



Formative research to inform adolescent programming in Uganda

Engagement for health, nutrition and sustainable development

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Anthrologica

Foreword

Adolescence is a period of rapid growth and consequently of increased nutritional demands. For girls, chronic under nutrition during adolescence can lead to an intergenerational cycle of maternal malnutrition. If girls remain malnourished during adulthood, they are more likely to deliver low birth weight babies. This creates a risk for their children to suffer from malnutrition and stunting. Intergenerational malnutrition then continues to thrive if no interventions break the cycle. Evidence-based interventions for this key group are therefore required to inform priority decisions and programming.

In Uganda, 25% of the population are adolescents, of which half are girls. Lack of specific data on adolescent nutrition and on how to effectively reach and engage them as a specific target group has limited prioritisation of adolescent nutrition interventions. This has had an impact on the health of adolescent girls.

The Health Sector Development Plan (HSDP) of 2015/16 – 2019/20 recognises the value of strengthening the Health Information Pillar of the health system to enhance health sector competitiveness. Accordingly, health research has been set as a programme area under this pillar with a focus on operational research. The World Food Programme (WFP) Country Strategic Plan (CSP) guides the agency's engagement in Uganda to support the Government's work to achieve Sustainable Development Goals 2 and 17. One of the strategic outcomes of the CSP focuses exclusively on nutrition activities and aims to reduce acute malnutrition and stunting rates amongst children aged 6-59 months in food-insecure areas.

This report on adolescent nutrition commissioned by WFP was carried out by Anthrologica in Mungula refugee settlement in Adjumani district and in Moroto district in Karamoja. The report is aligned to WFP's joint design and programming, evidence gathering, knowledge-sharing, enhancement of national capacities and partnerships. Findings from the report will be used to inform planning for adolescent nutrition interventions to improve the health of adolescents and will also contribute to informing the review process of the HSDP.



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This report documents formative research conducted in Uganda as part of a multi-country study to inform adolescent engagement and programming for health, nutrition and sustainable development. A concise report summarising key findings and recommendations has also been produced, and a database of stakeholders working with adolescents. A report synthesising core learning across the four countries included in the project (Cambodia, Guatemala, Kenya and Uganda) was launched at the World Health Assembly in 2018.

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Executive summary

Background

Adolescence is a time of significant brain development (Blum et al., 2014) and physical growth at a pace exceeded only by the critical first 1000 days (Thurnham, 2013). As identified in Sustainable Development Goal 2, Zero Hunger, addressing the nutritional needs of adolescent girls is one of the key steps towards achieving the objective of ending malnutrition by 2030. The 2013 'Maternal and Child Nutrition Series' published by *The Lancet*, the Vision 2030 Sustainable Development Goal agenda, and the Scaling Up Nutrition (SUN) movement have each played a key role in highlighting that adolescent nutrition interventions should be tailored to girls. Interventions to improve access to education, delay marriage, and prevent early pregnancies can contribute to improving adolescent girls' nutrition so they can reach their full potential (Horton, 2013; SUN, 2016; Thurnham, 2013; Black et al., 2013; Finlay et al., 2011). There is, however, a lack of evidence to guide the development of strategic nutritional messages and interventions for this specific target group and more research is needed on the nutritional status of adolescents globally (Leenstra et al., 2005; Patton et al., 2016).

In line with the global shift of attention towards adolescents, there is increased engagement and mobilisation of multi-sectoral actors around the adolescent agenda in Uganda. A number of national policies address health and nutrition needs of adolescents, including the Uganda Nutrition Action Plan; the Uganda Multi-Sectoral Nutrition Policy; and the National Anemia Policy. It is important to note that whilst policies have been passed by the relevant government institutions, it proved difficult to ascertain how far they had been operationalised, and their impact. Other policies of relevance, pending at the time of research, included the School Health Policy; the National Multi-National Sectoral Framework for Adolescent Girls; the Maternal, Infant, Young Child and Adolescent Nutrition Roadmap; and the renewal of the National Adolescent Health Strategy.

According to the national census of 2014, Uganda has 8.9 million adolescents (10-19 years), constituting 26% of the total population (Uganda Bureau of Statistics, 2016). Disaggregation shows equal proportions of boys and girls, but with a greater proportion of 10 to 14 year olds (55%). Most adolescents (80%) reside in rural areas which, in Uganda, are generally more impoverished than urban areas (World Bank Group, 2016).

Data on nutritional status in Uganda has historically concentrated on children under the age of five and women of reproductive age (15-49 years). According to findings appertaining to these populations, stunting, underweight, wasting, and iron deficiency anaemia constitute the most prevalent forms of malnutrition in Uganda (UBOS and ICF, 2012). National data also suggests a problem of overnutrition, as indicated by the prevalence of overweight or obesity among women of reproductive age. In urban areas, this likely results from changing dietary patterns coupled with decreasing physical activity levels. The Ugandan diet consists mainly of starchy staples and vegetables, with almost no animal-based protein (UBOS, 2014). It is characterised by low energy intake (UBOS, 2014) as well as a critical micronutrient gaps in iron, zinc, calcium minerals and vitamins A and B-12 (Harvey et al., 2010).

In 2017, the Ministry of Health and partners conducted an Adolescent Risk Behaviours Survey. This reported that nationally amongst 10-19 year olds, the rate of stunting (measured as height for age <-2 standard deviation score) was 15.5%; overweight (measured as BMI for age >=1 standard deviation score) was 6.7%; and thinness (measured as BMI for age <-2 standard deviation score) was 6.5% (Ministry of Health et al., 2017). Underweight and stunting was more common among males than females, and overweight was significantly more prevalent among urban females. Factors associated with stunting included low socio-economic status, being younger, and coming from the western region, but the study called for more qualitative research to understand key risk behaviours.

Detailed information about how to reach adolescents as a specific target group remains largely restricted to the areas of sexual and reproductive health and HIV, where positive inroads have been made. There is a need, therefore, to better understand all aspects of adolescent nutrition in Uganda, and to develop innovative approaches to effectively engage them on a broader range of issues.

Research Objectives

This research is part of a four-country study that is contributing to the global evidence base for adolescent nutrition. The other three countries included in the study are Cambodia, Guatemala and Kenya. The research has four overall objectives:

- To assess the experiences, needs and priorities of adolescents regarding their nutrition.

- To understand the policy and programmatic environment and current practices for effectively engaging adolescents.
- To establish the preferences of adolescents regarding how they want to be engaged in programming.
- To establish user-centred recommendations for more adolescent-friendly, context-specific nutrition interventions.

Methodology

The mixed-methods, collaborative study was conducted between February and December 2017. A country landscape analysis of adolescent programming recorded 28 key stakeholders working with adolescents in the country, and categorised the focus, timeframe and location of interventions, the target group (age, ethnicity, gender), the modes of engagement and key programme implementers. Formative qualitative research using participatory creative methodologies elicited perspectives, experiences and suggestions from adolescents and their communities. Data was collected in two districts: Moroto district in Karamoja, and Adjumani district in West Nile. In Moroto, fieldwork was conducted in Atedeoi (rural) and Katanga (peri-urban); in Adjumani, in Mungula I refugee camp (with both refugee and host communities). A total of 312 participants were included in the study, and 144 data collection activities were undertaken including focus group discussions, key informant interviews, technology surveys, and participatory workshops with adolescents using a range of creative methodologies to document their voices (photowalks, graffiti walls, drawings, clay modelling). Informed consent and assent was given prior to participation, and the study was granted ethical clearance by Makerere University School of Medicine. The full analysis of qualitative data used thematic analysis developed specifically for analysing data generated through applied research. Evidence-based recommendations were designed combining the formative research findings and stakeholder mapping, to improve the design of nutrition-specific and nutrition-sensitive interventions for adolescents, and highlight opportunities for adolescent engagement regarding nutrition in Uganda.

Defining and experiencing adolescence

Adolescence is commonly understood as the life stage between the end of childhood and the beginning of adulthood (Kaplan, 2004). Conceptually, the UN defines adolescence as spanning the age range 10-19 years, although others argue for 10-24 years (Sawyer et al., 2018). Adolescence is a dynamic concept, both culturally and historically. The length, the progression and even the existence of adolescence as an interim life stage differ widely across cultures (Steinberg, 2014).

In Uganda, there is not one standardised definition or age range for adolescence applied across laws and policies, and there are marked disparities between community-level definitions of adolescence and the terminology adopted at the national level. It is clear that conceptually, there is a distinct period of life that marks the transition from childhood to adulthood, although how that transition is defined, what triggers the entrance and exit between life stages, and the terminology used to describe it vary.

Age is rarely used to indicate different life stages at the community level, rather key socio-cultural markers dominate, such as marriage, parenthood and level of household responsibility. Participants confirmed physical change to be a strong marker related to transition between life stages, particularly breast development and the start of menstruation for girls, and deepening voices and the growth of facial hair for boys. Physical changes are also used to signify when a girl is ready for marriage and parenthood. Most adolescent groups explained that their *'thinking capacity'* was superior to that of younger children, but was not yet the level of an adult.

Adolescence was seen as a period of growing responsibilities. In Moroto district, household jobs for adolescent girls included mopping, fetching water, collecting firewood, thatching huts and carrying supplies between the *manyatta* (village) and town, and between the *manyatta* and *kraal* (pasture). Preparing food for the household and looking after younger siblings were core activities emphasised by adolescent girls. Married adolescents and adolescent mothers had similar responsibilities, but cared for their own children rather than their siblings. In Moroto, many women had assumed additional responsibilities as income generators by engaging in paid work outside the home. Household responsibilities had therefore started to shift to eldest daughters, and many confirmed that they often found the level of work and responsibility difficult to manage. In the refugee community, where it was reported that households included an average of 10 children, the responsibility of adolescent girls for their siblings was particularly demanding.

In both Moroto and Adjumani, participants of all ages agreed that girls had more responsibilities than boys. In Adjumani, girls discussed *'needing to work hard'* and to be *'more serious'*, whilst boys spoke about having more time

to play with friends despite having some responsibilities. The workload of girls was described as protecting them from 'idleness', a criticism often levied at adolescent boys in both sites.

Reliance on parents was described as a marker of childhood, and fostering independence and navigating away from parental reliance was a key component of adolescence. In both sites in Moroto and in the Adjumani host community, peer living practices were commonly described. Boys and girls aged around 14 years begin sleeping communally in a separate building to their family structures. In Moroto specifically, older and younger adolescent girls live in different groups as older adolescents may be visited by 'boyfriends'. *Nga'kobain*, a term derived from the word *kikob* meaning 'passing something between one-another', was used by participants to refer to groups of girls who live, eat and sleep together from approximately 14 years old (see photo below). Some participants highlighted that communal living may elevate risk, while several girls explained that it allows them to protect one another from sexual violence (before they get married and move to their husband's household). Sleeping communally was not a practice reported in the refugee community because of the limited land they had available to construct separate spaces. Stakeholders suggested that young refugees lacked opportunities to develop independence and responsibility because of the limitations in resources and freedom particular to their environment.

In general, the interim period between childhood and adulthood is often perceived to be longer for boys than for girls, as girls are likely to assume household responsibilities, marry, and bear children at an earlier age than boys. Yet, markers of adulthood are often identified in both girls and boys considerably younger than 18 years old, the legal age of majority in Uganda.

For the refugee population in Adjumani, a number of traditional initiation ceremonies signal adulthood. Among the Dinka and Nuer, the *gaar* initiation rite signals adulthood for boys, involving the scarification of contour lines on a boy's forehead (6 lines for the Nuer, 4-9 lines for Dinka). Dinka boys and girls may also have their lower teeth removed to signal adulthood. Amongst young men in the host Madi community in Adjumani, traditional markers for entrance to adulthood include wrestling and hunting. Markers for young women include beginning menstruation and increasing household responsibilities.

In rural Atedeoi, Moroto, a male is considered to be an adult when he gets 'married with cattle' (i.e., with cattle being transferred as part of the marriage process). Life stages or age sets for boys are divided into junior elders and senior elders. For men to be recognised as a senior elder, they must have gone through the initiation ceremony 'asapan', a rite of passage usually performed once per year per clan. Females are considered to be adults when they are married with cattle and have given birth to a child. It was widely agreed that giving birth is an important indicator of adulthood. A woman who is married, but has not yet borne a child, may not be regarded as a full and active adult, regardless of her age.

