for Agricultural Development (IFAD)	IFAD's interventions in Niger work to strengthen the capacities and coping mechanisms of small-scale rural producers, with an emphasis on the most marginalized socioeconomic groups. Based on a model of sustainable family farming, IFAD supports efforts to ensure food security and strengthen the resilience of rural households by intensifying and diversifying production, postproduction, and marketing activities. One project is addressing the food and nutrition security of the rural population in Maradi region, where farming is characterized by low productivity and a fragile natural resource base. The project	Maradi	IFAD, a specialized agency of the United Nations

Organization/ Project	Mission/Goal	Location(s) in Niger *(Blank if not specified)*	Funding/Partners
	aims to improve the living conditions and resilience of smallholder households in the region through economic development based on the marketing of cereals, market-garden produce, and livestock.		
Livelihoods, Agriculture and Health Interventions in Action (LAHIA), Save the Children	Save the Children, working with its subrecipient World Vision International, is implementing the Livelihoods, Agriculture and Health Interventions in Action project, a five-year, $29.8 million integrated food security program. The priority components of the program include reducing chronic malnutrition among pregnant and lactating women and children under five years of age, with a focus on children under two, as well as increasing local availability and access to nutritious food by diversifying agricultural productivity and rural household incomes and increasing resilience to shocks.	Maradi	Save the Children is partnering with World Vision, funded by USAID's Office of Food for Peace
Mercy Corps	Mercy Corps has been working in Niger since 2005. One focus area is agriculture and food. Mercy Corps provides emergency food vouchers and commodities to those who need it most while simultaneously building long-term food resilience by providing improved seeds, goats, farming tools, and technical training, and by teaching pregnant and nursing mothers about nutrition. They also work on women and gender issues by involving women in community decision-making, educating community leaders about the importance of gender equality and creating safe spaces and schools for young girls to express themselves and continue their education.		Various donors

Organization/ Project	Mission/Goal	Location(s) in Niger *(Blank if not specified)*	Funding/Partners
National Information Platform for Nutrition (NIPN)	The implementation of the National Information Platform for Nutrition in Niger is led at the political level by I3N, which will convene the NIPN policy advisory committee. The NIPN analysis unit will be created within the National Institute of Statistics (INS), where capacity to manage, analyze, and disseminate nutrition-related information and data will be built. Operations for NIPN implementation started in September 2017.	National	
Oxfam	Oxfam works in Niger on secure livelihoods, basic social services, humanitarian emergency response, governance, and gender justice. Oxfam has been working in Niger since 1992, collaborating with a significant number of partner organizations.	Tillaberi Dosso Tahoua Agadez Maradi Zinder Niamey	
Diffa Region Local Development Support Project (PADL–Diffa)	Backed by the African Development Bank (AfDB), Niger received approval from the Climate Investment Fund (CIF) for US $22 million to support its Water Resources Mobilization and Development Project. It seeks to boost food production in 10 rural districts in Niger and improve the livelihoods of some 700,000 people by implementing mini dams, wells, and boreholes; irrigation schemes; erosion control; and other water management measures; along with the social infrastructure and training needed at the local level to ensure sustainability. Moreover, climate-resilient seeds and farming techniques will be introduced to increase agricultural production.	Mostly Diffa region	AfDB, CIF

Organization/ Project	Mission/Goal	Location(s) in Niger *(Blank if not specified)*	Funding/Partners
Programme d'Appui à la Sécurité Alimentaire des Ménages-Tanadin Abincin Iyali **(PASAM-TAI)**	Catholic Relief Services' PASAM-TAI program tackles food security and malnutrition in Niger through WASH programming. The main approach is to promote handwashing and the end of open defecation. The goal of the program is to reduce food insecurity and malnutrition in the Zinder and Maradi regions of Niger.	Maradi and Zinder	CRS is partnering with The International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), GRET (a local NGO), *Cinéma Numérique Ambulant, Réseau des partenaires des arts vivants, CADEV/Maradi,* and *les services techniques de l'Etat*, funded by USAID's Office of Food for Peace
Resilience and Economic Growth in the Sahel—Accelerated Growth (REGIS-AG)	REGIS-AG is one of three key projects of USAID's RISE initiative, which is working to end the cycle of crisis and help the Sahel's most vulnerable population stay on the path to development. REGIS-AG works to increase the incomes of vulnerable households in marginal agricultural and agro-pastoral zones in Niger and Burkina Faso through the transformation of high-potential value chains.	Chronically vulnerable areas of Burkina and Niger, including Tillaberi, Maradi, and Zinder regions in Niger	Implementing organization is Cultivating New Frontiers in Agriculture (CNFA), funded by USAID
Resilience and Economic Growth in the Sahel—Enhanced Resilience (REGIS-ER)	REGIS-ER works to increase the resilience of chronically vulnerable populations in marginal agricultural and agro-pastoral zones in Niger and Burkina Faso. They are located in 25 communes within the marginal agricultural and agro-pastoral belt of Niger, which includes Tillaberi, Maradi, and Zinder.	Tillaberi Maradi Zinder	Implementing organization is National Cooperative Business Association (NCBA)–Cooperative League of the United States (CLUSA), funded by USAID
Resilience +: Community-Led Food Crisis Recovery in the Sahel II (CORE II)	Implemented by Lutheran World Relief (LWR), this project seeks to strengthen agricultural productivity and sustainably manage land and ecosystems to increase resilience to climate change risks. This project also includes an emphasis on the principles of gender equality. The aim of this project will be achieved via the	Zinder	Implemented by LWR, funded by Margaret A. Cargill Foundation