It is worth noting, however, that the conceptual juxtaposition of markers of adolescence can impede effective and efficient programme implementation. Some adolescents exclude themselves from services aimed at youth and/or adolescents as they self-identify as adults, (e.g. because they had their own child), despite being in the 10-19 age group.

Food and Nutrition

Available food and food sources

Across the research sites, adolescents were exposed to different foodstuffs and sourced food in different ways.

Moroto is an agro-pastoral zone. Crops typically grown included sorghum, greens, sunflowers, and, less commonly, maize, beans and cowpeas. Foodstuffs originating from livestock included meat, milk and blood that were usually more readily available in the *kraal* where food options may be more varied. In the *manyatta* and town, there was little choice. The community purchased flour, beans, oil, rice and some vegetables from the market, but because of households' limited financial resources, the cheapest goods were most commonly bought and consumed. The other main source of food, for school attendees, was school meals provided by WFP and supplemented by produce from small school gardens

In reporting their typical diet, adolescents most commonly described eating a meal of green vegetables, boiled or cooked with onions, tomatoes and oil; *posho*, a mix of sorghum flour, water and oil cooked into a thick paste; and beans if they have been harvested, or, if they can be afforded, bought in the market. Adolescents based in Atedeoi and Katanga had reduced access to animal products and greater access to starchy staples, with the opposite trend observed in the *kraal* areas where animals were kept to pasture. At the time of data collection, however, Moroto was experiencing significant food insecurity, and as one participant emphasised, 'now everyone is crying of hunger, hunger is everywhere'.

In Adjumani, amongst the refugee community in Mungula, sources of food included rations provided by external stakeholders, land (both private land and school gardens), livestock, and the market. During the time of data collection, the content of rations supplied to refugees in Mungula included oil, beans, maize and sorghum. Because of the scale of the operation, rations needed to be uniform and cost effective, but adolescents confirmed the diet to be limited.

Whereas rations were the primary source of food for refugees, the land (which in Mungula was generally considered fertile and productive) was the primary source for the host community. Those with enough land could produce cassava, beans, cowpeas and other crops including maize, which they could sell to buy rice, meat and fish. As such, food options for the host community were more varied, and in discussing their diets, adolescents in Adjumani focused more on vegetables and fruits than those in Moroto.

Differences in meal patterns were also observed across the sites, most notably in the *kraal* in Moroto where the need to take animals to pasture during the day placed emphasis on the morning and evening meal. A number of adolescents in both Moroto and in the Mungula refugee community reported that they often had nothing to eat for a morning meal, whilst some in both Atedeoi and Katanga (Moroto) described eating leftovers from the night before for their breakfast.

Food responsibilities

Adolescents played a key role in sourcing and preparing food for themselves and their households. Across the fieldsites, male household heads maintained control over how household resources were spent, whilst the mother or main female caregiver was responsible for sourcing food and preparing meals. As one stakeholder concluded, *'what is to be eaten, if there food at home, is left to women, men don't consider it an important aspect'*. In Moroto, adolescent boys were more involved in herding and milking animals and in extracting blood for consumption. Sourcing food and carrying foodstuffs between the *manyatta* and *kraal* was the responsibility of adolescent girls, most often carrying milk from the *kraal* to the *manyatta*, and sorghum flour from the *manyatta* back again. The burden of responsibility, particularly for younger siblings, was felt sharply by older adolescent girls in both rural and peri-urban sites in Moroto. It was common for the eldest girl in the family to prepare the food, overseen by their mother or female caregivers, a duty frequently depicted in the drawings made by adolescents during their participatory workshops.

Amongst the refugee community in Adjumani, rations were primarily distributed by external stakeholders (e.g. international organisations including WFP), although with a move to provide cash instead of food, programme implementers hoped to shift agency to the community. At the household level, the mother or main female caregiver was likely to decide what to buy, whilst adolescent girls would be sent to market to actually purchase food. The majority of the cooking was carried out by women and girls, and for child-headed households, the responsibility for food sourcing and preparation fell to the eldest girl.

Food preferences and aspirations

In Moroto, the limited availability of food meant that choice was rare, and many adolescents suggested that they could not risk expressing a preference for different foods but rather had to focus on sourcing any food. As one adolescent girl explained, *'every day we eat greens and posho. It's entirely dependent on availability of food, or availability of money to buy food'*. The only desired food items were additions to the routine diet, such as tomatoes, onions and cooking oil to give the green vegetables a *'nice taste'* and beans for added protein. A number of *'treats'* were mentioned by adolescents and their caregivers, including *mandazis* (fried dough), sweets and cakes, but these were more accessible in peri-urban Katanga, close to the trading centre. Livestock represented more than a food source in Moroto, and ownership was a powerful symbol of status. Older adolescent boys who were based in the *manyatta* in order to attend school expressed nostalgia for herding animals in the *kraal*. Their lack of access to animal produce such as meat and milk was keenly felt by many *manyatta*-based adolescents who perceived them to be the most nutritious and *'energy-giving'* foods.

In Mungula, Adjumani, adolescent refugees expressed preference for *'traditional'* foods according to their cultural backgrounds. Whilst they suggested that *'traditional'* food and meat gave the most energy, they also expressed nostalgia for their homeland through their food preferences. Adolescent refugees were vocal in their dislike of the food they ate regularly, particularly staple green vegetables, because they were *'boring'*. As one adolescent boy concluded, *'now we are eating these things by force which are not in our heart'*. In general, adolescents from the host community expressed a wider vocabulary for their preferred foods. Older boys desired food that gave them energy and kept them *'strong'* and able to perform their hard physical duties, particularly digging the land. Adolescents from the host community expressed great emotional attachment to their land, and digging was commonly documented in both drawings and photowalks. The land was perceived not only as a source of food, but also in terms of its income-generating potential so that more varied foods could be purchased and households had resources for school fees.

Participants (both adolescent and adult) expressed great respect for the land and an appreciation of what it could offer. As one adolescent girl from the host community explained, *'you get a lot of food when you dig'*.

Factors affecting nutrition

Seven interrelated themes were found to influence adolescents' access to adequate and healthy food: climate and agricultural practices; household economy and income generation; alcohol; social norms; sexual and reproductive health; access to education; and service provision.

Climate and agricultural practices

Across Moroto, both adolescents and adult participants reported that the recent lack of rain had significantly affected harvest yield, resulting in less food being available. Poor weather had also resulted in communities having to use more distant *kraals* to graze their livestock, which removed animals as a source of food from the *manyattas*. The lack of available water and pasture had also led to elevated rates of animal death. Not only did this reduce availability of meat and animal products, but it also reduced household assets at the very time that families needed to sell livestock to buy foodstuffs from market. In their photowalk activities, adolescents in Moroto documented the poor harvest, taking photographs of barren land and empty granaries. In Atedeoi, they highlighted the impact on their livestock, and as one girl explained, *'my photo is a picture of thirst. The animals are hungry and struggling to look for grass since the ground is bare and [they] have no water for drinking'*. In Moroto, participants also reported ineffective post-harvest handling practices during times of good yield, with people likely to sell their produce immediately rather than store it. The resulting glut on the market could lead to exploitation by middlemen who bought produce locally at depressed prices, only to re-sell it to larger businesses at inflated rates. In Moroto, concern about rising food prices was the most common explanation for participants using village savings and loans association (VSLA) schemes.

In Adjumani, host community members who had land also described insufficient rains affecting their crop yield, although to a lesser degree than in Moroto. In Adjumani, poor post-harvest storage was also raised by adolescents, who reported that it was compounded by lack of seeds and farming tools, and limited knowledge about farming methods, including irrigation and crop rotation. In their photowalk activities, adolescent girls in Adjumani documented pest infestations such as army worm, described by caregivers as being a *'disaster'* for their crops. One of the main issues emphasised by participants in Adjumani was land ownership and access. With the rapid influx of refugees due to the escalating conflict in South Sudan, programme implementers in Adjumani Town reported being *'overwhelmed by the number of refugees in the area'*. With limited funding, programmes had been forced to cut rations, and the size of allocated rations was a concern prioritised by adolescents in Mungula, Adjumani. Participants from the refugee community explained that the plots of land they were allowed to rent were too small to produce sufficient food to supplement rations. It was notable that adolescent girls chose to document this in their photowalk. In addition to the limited size of the plots, adolescents reported that landlords often reclaimed their land when it had been prepared for harvest or was yielding produce, or asked for payment for the land loaned. Similar issues were also raised by adolescents from the host community.

Household economy and income generation

Many adolescents across the fieldsites were engaged in income-generating activities and made key contributions to their household economy (discussed in relation to school attendance below). Because of their age, however, employment was usually informal and often led to exploitation and elevated risk. In Uganda, the Employment Act provides clear guidance on what constitutes child labour and the conditions under which individuals aged 14-17 years may engage in gainful employment without infringing their rights or putting their lives and health at risk (MOGLSD, 2006).

In Moroto, children aged seven years onwards were described as critical income generators and undertook activities that included open-cast gold mining, stone quarrying, agricultural day-labour, brewing alcohol, cutting firewood and making charcoal (cutting and burning branches and then chopping them into small pieces). Participants discussed such income-generating activities synonymously with household responsibilities, highlighting the expectation that children and adolescents had to work. As a school teacher in Katanga explained, *'these children are used for survival purposes'*. Adolescent girls used their photowalks to document their participation in the labour market, work described as both dangerous and physically exhausting. Cracking rocks in the stone quarries required substantial physical exertion and could lead to significant injuries including broken bones. In describing how they made charcoal, girls explained they had to walk up to 50km to sell it in town, and many expressed concern that such activities negatively impacted the environment.

Many of the income-generating activities were conducted by adolescent girls, reportedly because they grow faster than boys, and because the tasks fit with traditional female roles of carrying and transporting goods. Several of the girls who participated in the study were direct caregivers for their younger siblings and felt responsible to feed their families. Boys in Atedeoi, Moroto, engaged in activities including agricultural day labour, construction work and loading trucks at the stone quarries, but in general, fewer jobs were available to them (except in the *kraal* herding animals). This was keenly felt by older adolescent boys who described themselves as *'being idle and just watching the sun moving'*.

In peri-urban Katanga, adolescent girls engaged in washing plates and clothes or babysitting, or acted as *'house-girls'* for wealthier families in town, which could sometimes lead to sexual exploitation. Whereas babysitting was predominately seen as a job for younger unmarried girls, quarrying and selling alcohol, firewood and charcoal were seen as appropriate for both unmarried and married girls. Older adolescent boys in Katanga had more income-generating opportunities than their counterparts in Atedeoi, including cooking and selling of street foods, labouring on construction sites, crushing rocks or aggregates and driving motorbike taxis (*bodabodas*). Still, many boys expressed frustration that they felt a high level of responsibility to provide for their families, but few opportunities to do so because of their age. As one boy concluded, *'sometimes they tell us you are still young you can't do this, so providing for the family becomes a big challenge'*.

In Adjumani, agricultural work was the main income-generating activity of adolescent girls and boys of all ages, and from both the host and refugee communities. Again, there was a perception that engaging in these activities was a household chore or duty rather than child labour, but the physical expenditure could be extreme. Adolescents reported digging to pay for food (see photowalk image above), but noted that the activity itself made one hungrier. As one adolescent refugee boy described, *'here in Uganda, you can only think to go and dig at someone garden to get money. But as you dig you become hungry, so you eat the money'*. Within the refugee group, unaccompanied adolescent refugees looking after siblings were more likely to be involved income-generating activities, and although some reported receiving financial support from family in South Sudan, this was not always sufficient. Across the fieldsites, lack of household resources was raised as a significant barrier to the purchase of food. It was also clear that because of the intense physical exertion required in many of their income-generating activities, adolescents were unlikely to make sufficient money to purchase enough food to balance the energy deficit.

Alcohol

In both sites, alcohol served a number of functions that linked directly to food and nutrition. In Moroto and the host community in Adjumani (but not so markedly in the refugee community), the brewing business revolved around adolescent girls from 15 years old, and was a major source of income. Girls documented brewing and selling alcohol in their participatory workshops and explained, *'selling booze is an alternative livelihood activity since farming is always disappointing'*. In Adjumani, girls from the host community suggested, *'young girls should not brew. The government should encourage people to cultivate and sell their produce in order to get money instead'*. In addition to being a source of income, alcohol was also considered a food source in Moroto. Traditionally, alcohol was restricted to ceremonies and was only consumed by older community members, yet adolescent girls reported drinking one or two cups per day (*'it's like our breakfast'*), and eating the residue from the brewing process *'to fill the stomach'*. Adolescents identified both liquid alcohol and its residue as key components of their diet, although they noted that when animal milk was more available, alcohol consumption was less common. Both girls and boys in Moroto were aware of the negative impact of alcohol and whilst they saw it as a means to generate income, also highlighted that it *'turns people into drunks and stops them from properly supporting their families'*.

Social Norms

There was a general agreement across fieldsites that boys eat more than girls. A common narrative amongst male participants was that girls, who do most of the cooking, *'taste'* the food whilst they are preparing it, so eat less during actual meal times. In Moroto, female caregivers described being responsible for dividing the food and deciding who eats what. An adolescent's transition towards independence was reflected in where they ate. Whereas adolescent girls came together to eat, boys moved around to eat at different houses. If a man had many wives, he ensured that food was reserved for his sons in each of his wives' houses. In the host community, the father was said to eat the most, followed by adolescent boys. As adolescent girls explained, *'men usually eat first and they eat without fear'*.

Some eating practices were dependent on role and place. Animal products (meat, milk and blood) were more available to boys tending livestock than to girls or boys in school. When an animal was slaughtered for a ceremony or ritual, the whole community would receive a share, except for the animal's head which was given exclusively to male herders and adult men. A number of traditional food proscriptions were also identified. In the past, for example, pregnant women would have restricted food intake during pregnancy in order to limit their foetus's growth due to fear of a difficult birth. It was reported, however, that such practices and other food taboos were no longer followed

due to general food shortages, which meant that in effect, everybody had a restricted diet. As one adolescent girl in Atedeoi concluded, *'is there any food I am not allowed to have? No, any food I find I eat'*.

Sexual and reproductive health

Sexual and reproductive health was raised as a central issue that affected adolescents' nutrition status particularly with regards to HIV and adolescent pregnancy as a direct consequence of low contraception uptake, early sexual debut, early marriage and sexual violence. Although the age of consent in Uganda is 18 years, 15% of girls are married by 15 years old, and nearly 50% by 18 years old (UBOS and ICF, 2017). In Moroto, adolescent girls explained that early marriage was often initiated by parents, many of whom regarded girls who were under 18 years to be adults due to their household responsibilities and high degree of self-reliance. The Karamojong are polygamous and bride price is common. In both Moroto and Adjumani, caregivers reported marrying their daughters in order to receive bride price. As one local leader in the Mungula host community explained, *'the parents are offering the girls for wealth because of poverty'*. This was often done regardless of age, and in more rural areas could result in very young girls marrying men over 50 years old. In Adjumani, refugees from separated families were more likely to marry young in order to secure help and support to take care of siblings, and in order to start re-forming their families.

In Uganda, the rate of sexual violence is reported to be 21.9% amongst women aged 15-49 years, with adolescent girls between 15-19 years old being twice as likely as their male counterparts to experience sexual violence (UBOS and ICF, 2017). In Moroto, the older girls in the *Nga'kobain* social groups reported needing to *'move together'* to protect each other from sexual assault. Sexual violence was also identified as a priority issue by adolescent refugee girls in Mungula, Adjumani, often related to the consumption of alcohol. In their participatory workshops, girls concluded that drinking alcohol *'can lead to someone to rape you, but you will not know who raped you when you were drunk. And if you are made pregnant, you will not know who made you pregnant because you were drunk'*.

Adolescent pregnancy rates are 23.6% in Karamoja region (inclusive of Moroto district) and 22.4% in West Nile region (inclusive of Adjumani district), and during the study, community leaders across all sites reported a rise in the number of pregnant girls aged 15 years and older. In Adjumani, caregivers concluded that adolescent pregnancy created a huge burden, and was associated with significant shame and stigma. Home abortions were highlighted by a number of adolescents in Adjumani, who reported adolescent deaths related to secret terminations. Adolescents living with HIV were also identified as a particularly hard-to-reach group. Nationally, the HIV rate amongst adolescents (15-19 years) is 2%, with more girls affected than boys. HIV was identified as a concern in Moroto, but was raised less in Adjumani.

Access to education

School was seen as a protective factor against a number of the threats facing adolescents. In both Moroto and Adjumani, participants observed that attending school delayed pregnancy and marriage for adolescent girls and helped them gain valuable knowledge for self-protection, including how to avoid situations in which they might be vulnerable. Education was also seen as a method of protecting boys from being *'idle'* and *'causing trouble'*.

In Adjumani, *'mixed'* classes (with teachers and pupils coming from both host and refugee communities) were seen by participants to promote cohesion between different ethnic groups. However, education appeared to be more important to the refugee community and adolescent refugees frequently described their *'love for education'*. They expressed pride in being students and saw school attendance as a source of status, whereas adolescents from the host community discussed pride in terms of land, possessions and material assets. Adolescent boys from the refugee community reported that, despite the danger, some of their peers travelled back to South Sudan in order to continue their education.

Despite these recognised benefits, nationally there is a high dropout rate following primary school and it has been reported that 42% of eligible 13-18 year olds are not in school (MoH et al., 2017). Enrolment is lower in rural than urban areas, and is lower for girls than boys (MoH et al., 2017). In the study sites, a boy's education was generally prioritised over a girl's. Participants suggested that girls who were not in school were more likely to marry earlier, and in Moroto specifically, it was suggested that school attendance could reduce bride price. There was consensus that if a girl became pregnant, she would likely drop out of school because of shame and stigma, but also because it signaled a new stage of greater responsibility and childcare. Whereas other countries in the region (such as Kenya) have policies in place to encourage the re-entry of teenage mothers into education, Uganda does not.

Across all fieldsites, adolescents' attendance at school was dependent on their other responsibilities, including seasonal harvest work. In Adjumani, household duties, notably digging and farming the land, were prioritised. In Moroto, attending school required a young person to be in the *manyatta* rather than taking animals to pasture and living in the *kraal*, and this meant a choice between school and herding animals. In the past, favoured children were retained to herd animals whilst others were sent to school, although this appeared to be less common today due to the reduced number of livestock. Participants saw the opportunity costs of taking time away from income-generating

activities in order to attend school as a significant barrier to adolescents' education. Moreover, school fees were a particular obstacle for refugee orphans, directly limiting their participation in the school system.

Vocational training was discussed with enthusiasm by participants in Adjumani as a way to link education more directly with income generation. Emphasis was placed on the need for training in agricultural methods, and adolescents stressed that training should be flexible in order to accommodate their responsibilities, particularly in terms of childcare for adolescent mothers. Adolescents recommended that to make vocational training as effective as possible, *'start-up kits'* and materials should be provided post-training.

Service delivery issues

School was recognised as a direct means to support adolescent nutrition through school feeding programmes. School meal provision was reported as a primary motivator for school attendance in Moroto, and as one teacher asserted, *'if there is no smoke from the kitchen, children will not come to school'*. Another school teacher expressed concern that school was being used as a *'feeding centre'*, that children were coming at break-time for food, but then leaving to continue their household duties or income-generating labour. In contrast, the lack of school meals in Adjumani was cited as a reason for non-attendance, absenteeism and drop-out.

Antenatal care (ANC) is a common platform for delivering nutrition services to pregnant women and lactating mothers, although it was suggested that most adolescents in the study areas presented for delivery rather than ANC because they perceived health facilities to be for curative treatment interventions rather than preventative care. Adolescents were also reticent to attend health facilities because of their negative association with HIV and because HIV testing was a routine aspect of ANC care. A key barrier preventing ANC attendance that was noted in Moroto was the belief raised by many adolescents that a woman must be accompanied by a man to attend ANC. Whilst this is not a compulsory policy at national level, it was perceived as such amongst local leadership and the wider community.

Adolescents also highlighted a number of barriers that prevented them from attending health facilities more generally. They described their *'fear'* of having to describe a health issue to medical professionals; of being judged by other community members waiting at the facility; and of rumours around certain procedures. Other key barriers included distance to the facility (particularly from the *kraals* in Moroto); long waiting times; drug shortages and stock-outs; and the lost opportunity to generate income and complete household duties.

The 'Youth Corner' in Moroto Referral Hospital, was reported to offer a package of health services and act as a health resource centre for young people with a focus on sexual reproductive health that included nutrition assessments, education and referral, but not ANC services. During the study, service providers reported a lack of resources to carry out community outreach and confirmed, *'we don't have the resources and logistics to deliver knowledge to adolescents'*. There were no active adolescent/youth friendly services in Adjumani, apart from a tented area in Mungula Health Centre. One local health provider described that with the time and personnel required to provide youth friendly services as per national guidelines, *'is a burden'* on the already over-stretched health system.

In Moroto, it was also suggested that the provision of food supplements to pregnant and lactating women could actually encourage adolescent girls to get pregnant. Some adolescents reported that pregnant girls sold the supplementary rations given to them by the health facilities *'so that they can buy food that the entire family can eat'*.

For the refugee population in Adjumani, the unpredictability of ration supply was also seen to be problematic. Programme implementers agreed that *'communication with communities must be improved. When they are delays in food, it is serious'*. This was particularly important for adolescent girls, who had many responsibilities within the household, largely around food, but often received information last. Adolescent refugees highlighted that rations did not always reach the most in need and suggested corruption in the system. As one boy explained, *'those who say they are vulnerable are given special care by UNHCR, whilst those people who are actually vulnerable, miss out'*. In their participatory workshops, adolescent refugees in Adjumani explained that families would often resort to selling food rations to buy larger quantities of cheaper, lower quality goods.

Engaging adolescents

Understanding how to effectively engage adolescents is essential for assessing how nutrition-specific and nutrition-sensitive interventions can be delivered and best related to other components of the 'adolescence equation'. Throughout the study, adolescents highlighted their priorities and needs related to engagement.

'Come to use, fit around our lifestyles' – Adolescents stressed the importance of accessibility and preferred to be 'reached' in places they already frequented and at convenient times. Interventions must be tailored to fit the often-chaotic lifestyle of adolescents and must recognise their competing priorities.

'Use our groups, don't group us' – Unless interactions were likely to be particularly sensitive (in which case grouping by gender was more appropriate) adolescents expressed preference for being grouped together, including those in refugee and host communities. They did suggest grouping according to age and life stage, however: married girls and young mothers should be engaged separately from unmarried girls (including the *nga'kobain* social groups in Moroto); older boys (including junior elders) separately from younger boys; and some suggested that in-school adolescents should be engaged separately from those who were out-of-school.

'Make it entertaining' – Great importance was attributed to the need for activities to be primarily entertaining, followed by being informative and understandable. The use of music to attract and sustain the attention of adolescents was highlighted. Dance and sports activities were also popular.

'Show us real experiences' – Adolescents confirmed that they found 'real life' stories to be the most engaging and affective way of sharing and learning from experiences.

'Speak our language' – The importance of conversing with adolescents in their local language was stressed. Adolescents highlighted the benefit of tailoring language to fit their colloquialisms. They also stressed the need to be spoken to with respect in order for them to feel comfortable engaging with services and programmatic interventions.

'Ask us, include us' – Adolescents stressed that they wanted to be involved in a participatory manner. They suggested that rather than passive or one-directional methods of conveying information, they wanted to be included in interpersonal activities. This would give them a chance to ask questions and to ensure that their voices were heard and opinions recognised.

'Be fair' – Adolescents stressed that different and multiple modes of engagement may be needed to interact with adolescents, but that all engagement should be transparent. Great value was placed on being fair and avoiding favouritism. The importance of trust and privacy was repeatedly emphasised and adolescents were wary of information or situations they perceived to be discriminatory or associated with corruption. Ensuring equity in both engagement and the provision of services was highlighted as a priority (particularly in terms of interactions between refugee and host communities).

'With food, we need energy now...' – The need to show the immediate benefit of food to secure adolescents' interest was highlighted across the fieldsites. Adolescents reported that having energy was their priority to ensure they could complete their daily workload.