Organization/ Project	Mission/Goal	Location(s) in Niger *(Blank if not specified)*	Funding/Partners
	following key objectives: (1) improve the resilience of producer organizations and communities to climate change; (2) improve the management of water, soil, and forest resources and increase access to rural energy; and (3) increase household agricultural productivity and food security.		
Save the Children International	Save the Children activities are deployed in four regions of Niger, with 400 employees and approximately $30 million expenditures incurred each year for health programs, nutrition, child protection, education, food security and livelihoods, water, and sanitation.	Diffa region Tessaoua Zinder Naimey	ECHO, the Global Fund, and USAID
Sawki	Mercy Corps, Africare, and Helen Keller International are implementing a development food aid program entitled *"Sawki"* that is designed to respond to the food security needs of more than 115,000 beneficiaries in Maradi and Zinder.	Maradi Zinder	Partners are Africare, HKI, and Mercy Corps; funded by USAID's Office of Food for Peace
Trickle Up	This three-year project supports the design, delivery, and learning associated with the World Bank's Adaptive Social Protection Program. In October 2016, the World Bank and six Sahelian country governments convened in Dakar to agree on the components of a "basic package" for the nascent program. This basic package comprises many of the components central to the Graduation Approach, including individualized coaching.		
United Nations Development Program (UNDP)	The Community-Based Adaptation project portfolio in Niger consists of seven projects: (1) Intensified Goat Breeding to Help Vulnerable Women Adapt to Climate Change Effects; (2) Adapting to Climate Change in the Community of Tamalolo; (3) Intensified Agroforestry Practices for Adaptation in Tânout; (4) Hut Livestock to Reduce Household Vulnerability in Houtchi and	Various	UNDP

Organization/ Project	Mission/Goal	Location(s) in Niger *(Blank if not specified)*	Funding/Partners
	Dan Djaoudi, Roumbou; (5) Developing Sustainable Agriculture Techniques for Adaptation in Roumbou Municipality, Dakoro; (6) Improving Agro-Forestry and Providing Better Seeds to the Community of Maigochi Saboua, Roumbou; and (7) Adapting Pastoral and Agricultural Practices to the Realities of Climate Change.		
United Nations Population Fund (UNFP) Niger Adolescent Girl Initiative	The initiative empowers vulnerable girls aged 10–19 through an eight-month program designed to delay child marriage and prevent adolescent pregnancy. The initiative establishes "safe spaces" and uses mentors—young women aged 20–40 with at least a secondary education level—to serve as role models in their communities. The girls go through a comprehensive program of 31 sessions on topics such as life skills, hygiene, reproductive health, and financial skills, all aimed at empowering them with self-esteem; leadership skills; and the ability to protect themselves from violence, peer pressure, sexually transmitted diseases.	Started in Zinder, Maradi, Tillaberi, and Niamey, with the plan of expanding to all regions of Niger by 2018	UNFP
University of California Davis (UC Davis) Niger Maternal Nutrition (NiMaNu) Project	UC Davis's NiMaNu project conducted an implementation research project entitled *Assessment of the nutritional status of pregnant women in Zinder, Niger, and optimization of antenatal care services*. In the first phase of formative research, the beliefs, barriers, knowledge, attitudes, and practices related to antenatal care and pregnancy outcomes were assessed among pregnant women, and the quality of prenatal care services was evaluated at the health center level. Based on these findings, UC Davis developed a two-pronged strategy to optimize antenatal care services in two health districts in the region of Zinder.	Zinder	Partners include HKI, the Micronutrient Initiative, and the Niger Ministry of Health; funding is from Global Affairs Canada (GAC), the Micronutrient Initiative, and UNICEF

Organization/ Project	Mission/Goal	Location(s) in Niger *(Blank if not specified)*	Funding/Partners
World Food Program (WFP)	WFP has been working in the Niger since 1968. Its current work aims to alleviate hunger and malnutrition, not only in emergency situations, but also over the long term through resilience-building. WFP implements integrated activities in different areas, such as nutrition, food security, school meals, and purchases from small local farmers, to help the poorest households be self-sufficient.	Various	Various donors
World Vision International (WVI)	WVI focuses programming in Niger on the areas of WASH, health and nutrition, food security, education, and vocational training. It uses the Area Development Programming Approach, a long-term model that uses a multi-sectoral approach and concentrates initiatives on vulnerable communities within a targeted zone for efficiency and maximum impact.	Niamey Dosso Maradi Tahoua Tillaberi Zinder	WVI, funded by private donors

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