'Build us for the future' – Adolescents wanted engagement activities to 'help [them] see a bright future' through building skills and interests. They were most receptive to learning when it built on activities they enjoyed and were good at and which prioritised issues they identified to be important. Participants emphasised the importance of engaging adolescents holistically, providing health and nutritional information alongside sexual and reproductive health services, education and vocational training.

Recommendations

Strengthening the visibility of adolescents

- Uganda has a valuable window of opportunity to further develop its enabling environment for adolescent nutrition. To strengthen the evidence base, there is a need to disaggregate available data for adolescents and to systematise routine collection of adolescent-specific data. To complement and supplement routine quantitative data, high quality qualitative data should be collected to better understand the lived realities of adolescents, and the complex root or underlying causes for their nutrition practices and food-related behaviours. At national and sub-national levels, competencies must be developed to analyse, interpret and apply both qualitative and quantitative data.
- The definition of adolescence at the national level is not consistent with definitions used at the community level. This results in some adolescents self-identifying in ways that preclude them being recipients of youth-orientated services. Interventions must be sensitive to variables including age, gender, socio-economic status, life stages, livelihoods and ethnicity. Effective engagement should target groups as defined and understood at the community level.
- The tendency at both policy and programmatic level to group adolescents with 'children', 'youth' or 'women of reproductive age' reduces the visibility of adolescents, hampers the identification of adolescent-specific problems, and limits the development of appropriate strategies and programme design to meet their specific needs. Although it may not be possible to agree on definitions and terminology across all sectors, it is important that measures be taken to prevent adolescents' needs from becoming diluted, or insufficiently addressed. This will

require focused advocacy with national stakeholders and partners to ensure their commitment to this age group, regardless of the terminology used.

- Promising policy developments include the Adolescent Health Policy, which includes a detailed section on nutrition, and the Maternal, Infant, Young Child and Nutrition Roadmap, which offers guidance on promotion, prevention and treatment with a focus on multi-sectoral working (both in draft form at the time of writing). The Anemia Policy also specifically highlights adolescent girls. The challenge is to support the effective implementation of these policies, and to advocate for the inclusion of adolescent nutrition across the policy spectrum.

Influencing adolescent nutrition

- When taking adolescents as the central unit of analysis, it becomes clear that this group is uniquely affected in Uganda. Programmes targeting adolescents must take account of the nutritional challenges faced in different contextual settings, and the impact these have on their overall growth, development and wellbeing.
- Increasing communication and information about nutrition alone will not improve the diet or healthy behaviour of adolescents. Rather, interventions should adopt a systems-based approach that addresses the nutritional needs of adolescents in the context of and in combination with other key components of their lives. Communication and information should be combined with improved access to healthy food and other services.
- Reducing poverty by increasing safe income-generation opportunities (and raising household economic status) is key, but such opportunities should be designed around keeping adolescents in school, e.g. scheduling activities for afternoons and weekends. For adolescents who are older or do not attend school, vocational training that develops business skills and provides resources such as start-up equipment is an important avenue of constructive engagement.
- In addressing agricultural practices for adolescents and their households, an agri-nutrition lens should be adopted. Knowledge, skills and resources should be developed for effective and efficient irrigation systems and post-harvest storage, and consideration given to issues of land access. New and emerging urban-agricultural methodologies (e.g. sack-gardens) may be particularly relevant and appealing for adolescents residing in urban and peri-urban localities.
- Addressing adolescent nutrition requires a systems-based approach that considers restrictive social norms, sexual and reproductive health issues including early marriage and teenage pregnancy, and access to education. These are critical components related to improving nutritional status and wellbeing.

Engaging with adolescents

- As target beneficiaries, adolescents should be engaged as active participants in the design, implementation and monitoring of interventions. Programmes should be sensitive to the needs, preferences and priorities of adolescents. During the research, they clearly articulated suggestions that should be operationalised including ease of access, the strategic use of language, and showcasing real experiences. They emphasised the importance of privacy, trust and transparency in all engagements. They wanted interventions to develop their skills for the future, but to be dynamic and entertaining, using music, dance and sport.
- Several key influencers in the lives of adolescents were identified, including caregivers and parents, particularly mothers (for younger adolescents); husbands and mothers-in-law (for married female adolescents); peers (particularly for older adolescents); teachers (for those in-school and particularly refugee communities); and community leaders (for adolescent girls and boys of different ages). Securing their buy-in and support is vital in both generating demand and facilitating utilisation of programmes and services. In line with the strong oral culture in all fieldsites, mentors from the community who could serve as positive role models were also highlighted as key influencers. National level stakeholders agreed that to successfully programme for adolescents, it is critical to work within their '*circles of life*'.
- Adolescents took a high level of responsibility for household food preparation, and can therefore be agents of change regarding healthy eating practices for their family members and broader communities. In addition to receiving information about nutrition and nutrition-related services for their own wellbeing, adolescents should be considered primary targets for cascading knowledge and improving the nutrition of other vulnerable groups (e.g. children under five, pregnant women).
- There is need to support trusted adolescents to assume positions of leadership to represent the voice(s) of their peer group(s), to ensure appropriate user-centred design, and to provide monitoring and evaluation feedback to ensure programmes are appropriate, relevant and effective.

Platforms for engagement

- Considering the dynamic needs of adolescents, there is no 'one size fits all' delivery channel. Interventions should respond to the complex realities of an adolescent's life and rather than being an additional burden, should be mindful of the conflicting responsibilities they may have. Adolescents should be engaged through multiple avenues or platforms that are mutually supportive.
- The formative research and stakeholder mapping documented existing programmes that engaged adolescents and implemented activities related to nutrition; sexual reproductive health, including HIV; economic empowerment, livelihood support and life-skills training; education; school health and nutrition; and nutritional supplementation. There was a particular bias towards girl-centred programming and sexual reproductive health and HIV programming. Overall, however, programmes were not implemented at scale and coverage was limited. Only a few programmes were designed with 'adolescents' (defined as 10-19 year olds) as the primary beneficiary.
- Adolescents discussed their preference for being engaged at informal community spaces, through clubs and groups with peers and with a strong support/mentoring component. At the national level, platforms and 'safe spaces' have also been highlighted in adolescent livelihood projects that combine life-skills training with economic empowerment (see also Amin, 2011, and Austrian and Muthengi, 2014). Other innovative platforms that were highlighted included Farmer Field Schools (interactive agricultural training) and Wellness Visits (health worker extension visits to primary schools).
- A number of adolescents suggested engagement through religious institutions, although practices varied even within the same district. This is an area that requires further research. If religious institutions are to be engaged, it will be important to form a strong alliance with the Inter-Religious Council of Uganda at the national level, particularly given their influential role in cross-sectoral policy decisions. It is challenging, however, for religious institutions to actively tackle sexual and reproductive health and family planning related issues, and this may limit the potential impact of the church as a delivery channel.
- For adolescents in formal education, school was identified as a positive and trusted platform for engagement, although it was noted to be a highly selective channel given that many adolescents do not regularly attend school (such as adolescents at the *kraal* in Moroto).
- Technology platforms are a promising way to engage adolescents, yet the research provided further evidence that the penetration and use of technology is highly context-specific, and differs according to social groups, age and gender. Mobile phones were only rarely accessed by peri-urban adolescents in Moroto and host community adolescents in Adjumani, and even then, only infrequently. Radio was the most commonly used media and was popular across the fieldsites, although access appeared lower for adolescent girls than boys. Programme implementers suggested that, in order to increase the effectiveness of community radio, adolescents should be involved in the design of programme content, and strategies such as 'listening groups' (in which people are brought together to listen and then discuss programmes) should be established. Both host and refugee communities in Mungula were more engaged and interested in using the internet and social media than participants in Moroto, although again access was limited. In Moroto, it was notable that many adolescents had never heard of the internet. Local leaders in both sites spoke negatively about the '*rapid influence of Western culture*' on the adolescent age group. This highlighted the importance of negotiating the use of new technologies with parents, caregivers and other gatekeepers, particularly if girls and younger adolescents are the target group for social media-based interventions.

Entry points for strategic partnerships

- As the coordinating body for the Uganda Multisectoral Nutrition Policy, the Office of the Prime Minister is key to driving the adolescent nutrition agenda forwards. The ministries of Health and Agriculture are mandated to address nutrition, and they should be supported to help mainstream nutrition-sensitive and nutrition-specific activities. Similarly, the Ministry of Gender, Labour and Social Development is key, particularly given the newly developed National Multisectoral Framework for Adolescent Girls policy document (in draft at the time of writing). Actors already engaging adolescents in other sectors should be encouraged to include nutrition in their activities.
- Services aimed at women of reproductive age should purposefully try to reach all adolescents and services aimed at pregnant women should ensure that pregnant adolescents are effectively included. By advocating for the adoption of a youth-friendly approach, adolescents could be engaged in ways and through channels that they have suggested and prioritised. Services must be presented in a way that helps adolescents see them as directly relevant and inclusive, particularly in terms of preventative as well as treatment-orientated services. Engaging

adolescents when they are younger (e.g. 10-14 years) is important. Normalising health facility visits for this age group can reduce stigma related to attendance and will help move away from the negative association between health facility attendance and sexual reproductive health issues.

- Expanding school feeding programmes to further include adolescents may be a positive driver to encourage adolescents to maintain school attendance and benefit from the protective capacity of the education system for longer, delaying early pregnancy and marriage, with the resulting positive impact on nutrition. Structural weaknesses inherent in the school system, including storage facilities for food products, and poor access to water and sanitation, need to be simultaneously addressed. In Moroto, the provision of school meals attracts children and adolescents who are not registered at school, and there is need to build the value of school beyond it being a 'feeding centre' to encourage regular attendance. Flexible education structures that allow children and adolescents to continue to contribute to herding activities and other responsibilities should be further explored. In Adjumani, school feeding programmes that incorporate agricultural learning (e.g. through school gardens), may be a positive driver to encourage and maintain attendance.
- The food industry should be positively engaged to ensure low-cost and healthy food is produced and sold, and to influence market trends towards the recognition and consumption of food that is healthy and has a high nutrient value. The Scaling Up Nutrition (SUN) business network could be strengthened and with apex bodies such as the Private Sector Foundation, could serve as effective entry points to develop strategic partnerships with the private sector.

Younger adolescents participating in a creative workshop, Ateдео, Moroto



Summary of key policy and programme implications

Theme	Key considerations
Available food and food sources	<ul style="list-style-type: none"> • Make diverse, healthy, natural and affordable foods available and attractive to adolescents and their families, particularly in times of scarcity. • Production of a variety of foodstuffs should be encouraged, alongside pastoralist practices as appropriate. This should include improved irrigation, better management of food and harvest losses, and social protection via cash transfers.
Food responsibilities	<ul style="list-style-type: none"> • Because adolescents have high levels of responsibility for their own and their families' nutrition, particularly that of their younger siblings, it is important to target messaging aimed at benefitting other vulnerable groups (e.g. children under five years old) towards adolescents. • Household decision-makers and 'financial controllers' should be engaged so they allow and actively encourage healthier food options to be priority purchases. • Amongst the refugee communities, messaging regarding food rations and cash payments should be targeted towards adolescents.
Food preferences	<ul style="list-style-type: none"> • The promotion of healthy foods should focus on components adolescents value in terms of choice and consumption, primarily that they are energy-giving, filling and tasty. Incentivising adolescents to choose healthy food and adopt healthy food practices should be linked to positive identity markers and social status. • When novel and fast food enters the market, avenues should be developed for promoting traditional and healthy food that align with adolescent aspirations.
Climate and agricultural practices	<ul style="list-style-type: none"> • Recognising the ramifications of climate stress on adolescent health and nutrition and how it affects their education and future employment is critical. Humanitarian assistance linked to drought and food insecurities should purposively consider adolescent issues and constraints and the role of adolescents in household and societal structures. • Poverty is widespread and exacerbated by climate change-induced vulnerabilities. Policies invoking the activation of social safety nets and food assistance should be strongly linked to drought, and should purposively consider adolescent issues and constraints. • There is a need for more resilience work that better protects livestock and livestock-feeding areas in the event of a drought. Livestock and crop insurance systems could also be considered. • If rations are to be supplemented by household crops, then land rights for refugees is an important issue that urgently requires greater understanding and advocacy.
Household economy and income generation	<ul style="list-style-type: none"> • Income-generating activities are often prioritised over school attendance, and adolescents and their families need strong incentives for this age group to continue formal education. Social protection mechanisms such as cash transfers may help address poverty and underlying issues that result in families sending their adolescents to work. • Many of the income-generating activities adolescents engage in require a high level of energy expenditure and are exploitative. Safe income-generation opportunities should be made available but designed around keeping adolescents in school, e.g. scheduled for afternoons and weekends. • For older/out-of-school adolescents, vocational training that develops business skills and provides resources for start-up equipment is a key avenue for constructive engagement. • Alternative income-generation opportunities should be made available to families to deter their reliance on the production and consumption of locally brewed alcohol.
Social norms	<ul style="list-style-type: none"> • Knowledge of healthy food does not directly translate to healthy food practices, so investment should be made to ensure adolescents assume healthy diets and consumption patterns. This is linked to making healthy food not only available and accessible, but also aspirational and attractive. Interventions that focus on food and meal preparation may be helpful. • Ingrained gender norms related to food allocation within the household prevent girls' healthy nutrition. Raising awareness about the importance of an adolescent girl's nutrition should focus on her strength and role in the (household) economy (in terms of immediate value) and on the importance of her health for the next generation (in terms of future value). • Engaging with key male and adult influencers is critical.
Sexual and reproductive health	<ul style="list-style-type: none"> • Reducing adolescent pregnancy and HIV is key in ensuring the healthy development of adolescent girls, and is linked with poverty reduction and education promotion efforts that have been proven to have a positive impact on adolescent nutrition and broader wellbeing. • The risks of early marriage and pregnancy should be discussed in community forums and the benefits of delayed marriage and pregnancy advocated for. • Raising awareness around good nutrition during pregnancy is needed. In parallel, initiatives should improve antenatal care, delivery practices and postnatal care. Delivery with skilled attendance should be actively promoted. • Greater awareness is needed around the problems of sexual violence against adolescent girls. Adolescent girls should be empowered to protect themselves (e.g. through personal protection skills and self-defense) and perpetrators should be brought to appropriate justice.
Access to education	<ul style="list-style-type: none"> • The value of adolescent education should be promoted through community-based role models and linked to attractive incentive structures for adolescents and their wider family unit. To help facilitate school attendance, it is important to explore ways to reduce income-generation activities and housework / household responsibilities of both boys and girls. Subsidising informal fees for poorer families could be considered. • Menstrual management support should be considered as this could improve school attendance rates for adolescent girls.
Service delivery issues	<ul style="list-style-type: none"> • Health facility services should actively try to reach adolescents and sustain engagement. Services should be carefully designed to ensure this age group perceives them to be relevant. Normalising health facility visits for preventative care is important and should aim to shift association away from sexual and reproductive health and HIV issues. In parallel, the provision of quality care for adolescents must be further strengthened and an appreciation for preventative services developed. • Outreach visits to the community can be beneficial in overcoming stigma associated with facility attendance and to 'build bridges' between facilities, services and adolescents. • The quality and delivery of school meals need to be improved, including consistency in availability, nutritional value and portion size. Consideration should be given to allotting school meals to non-registered children. • Expanding school meal programmes to include adolescents at secondary-school level may be a positive driver to keep this target group in school, although for this to be effective, the perceived value of adolescent education must be built at the community level. • Structural weaknesses in the school system (storage, WASH, workload of teachers etc) need to be overcome if schools are to be an effective delivery platform. Despite the potential value of school as a platform for sustained engagement, it must be recognised that schools do not reach all adolescents or the most vulnerable, and interventions must therefore be combined with engagement channels that can reach out-of-school adolescents, including mature minors.

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Abbreviations

AFHS	Adolescent Friendly Health Service
AFOD	Alliance Forum for Development
AFI	Andre Food International
AHA	Africa Humanitarian Action
ANC	Ante-Natal Care
CBO	Community-Based Organisation
CRRF	Comprehensive Refugee Responsive Framework
CSO	Civil Society Organisation
DHO	District Health Officer
DRC	Danish Refugee Council
FAO	(United Nations) Food and Agriculture Organisation
FHI-360	Family Health International 360
FGD	Focus Group Discussion
GAM	Global Acute Malnutrition
ILO	International Labour Organisation
IRC	International Rescue Committee
IT	Information Technology
HIV	Human Immunodeficiency Virus
INGO	International Non-Government Organisation
IRB	Internal Review Board
IRCU	Inter-Religious Council of Uganda
MCHN	Maternal and Child Health and Nutrition
MIYCAN	Maternal Infant Young Child Adolescent Nutrition
MMN	Multiple Micronutrient
MOES	Ministry of Education and Sports
MOGLSD	Ministry of Gender Labour and Social Development
MOH	Ministry of Health
MTI	Medical Teams International
MUAC	Mid Upper Arm Circumference
NCA	Nutrition Causal Analysis
NCD	Non-Communicable Disease
NER	Net Enrollment Rate
NGO	non-Government Organisation
OPM	Office of the Prime Minister
OVC	Orphans and Vulnerable Children
PNC	Post Natal Care
SDG	Sustainable Development Goal

SMART	Standard Monitoring of Relief and Transition
SOMREC	School of Medicine Research and Ethics Committee
SRH	Sexual and Reproductive Health
STA	Settlement Transformation Agenda
SUN	Scaling Up Nutrition
TAF	The Action Foundation
TB	Tuberculosis
TBA	Traditional Birth Attendant
UBOS	Uganda Bureau of Statistics
UNAP	Uganda Nutrition Action Plan
UNCST	Uganda National Council for Science and Technology
UDHS	Ugandan Demographic Health Survey
UNHCR	United Nations High Commission for Refugees
UNFPA	United Nations Population Fund
UNICEF	United Nations Children Fund
UNYPA	Uganda Network of Youth People Living with HIV
UYDEL	Uganda Youth Development Link
VHT	Village Health Team
WASH	Water Sanitation and Hygiene
WFP	World Food Programme
WHO	World Health Organization

Introduction

Background

Adolescence is a time of significant brain development (Blum et al., 2014) and physical growth at a pace exceeded only by the critical first 1000 days (Thurnham, 2013). As identified in Sustainable Development Goal 2, Zero Hunger, addressing the nutritional needs of adolescent girls is one of the key steps towards achieving the objective of ending malnutrition by 2030. The 2013 'Maternal and Child Nutrition Series' published by *The Lancet*, the Vision 2030 Sustainable Development Goal agenda, and the Scaling Up Nutrition (SUN) movement have each played a key role in highlighting that adolescent nutrition interventions should be tailored to girls. Interventions to improve access to education, delay marriage, and prevent early pregnancies can contribute to improving adolescent girls' nutrition so they can reach their full potential (Horton, 2013; SUN, 2016; Thurnham, 2013; Black et al., 2013; Finlay et al., 2011). There is, however, a lack of evidence to guide the development and delivery of strategic nutritional messages and interventions for this specific target group. More research is needed on the nutritional status of adolescents globally (Leenstra et al., 2005; Patton et al., 2016).

In-line with the global shift of attention towards adolescents, there is increased engagement and mobilisation of multi-sectoral actors around the adolescent agenda in Uganda. A number of Ugandan policies address the health and nutrition needs of adolescents, both adolescent-specific and adolescent-sensitive politics. Nutrition policies that apply to adolescents include the Uganda Nutrition Action Plan, the Uganda Multi-Sectoral Nutrition Policy, and the National Anemia Policy. Although policies are in place, it was difficult to ascertain how far they had been operationalised or their impact. Other policies of relevance include the School Health Policy; the National Multi-National Sectoral Framework for Adolescent Girls; the Maternal, Infant, Young Child and Adolescent Nutrition Roadmap; and the renewed National Adolescent Health Strategy.

According to the national census of 2014, Uganda has 8.9 million adolescents (10-19 years) which accounts for 26% of the total population (Uganda Bureau of Statistics (UBOS), 2016). Disaggregation shows equal proportions of boys and girls, but with a greater proportion of 10-14-year-olds (55%). Most adolescents (80%) reside in rural areas which, in Uganda, are generally more impoverished than urban areas (World Bank Group, 2016).

Data on nutritional status in Uganda has historically concentrated on children under the age of five and women of reproductive age (15-49 years). According to findings in these population categories, stunting, underweight, wasting, and iron deficiency anaemia constitute the most prevalent forms of malnutrition in Uganda (UBOS and ICF, 2012). National data also suggest a problem of 'over-nutrition' as indicated by the prevalence of overweight or obesity among women of reproductive age. In urban areas, this is likely a result of changing dietary patterns coupled with decreased physical activity levels.

The immediate cause of malnutrition (as indicated by the situation of children and women of reproductive age) is the interplay between inadequate dietary intake – both in quantity and quality – and high disease burden (Government of Uganda 2011). The Ugandan diet consists mainly of starchy staples and vegetables and contains limited animal-based protein (UBOS, 2014). It is characterised by low energy intake (UBOS, 2014) as well as a critical micronutrient gap in iron, zinc, calcium minerals and vitamins A and B-12 (Harvey et al. 2010).

According to data from the most recent Demographic Health Survey (DHS 2011), adolescents appear more susceptible to wasting than overweight or obesity; with more boys than girls affected (UBOS and ICF 2012).

Table 1 – Nutritional status of adolescents aged 15-19 years by sex and geographical location compared to 15-49 year age group

	Gender	Nutritional status		Anemia ¹
		BMI <18.5	>25.0 ²	
National 15-49 years	Male	18	4	-
	Female	12	19	23
National 15-19 years	Male	33	1	-
	Female	14	12	19
Karamoja 15-19 years	Male	33	2	-
	Female	33	1	43
West Nile 15-19 years	Male	34	1	-
	Female	21	5	32

All data extracted from UDHS 2011, except figures on anaemia that were taken from UDHS 2016. The DHS data is based on the proportion of the adolescents aged 15-19 years old assessed as a component of 15-49 year olds.

Comparing the nutrition status of adolescents to that of the broader 15-49 year age group suggests that adolescent boys have significantly more wasting and almost none are overweight or obese; whilst adolescent girls have slightly less anaemia, and lower rates of overweight or obesity, but slightly more wasting (see Table 1 above).

In 2017, the Ministry of Health and partners conducted an Adolescent Risk Behaviours Survey. This reported that amongst 10-19 year olds nationally, the rate of stunting (measured as height for age <-2 standard deviation score) was 15.5%; overweight (measured as BMI for age >=1 standard deviation score) was 6.7%; and thinness (measured as BMI for age <-2 standard deviation score) was 6.5% (Ministry of Health et al., 2017). Underweight and stunting was more common among males than females, and overweight was significantly more prevalent among urban females. Factors associated with stunting included low socio-economic status, being younger, and coming from the western region, but the study called for more qualitative research to understand key risk behaviours.

Nutrition interventions for adolescents have traditionally used school-based and health facility delivery platforms. At the national level, the government has delegated school feeding to parents and school management (Ministry of Education and Sports, 2015). Yes, school-based services may not reach the most vulnerable (e.g. Woodruff et al., 2006; Omwami et al., 2011) and there is evidence that adolescents avoid facility-based services that are not 'adolescent friendly' (Atuyambe et al., 2009; Mboney, 2003).

Against this backdrop, there remains a need to better understand adolescent nutrition in Uganda, and to develop innovative communication and intervention approaches that target the nutritional needs and preferences of adolescent groups (Patton et al. 2016).

¹ Any anaemia defined as Hemoglobin (Hb)<11.0g/dl (pregnant WRA) and Hb<12.0g/dl (non-pregnant WRA);

² Overweight or obese

Research objectives

This research is part of a four-country study that aimed to contribute to the global evidence base for adolescent nutrition. The other three high-priority countries included in the study are Cambodia, Guatemala and Kenya. The research had four overall objectives:

- To assess the experiences, needs and priorities of adolescents regarding their nutrition.
- To understand the policy and programmatic environment and current practices for effectively engaging adolescents.
- To establish the preferences of adolescents regarding how they want to be engaged in programming.
- To establish user-centred recommendations for more adolescent-friendly, context-specific nutrition interventions.

Research outputs

The research has several interrelated outputs:

- Substantive country-specific report based on newly gathered empirical data.
- Concise report summarising key findings.
- Detailed country-specific spreadsheet of stakeholders engaged in adolescent programming and inventory of delivery channels and engagement mechanisms.
- Four-country literature review.
- Cross-country synthesis highlighting key learning across Cambodia, Guatemala, Kenya and Uganda.

Report structure

This report details the research conducted in Uganda. Prior to its finalisation, WFP were invited to provide feedback that was then incorporated as appropriate. The report is structured to be of operational use to WFP and partners, and presents valuable new data that contributes to the evidence base on engaging adolescents for nutrition, health and sustainable development.

Following the introduction, the study's methods are outlined in detail including contextual details of the study sites. The research findings are presented in four chapters. Chapter 1 focuses on defining adolescence including definitions at the national level and also community-level markers. Chapter 2 addresses food and nutrition, describing available food and food sources; food responsibilities and self-reliance; food preferences, motivations and aspirations. Chapter 3 explores interrelated factors affecting adolescent nutrition: conflict and governance; climate and agricultural practices; household economy and income generation; alcohol; social norms; sexual and reproductive health; access to education; and service provision issues. Chapter 4 discusses the engagement of adolescents. It identifies their key influencers and reports on the communication and media landscape. It summarises existing adolescent programming and highlights adolescents' preferences about how they should be engaged. The conclusion presents a series of recommendations to strengthen the visibility of adolescents; influence adolescent nutrition; engage adolescents; build on platforms for engagement; and develop entry points for strategic partnerships.

Methodology

The research was conducted in line with prevailing ethical principles to protect the rights and welfare of all participants. Permission to undertake the research was granted by Makerere University School of Medicine Research and Ethics Committee (SOMREC) and the Uganda National Council of Science and Technology (UNCST), and was supported by the WFP Country Office in Kampala (Annex 1). The research was conducted in three interrelated phases: document review; stakeholder mapping; and formative research.

Phase 1: Document review

Undertaken at the start of the consultation process, the rapid desk review provided a solid foundation for the work. It sourced material published in peer-reviewed journals and grey literature including programmatic documents, country reports and demographic surveys. The complete literature review was submitted as a standalone report, *'Adolescent girls nutrition in Cambodia, Kenya, Guatemala and Uganda: a review of selected literature'*. The full texts of all referenced material were collated and submitted as part of the research portfolio.

Phase 2: Stakeholder mapping and situational analysis exercise

Stakeholder engagement was initiated in February 2017. Building on preliminary meetings with key I/NGO stakeholders, the core research team facilitated a workshop to provide an overview of the stakeholder mapping, secure partner engagement, consult on possible formative research site selection, and identify additional stakeholders using a snowball technique. Through the consultation process 28 key stakeholder organisations were engaged and their programmes included in the mapping exercise between April and September 2017 (see Annex 2).

Information on each stakeholder organisation was collated and tabulated in an Excel spreadsheet (submitted as part of the research portfolio). In addition to contact information, the mapping categorised the focus, timeframe and location of interventions, the target group (age, ethnicity, gender), the modes of engagement; key research studies produced (if any); and areas of interest (e.g. requests for additional information on relevant topics where data is lacking). From this, both gaps and future opportunities for cross-sector programming were highlighted, specifically opportunities for effective nutrition and nutrition-sensitive interventions.

The WFP national research consultant undertook a situational analysis of adolescent nutrition and reviewed relevant demographics, pregnancy statistics, education statistics, employment levels, current dietary practices and trends, and nutritional issues. It also identified entry points for advocacy and programming. The report, *'Uganda Assessment Report on Adolescent Nutrition Policy and Programming'* was submitted as part of the research portfolio, and key findings integrated into both the literature review and the substantive country report as appropriate.

Phase 3: Formative research

After an interim period during which ethics clearance to conduct primary data collection was secured, the formative research phase of the study was conducted in April-June 2017, including 22 days intensive in-country fieldwork from 29 May to 19 June 2017 (see Annex 3 for detailed fieldwork schedule).

Fieldwork support

WFP has a number of sub-offices that implement activities across the country. Two were selected to support the data collection through facilitating the community-level engagement critical for the fieldwork component of the study: Moroto Sub-office and Gulu Sub-office. The sub-offices liaised with the District Health Office (DHO) to introduce the research project. They were responsible for organising meetings between the research team and relevant interlocutors at district and community levels, and provided one member of staff (for a maximum of four days) to accompany the research team in the field to make introductions at the local level. Louis Odong (LO), from WFP Moroto sub-office and Gloria Anywalali (GA) from the WFP Gulu sub-office supported the fieldwork. Three National Research Assistants supported the research: Robert Angella (RA) in Moroto district; and Patrick Tiondi (PT) and Simon Marot (SM) in Adjumani district.

Study sites

The research sites were selected by the WFP Country Office in collaboration with Anthrologica. Sites were chosen that could inform existing Ministry of Health and WFP nutrition programming to better reach and serve adolescents, considering the range of current programming and where data could be most informative; and sites that could inform the adolescent nutrition component of the WFP Country Strategic Plan. In considering different sites, a number of key criteria were considered:

- Are diverse populations included?
- Does the site have a field office that is able and willing to support the research?
- Does the site have an established local partner providing outreach or interventions for adolescents? Are they willing/able to help facilitate the research?
- What are their mechanisms / delivery channels for engaging adolescents (e.g. youth clubs, community outreach) and can these be used to help identify and recruit participants?
- Do they include adolescents of different age ranges in their programming (e.g. 10-14 year olds, 15-19 year olds)?

The WFP country office in Uganda proposed two districts that captured their country programming priority areas: resilience building and crisis intervention. Due to time and available resources, Anthrologica advised a maximum of two districts with two distinct communities represented in both: a pastoralist area with both peri-urban and rural population groups; and a refugee site, to include both refugee and host populations.

Fieldwork was conducted in Moroto district (a pastoralist and drought-affected area that is a focal area for WFP resilience-building activities) and Adjumani district (hosting a number of refugee settlements and supported under WFP crisis programming). Two population groups were selected per district: in Moroto district, Atedeoi (rural population) and Katanga (a peri-urban population within Moroto Municipality); and in Adjumani district, both refugee and host communities in Mungula I. A short summary of each field-site is presented below (see also Table 2). A map of the fieldsites, further in-depth background information on their socio-cultural and geographical features and ongoing WFP activities in each district is presented in Annex 4.

Moroto district is part of Karamoja sub-region and Adjumani district is part of West Nile sub-region. Both districts are located within the northern region of Uganda, identified by the Ministry of Health as having the highest percentage of under-weight adolescents (Ministry of Health et al., 2017). At a sub-regional level, Karamoja and West Nile report the highest wasting and underweight rates and were amongst the three sub-regions with the highest rates of stunting in children under five years (UBOS and ICF, 2017). The Adolescent Girl's Vulnerability Index (Amin et al. 2013) highlighted Moroto and Adjumani as two districts with multiple vulnerability factors for the adolescent age group across a number of health and social spheres.

Table 2 – Geographic, educational and health characteristics of fieldsites in Moroto and Adjumani districts

Sub-Region	District	Area (km ²)	Population	Major Ethnicities	Land typology	Sub-County	Parish	Fieldsite
North-East (Karamoja)	Moroto	8,516	103,432 ³	Karamajong (including Matheniko & Tepeth clans)	Semiarid with high altitude forests and savannah woodland ⁴	Rupa	Mogoth	Atedeoi
							Boma South	Katanga
West Nile	Adjumani	3,128	231,623 ⁵	Host community: Madi & Lugbara	Vegetation cover, permanent wetlands and seasonal swamps ⁶	Itirikwa	Mungula	Mungula Settlement – Host community
				Refugee community (South Sudanese): Madi, Kuku, Dinka, Acholi Bor, Zande				Mungula Settlement – Refugee community

Summary of key Education and Health indicators for research sites

Sub-Region	% of 15-19 year olds who have had a live birth ⁷	Median age at first marriage (women aged 20-49) ⁸	Primary school attendance ⁹		Secondary school attendance ¹⁰		Under-five nutritional status (% below -2 SD) ¹¹			Adolescents' nutritional status (15-19 yrs)		
			Male	Female	Male	Female	Stunting	Wasting	Under weight	Anemia ¹²	BMI <18.5 ¹³	BMI >25 ¹⁴
North-East (Karamoja)	23.6%	18.4	53.9 NET 49.3 Gross	49.3 NET 67.8 Gross	4.4 NET 10.8 Gross	7.4 NET 15.9 Gross	45%	7.1%	31.9%	43% (F)	33%(F) 33% (M)	1% (F) 2%(M)
West Nile	22.4%	18.1	81.2 NET 132.8 Gross	76.7 NET 112.9 Gross	5.4 NET 6.6. Gross	4.3 NET 6.8 Gross	37.8%	6.2%	17.9%	32% (F)	21% (F) 34% (M)	5% (F) 1%(M)

(F) = Female (M) = Male

³ Housing and Population Census 2014 (UBOS 2016)

⁴ UNDP and Republic of Uganda (2014)

⁵ Housing and Population Census 2014 (UBOS 2016)

⁶ Adjumani District Development Plan (Adjumani District Government, 2015)

⁷ UDHS (UBOS and ICF 2017)

⁸ UDHS (UBOS and ICF 2012)

⁹ Uganda National Household Interview 2012/2013 (UBOS, 2014)

¹⁰ Uganda National Household Interview 2012/2013 (UBOS, 2014)

¹¹ UDHS (UBOS and ICF 2012)

¹² UDHS (UBOS and ICF 2017)

¹³ UDHS (UBOS and ICF 2012)

¹⁴ UDHS (UBOS and ICF 2012)

In Moroto district, the Karamojong are the main ethnic group, made up of the Matheniko clan in the rangelands and the Tepeth clan in the mountains. The district is sparsely populated and the majority of the population live in rural areas. The few urban zones are based around trading centres. Primarily agro-pastoralists, the main livelihoods are subsistence agriculture and semi-nomadic livestock rearing. Family groups live in settlements known as *manyattas* that are fenced with wood and thorns. *Kraals* are mobile settlements created around livestock pasture areas, with less elaborate structures than *manyattas*. (UNDP and Republic of Uganda, 2014). In recent years the district has experienced unpredictable climate change that has contributed to crop failure and livestock reduction and resulted in food insecurity, malnutrition among children, environmental degradation and an increase in pest infestation and human epidemics/disease. Consequently, Moroto district reports some of the poorest food security and nutrition indicators in the country. A food security and nutrition assessment (FSNA) from July 2016 found 13.7% Global Acute Malnutrition (GAM) rates, 26.6% underweight and 34.1% stunting in children under five, and 38% of mothers underweight (WFP and UNICEF, 2016). Diet diversity scores for Moroto were low for 45% of respondents: 15% never consumed protein rich foods and 45% never consumed hem-iron rich foods.¹⁵ Despite these scores, Maternal and Child Health and Nutrition (MCHN) programmes offering blanket nutrition support to expectant women, lactating mothers, and children under two years of age were found to have low uptake. The vulnerability of female-headed households was particularly highlighted (WFP and UNICEF, 2016). A recent Link Nutrition Causal Analysis (NCA) study in Moroto reported access to milk, unstable access to food, lack of purchasing power and poor agricultural products as key drivers of malnutrition in the district (Action Against Hunger, 2016). National-level data suggests that unlike the rest of the country (where boys are more susceptible to wasting than girls), in Karamoja both boys and girls present with equal levels of wasting (UBOS and ICF 2012).

Research activities in Moroto focused in a rural village (Atedeoi), and a peri-urban trading centre (Katanga). Atedeoi village, under Mogoth parish, Rupa Sub-County, is composed of seven *manyattas*. The majority of the population are Matheniko and Christian. Katanga village is located around a busy trading centre in Moroto. The majority of the population are Matheniko and identified as Christians. The main livelihoods are farming, small-scale cultivation, brewing alcohol and casual labour, and limited farming of sorghum and maize. Both Atedeoi and Katanga are governed by a Local Counsellor 1 Chairman.¹⁶

Uganda hosts the third largest refugee community worldwide, and many of the refugee settlements are located in Adjumani district, close to the border with South Sudan. The Government of Uganda reported that between July 2016 and March 2017, a total of 674,033 new refugees arrived in the country. The country's severe underfunding for refugee support led to a global call for action prioritising the provision of life-saving protection and multi-sectoral humanitarian response for newly arriving refugees, and the stabilisation of recently opened settlements (Government of Uganda and UNHCR, 2017). The land in Adjumani is fertile. The main food crops include cassava, sweet potatoes, sorghum, sesame and soya beans, while cotton, sesame, maize, groundnuts and soya beans are the main cash crops. Despite this, the Adjumani District Development Plan described inefficient post-harvest storage, low access to quality fertilisers, low access to credit or capital and agricultural subsidies, inappropriate land tenure systems, and lack of effective locally-based commercially oriented farming organisations capable of growing small agricultural producers. Food production performance has reportedly prolonged problems of malnutrition and pockets of famine and hunger in the district (Adjumani District Local Government, 2015). A 2015 FSNA in Adjumani district reported that the prevalence rate for anemia amongst women of reproductive age was 38.2%, and that 30.4% of newly arrived refugees and 16.3% of older arrivals were moderate or severely underweight (16.5/16.5-18.3%) (Wamani & WFP Assessment, Monitoring and Evaluation Unit, 2015). Only marginally more children aged between six and 23 months from older refugee arrivals had the minimum acceptable diet, compared to children of newer arrivals (22.8% and 19.9% respectively).

¹⁵ The Household Diet Diversity Score (HDDS) is a simple count of seven food categories consumed in a household over the past 7 days. Based on IFPRI classification, HDDS is then reported as Low (HDDS <4.5), Medium (4.5 < HDDS < 6) or High (HDDS > 6).

¹⁶ The political structures across Karamoja centre around Local Councils, from Local Council I at village level to Local Council V at the district level.

Research activities were focused in Mungula refugee settlement, located approximately 20km south from Adjumani Town. In-line with Uganda's Refugees Act (2006) refugees live side-by-side with the national 'host' population in Mungula. Refugees are granted small plots of land, approximately 30-50m². They are permitted to build houses and cultivate crops on the land. Refugees also have the right to access local social services, such as education, healthcare, and livelihood support (Government of Uganda, 2006), and are supported by food rations/cash equivalents from WFP.¹⁷ The refugee population in Mungula is primarily Dinka, with a small number of Madi and Nuer. The dominant language of the refugee population is Dinka, although Arabic and Madi are also understood by a significant proportion. The host population is predominantly Madi. At the time of the research, Mungula was not routinely absorbing recent arrivals, and so most inhabitants had been in Uganda for a number of months or years.

Data collection

Data was gathered through a combination of the following methods:

- Desk review of data and literature
- In-depth interviews with key informants and stakeholders
- Focus group discussions with key informants and stakeholders
- Participatory workshops with adolescents
- Technology survey with adolescents
- Feedback workshop with WFP and key stakeholders engaged during the mapping

Tool development: Based upon a rapid review of literature and programme documentation, a topic guide was developed around key themes: defining adolescence; I/NGO, governmental policy and programming; health (general) and sexual and reproductive health issues; food and nutrition; education; child rearing and adolescent influencers; messaging; research needs and document requests; IT/telecommunication context; and corporate responsibility. This formed the basis for the design of a series of research tools: semi-structured in-depth interview and focus group discussion frameworks per stakeholder group; participatory workshop frameworks and guidelines; and a survey on youth communication and technology channels (see Annex 5). The key themes were addressed in each interview, focus group discussion and workshop thereby allowing the analysis of themes across participant groups and fieldsites. Specific questions and probes were reviewed and refined during the study. The research was designed to facilitate input from multiple stakeholders using a phased approach, so that issues raised by one group of interlocutors could be discussed with other groups of stakeholders as appropriate. This ensured the collation of in-depth material and the rigour of its validation and triangulation. WFP had oversight of the tools prior to their finalisation and implementation.

Key informant interviews: Key informant interviews were held with a range of stakeholders at national, provincial, district and community levels. Interview questions were reviewed and refined during fieldwork in response to themes arising during the course of interviews conducted. The direction and content of each interview was determined by the interviewee and focused on issues they self-prioritised, although all components of the topic guide were covered to ensure thematic comparison. All interviews were conducted with as much privacy as possible, after full consent had been given and in the presence of the research team only. Each interview lasted for approximately 60 minutes.

Focus group discussions: Focus group discussions (FGDs) were held with selected stakeholders at the community level. As with the key informant interviews, the group discussions were structured by the

¹⁷ Critics of Uganda's refugee policies have highlighted the extra strain they put on already struggling local services, to the detriment of the local community's well-being. Strengthening local communities so the burden of hosting refugees is minimized is advocated through legislation including the Comprehensive Refugee Response Framework (CRRF) (UNHCR, 2016), the Refugee and Host Population Empowerment (ReHoPE) approach (United Nations Country Team and World Bank, 2017), and the Government Settlement Transformative Agenda (STA) (Office of the Prime Minister, 2015).

prepared framework, but allowed for flexibility and the co-production of knowledge. In many cases, although not always, caregivers who participated in the FGDs were the mothers or grandmothers of girls attending the adolescent workshops. FGDs with community leaders and caregivers were held in communal meetings spaces, again after full consent had been given and in the presence of the research team only. Each discussion lasted for approximately 90 minutes.

Adolescent workshops: Participatory workshops were held with adolescent boys and girls aged between 10-14 years, and 15-19 years. Specific participatory methods were employed to ensure the meaningful engagement and integration of this group into the research and each session used appropriate terminology, language and creative methods in line with ethical good practices and within the scope of the Convention on the Rights of the Child. Methods used included daily activity timelines (to depict daily activities, food consumption patterns and household responsibilities); drawings and mud mouldings (to depict perceptions of adolescence); social network mapping (to depict the people that have influence of the adolescent, and the places in which they get information); and a modified photovoice exercise using Polaroid cameras. The use of drawings to depict perceptions of adolescence was inappropriate in rural Moroto where illiteracy levels are high, and so the field-team adapted this activity in-line with local materials and play structures to focus on mud mouldings. Photographs were taken of all the mud mouldings made by participants during the workshops. Photovoice is a participatory photography and data analysis methodology used in community-based research to document and reflect local realities (Wang and Burris 1994). Cognisant of the different competencies of children and adolescents (James et al. 1998; Johnson, 2011) older adolescent girls (15-19 years old) undertook a 'photowalk' during their creative workshop to document and reflect their communities, daily practices, local food sources and dietary behaviours. Adolescent workshops were held in communal meeting spaces after full assent and consent had been given, and in the presence of the research team only. Each workshop lasted for between two and four hours.

Technology survey: After pilot testing the technology survey in Moroto, the research team adapted the questionnaire so that it was simpler and easier to understand by both the enumerators and research participants. Survey questions were asked systematically in a step-wise matter on topics related to radio, television, mobile phone, internet use, social media engagement and behavior. If one set of questions did not apply to the participant (e.g. they did not listen to the radio), the enumerator moved to the next set of questions until the survey was complete. The survey also included a final set of questions on other (non-technology) forms of communication. The technology survey took between 15-60 minutes to complete, depending on how many question blocks it was appropriate for a participant to answer.

As a token of appreciation, all interviewees, and FGD and workshop participants were provided with a snack and a bar of soap. Technology survey respondents were provided with a snack. The 15-19 year old adolescent girls' workshops were of longer duration and so they were provided with additional refreshments and a Polaroid photograph of themselves or a group photo with their friends, depending on their preference.

Participants and recruitment

Study participants were selected using purposive, nonprobability sampling. A total of 312 participants were included in the study. At the national level, representatives from government, I/NGOs, the private sector and industry were selected for interview if they were involved in adolescent and/or nutritional programming, employment or marketing activities, and at the district-level, interlocutors included a purposive sample of governmental, I/NGO and civil society organisations (CSOs). At the community-level, interlocutors included community leaders (local chairpersons, Refugee Welfare Councilors, youth leaders, women's leaders), influential persons (teachers, village health team members, traditional birth attendants), parents and caregivers of adolescents, and adolescent girls and boys aged 10-19 years old.

The number and distribution of participants by district, activity and stakeholder group are presented in Table 3 below. A total of 144 data collection activities were undertaken (18 participatory workshops with adolescents, seven FGDs with caregivers of adolescents, 79 technology surveys with adolescents and 40 interviews). In total, 131 adolescent boy and girls aged 10-19 years took part in the workshops and 79 adolescent respondents completed the technology surveys. Forty-nine caregivers took part in FGDs and 53 adults participated in in-depth interviews.

Table 3 – Participants by location and activity type

		National Nairobi		Moroto		Adjumani		Total	
		Number of activities	Number of participants	Number of activities	Number of participants	Number of activities	Number of participants	Total number of activities	Total of participants
Interviews	National-level policy makers	4	4	-	-	-	-	4	4
	National-level private sector officials (health, nutrition, media)	2	2	-	-	-	-	2	2
	National-level agencies + programme implementers	9	15	-	-	-	-	9	15
	District-level government officials	-	-	2	5	2	2	4	7
	District-level programme implementers	-	-	2	3	2	3	4	6
	District-level media and communications	-	-	1	1	1	1	2	2
	Community key informants	-	-	6	7	9	10	15	17
FGDs	Caregivers of adolescents	-	-	3	26	4	23	7	49
Workshops	Adolescent girls (10-14 yrs)	-	-	3	21	2	14	5	35
	Adolescent girls (15-19 yrs)	-	-	3	21	2	15	5	36
	Adolescent boys (10-14 yrs)	-	-	2	15	2	16	4	31
	Adolescent boys (15-19 yrs)	-	-	2	13	2	16	4	29
Survey	Adolescent girls and boys (10-19 yrs)	-	-	41	41	38	38	79	79
Total		15	21	65	153	64	138	144	312

Consent

Prior to commencing each data collection activity, informed consent was obtained. The research lead provided a full explanation of the study and emphasised the optional, voluntary, confidential and anonymous nature of participation. It was made clear that participation would not affect any future services and/or community benefits needed or received. All participants were given the opportunity to ask questions and for further explanation. The study's consent form (see Annex 6) was presented, explained in detail and read aloud for illiterate participants. The contact details of the WFP national focal point for the research was included on each consent form and provided to community leaders, governmental officials and industry representatives for their records. A copy of the consent form was provided to all participants upon request.

Particular attention was given to the consent procedure at the start of each adolescent workshop. The study and workshop objectives and the individual's participation were explained in detail to their caregiver (many of whom also participated in focus group discussions) and who were asked to complete the study's consent form. The study and their participation were explained to the adolescents in an appropriate and accessible manner and in their own language. They were asked for their assent and given the opportunity to also complete the assent consent form.

All research participants, including the adolescent participants, gave informed consent by signing the consent form. A small number of national level stakeholders gave their verbal consent. At the conclusion of fieldwork, all consent forms were retained in hard copy by Anthrologica.

Data management, transcription and translation

Interviews, FGDs, and adolescent workshop discussions were recorded using a digital voice recorder with the exception of ten stakeholder interviews in which the participant requested an audio recorder not be used. Detailed notes were taken by the research team during each data collection session (particularly during the interviews that were not recorded). All data were stored securely on the principal researcher's password protected laptop and backed up on a portable hard drive.

At the end of data collection, the audio recordings of all the data collection sessions were transcribed into English by the national research assistants (RA, SM and PT). Anonymised transcripts were produced in Microsoft Word. The transcripts were reviewed by the principal researcher for accuracy and were cross-referenced with the research team's field notes. Any areas of inconsistency were resolved after an additional review of the original audio file.

All technology surveys were completed on paper by the national research assistants (RA, SM and PT) and the WFP field team supporters (LO and GA). Hard copies were collected and at the end of the fieldwork data were entered into Excel, cross checking the entries against the original paper copies. Hard copies of all the technology interviews were retained by Anthrologica.

Data analysis

Preliminary analysis of data was conducted throughout the data collection process and the research team presented initial findings to key WFP staff, research implementation partners, and I/NGO stakeholders at a roundtable workshop at the conclusion of the fieldwork.

The full analysis of all qualitative data was conducted by the lead researcher using thematic analysis. Dominant themes were identified through the systematic review of interviews, FGDs, workshops and observation notes. Salient concepts were coded and their occurrence and reoccurrence labelled by hand. The emerging trends were critically analysed according to the research objectives. Particular sections of *ad verbatim* narrative were used to build case studies and included in the report to ensure the participants' voice was captured and maintained. The technology interview data was analysed using Excel. The demographic data of participants and technology survey data was analysed using Excel. The analytic process was systematic and transparent, and all raw data were made available to WFP.

Methodological limitations

The study had a wide geographical scope, which combined with a limited timeframe and resources, posed a certain set of challenges. Throughout the research, the team sought to mitigate the impact of these issues by employing a carefully developed pragmatic methodology and by efficiently utilising resources available.

The maximum possible number of interviews, FGDs, workshops and surveys were conducted at each field site given the time and operational constraints.

In qualitative research, there is always a risk associated with misinterpretation and the possibility that participants provide what they perceive to be socially-correct responses, or withhold sensitive information. Attempts were made to mitigate these risks by the research team working closely together to plan translation styles in advance and decide how to best capture colloquialisms, idiomatic expressions and jargon. Careful phraseology was used when posing questions. Sections of narrative were repeated to the participant to confirm or clarify statements. In addition, the research team was not known to the communities or individual respondents in advance, and through the careful consent process, a 'safe-space' for sharing ideas was created. Participants were encouraged to speak openly and the research team did not feel that socially-correct answers biased the findings. Interview and discussion frameworks allowed similar questions to be asked in multiple ways in order to triangulate responses across relevant stakeholders. Observational data compiled during photowalk activities in the community also served as a method of verification (e.g. the condition of crops, presence of roadside foods etc).

In all sites, it was necessary for the research team to discuss the more appropriate way to convey the concept and period of adolescence to community-level respondents. There was not always one word that fit the description of adolescent. Circumlocution was required to articulate the research questions in the local languages, and due to the sometimes lengthy descriptions that were needed to convey meaning, interlocutors may have been predisposed to provide answers based on the descriptions provided by the translators. This was addressed during data analysis by comparing community-level descriptions of adolescence to district and sub-county-level interpretations of local sentiments regarding the concept of adolescence (e.g. 'puberty') in order to mitigate any biases introduced when asking questions regarding local interpretations of 'adolescence'.

In Uganda, there is a diverse landscape of governmental and I/NGO partners delivering community-based health services for women and children and (often indirectly) adolescents and it was not possible to engage all potential partners in the study. As far as possible, stakeholders were mapped in advance of data collection, and the WFP Country Office was able to prioritise key partners for inclusion in the study. Scheduling appointments with government representatives at both national and district-levels was difficult due to their limited time and competing priorities. With the exception of the Ministry of Agriculture, however, WFP was able to secure an official letter to arrange interviews with representatives from the key sectors identified.

The research intended to capture the voices of both in-school and out-of-school adolescents. In the fieldsites, these two groups were not clearly differentiated. The majority of primary school-age children were found to be registered as 'in-school', however in reality, did not regularly attend due to other, often conflicting, household priorities including family commitments, farming, and/or income-generation responsibilities. This resulted in a number of the workshops appearing to involve more 'in-school' than 'out-of-school' participants, when the delineations were actually more fluid. Many participants listed as 'in-school' but able to reflect their recent experiences of being 'out-of-school'. In order to ensure both perspectives were well captured in the study, additional probing questions were incorporated into the workshop structure to explore participants' experiences moving between being 'in' and 'out' of school.

The two research districts are considered protracted crisis zones. Data was collected during one point in the year, and although participants were asked to reflect on their experiences throughout the year, seasonal variability cannot be fully accounted for. This is particularly relevant for Moroto district, which at the time of the study was experiencing a particularly severe period of drought and food insecurity. Given the sample size and the socio-economic and cultural diversity of Uganda, results cannot extrapolate to a whole-country context. The saturation of findings from the two districts however, indicate data are likely applicable to adolescents living in areas with similar socio-economic and cultural backgrounds, and which share similar characteristics. Findings across all research locations were broadly corroborated by the literature reviewed.



1. Defining and experiencing adolescence

Adolescence is commonly understood as the life stage between the end of childhood and the beginning of adulthood (Kaplan, 2004). Conceptually, the UN defines adolescence as spanning the age range 10-19 years, although others argue for 10-24 years (Sawyer et al., 2018). Adolescence is a dynamic concept, both culturally and historically. The length, the progression and even the existence of adolescence as an interim life stage differs widely across cultures (Steinberg, 2014).

In Uganda, there were marked disparities between community-level definitions of adolescence and the terminology adopted at the national level. It was clear that conceptually, there was a distinct period of life that marked the transition from childhood to adulthood, although how that transition was defined, what triggered the entrance and exit between life stages, and the terminology used to describe it varied across research sites.

Differences in markers between male and female adolescence were highlighted, with boys often perceived to have a longer interim period between childhood and adulthood than girls. This was particularly evident in Moroto district where girls assumed adult responsibilities earlier. Age was rarely used to indicate different life stages at the community level and the markers of adulthood could be observed in individuals considerably younger than 18 years old, the legal age of majority in Uganda. In some cases, the conceptual juxtaposition of 'markers of adolescence' were found to impede effective and efficient programme implementation as a number of adolescents excluded themselves from services aimed at 'youth' and/or 'adolescents' because they self-identified as adults (given that they were already married or had a child for example), despite being in the 10-19 age group.

National and district level definitions of adolescence

Uganda law recognises individuals below 18 years of age as children (MOGLSD, 2006), yet the National Adolescent Health Policy defines adolescents as those between the ages of 10 and 19 years (MOH, 2012). The adolescent age range also fits into the government definition of 'youth' (12- 30 years) and the DHS definition of women of reproductive age (15-49 years) (UBOS, 2012).

In the stakeholder mapping conducted as part of the research, it was evident that 'adolescents' (10-19 years) were rarely defined as the primary target beneficiaries of interventions, and even less so adolescent girls. Rather adolescents were more likely to be clustered with or defined as 'young adults'. Stakeholders working with adolescents suggested that this reduced the visibility of adolescents, hampered the identification of adolescent-specific problems, and limited the development of appropriate strategies and programme design to meet their specific needs. Table 4 (below) presents a range of terminology used by selected key stakeholders at national and district levels to describe the 10-19 year age group.

The way that national- and district-level stakeholders defined this age-group was largely dependent on the sector in which they operated. Social protection actors appeared more likely to target 'youth' ranging from 10 to 35 years old. Health actors targeted 'adolescents' (10-19 years) and/or 'women of reproductive age' ranging from (15 to 49 years). Education actors targeted groups by the corresponding phase of their education 'primary school students' (6-12 years) and 'secondary students' (13-18 years). Inconsistencies were also evident within sectors and even specific institutions. For example, Moroto Regional Referral Hospital offers a special service package for patients aged between 10-24 years, labelled interchangeably as 'Adolescent Friendly Service', 'Youth Friendly Service' and 'Youth Corner'.¹⁸

¹⁸ The Adolescent Health Policy Guidelines and Service Standards for Uganda (2012) aims to ensure the provision of adolescent-friendly health services (AFHS). It highlights barriers adolescents face in using services, including long waiting times, long queues and poor quality services (including lack of privacy, rude service providers etc). It also outlines certain characteristics AFHS should demonstrate: healthcare providers should be specifically trained and assume a non-judgmental attitude; peer counselors should be available; and facilities should offer an integrated package of services, a clean environment, health education materials and recreational activities.

Table 4 – Terminology used by government, UN and NGO stakeholders at national and district levels

Institution	Terminology	Age
Ministry of Health	Adolescence	10-19 years
	Women of Reproductive Age	15-49 years
Ministry of Gender Labour and Social Protection	Youth	12-30 years
Ministry of Education	Primary School Student	6-12 years
	Secondary School Student	13-18 years
UNICEF	Early adolescence	10-14 years
	Late adolescence	15-19 years
WHO	Adolescence	10-19 years
PLAN	Adolescence	10-19 years
Moroto Regional Referral Hospital	Adolescent Friendly Service Youth Friendly Service Youth Corner	10-24 years
Restless Development (Moroto)	Young People	15-30 years
Save The Children (Adjumani)	Children (for Peer Group activities)	7-17 years
	Adolescence	12-19 years
International Rescue Committee (Moroto)	Youth	14-24 years
Nenah FM (Moroto)	Youth	15-24 years
Amani FM (Adjumani)	Youth	15-24 years

Community definitions and markers

Community-level participants in Moroto district primarily spoke Ngakarimojong. Terminology relevant to the 10-19 year age-group included: *ngi'kereunok* meaning children who are in-between adults and children; and *ngi'karachuna* meaning young adults or youth. Participants also explained the concept *nga'kobain*, a term derived from the word *kikob* meaning 'passing something between one-another', referring to an age set: a group of similarly aged girls who live, eat and sleep together from approximately 14 years old.

In Adjumani district, the most common language amongst participants was Juba Arabic. Terminology relevant to the 10-19 year old age-group included: *yaal sukhaar* meaning young children, usually for those under 12 years; and *shabaab* meaning youth, usually for those above the age of 17. There was no specific term covering the 10-19 age group. Within the host population, Madi was the primary language. Relevant terminology in Madi included: *jul and*, *lefuno*, referring to young people usually over 18 who are expected to marry; and *yayii* and *lemurizii*, terms also used for young adults or youth. According to the workshop participants, these terms were not interchangeable with 'adolescence' and were not definitions that revolved around age as the central criteria.

In rural Atedeoi, Moroto, a male was considered to be an adult when he married and cattle had been exchanged in the process ('married with cattle'). Life stages or 'age sets' for boys were split into junior elders and senior elders. For men to be recognised as a senior elder, they had to have gone through the initiation ceremony '*asapan*', a rite of passage usually performed once per year per clan. Females were considered to be an adult when they were married with cattle, and had given birth to a child. It was widely agreed that giving birth was an important indicator of adulthood. Women who were married, but did not yet have a child, may not be regarded as a full and active member of the community (discussed further below).



Woman thatching roof. Drawing, 10-14 adolescent workshop, Moroto.

In peri-urban Katanga, Moroto, age was more often referred to as a delineator for life stages. In contrast to Atedeoi, participants in Katanga reported that turning 18 years of age was a key marker of adulthood. Another dominant marker that emerged was the degree of obligation and responsibility assumed as part of being an adult, and the allocation of particular duties: adult women were responsible for

building houses whilst adult men were responsible for fencing the perimeter of the *manyatta*. In the participatory workshops, this was clearly illustrated by the younger adolescents in their drawings.

In Moroto, physical changes were also noted as a defining feature of adulthood. Female adults menstruated and developed breasts. Adult males had deeper voices, stronger muscles and beards. These features were also highlighted by younger adolescents in the drawings they produced as part of the participatory workshops.

For the refugee population in Adjumani, a number of initiation ceremonies customarily signal adulthood. Among the Dinka and Nuer, the *gaar* initiation rite signals adulthood for boys, involving the scarification of contour lines on a boy's forehead (6 lines for the Nuer, 4-9 lines for Dinka). Dinka boys and girls may also have their lower teeth removed to signal adulthood. Amongst the host Madi community in Adjumani, traditional markers for a man's entrance to adulthood included wrestling and hunting, and for women, beginning menstruation and increased household responsibility. Marriage, parenthood and physical development were stronger markers of adulthood as defined by caregivers and other influential community members for both the refugee and host community, particularly for females.



Young man with a beard. Drawing, 10-14 adolescent workshop, Moroto.

Markers identified by adolescents

When workshop participants were asked to describe their current life stage, a number of themes emerged that were common across both districts.

Physical change: The physical changes that occurred during this life stage were strongly felt, particularly breast development and the start of menstruation for girls and for boys, deepening voices and the growth of facial hair. This finding is aligned with other research on this age-group in Uganda that concluded the cultural definition of female adolescence may not necessarily be based on chronological age, but rather on physical characteristics such as '*budding breasts*' (Bantebya et al., 2013). Physical changes were also used to signify when a girl is ready for marriage and parenthood.

Cognitive change: Most adolescents described how their '*thinking capacity*' was superior to that of younger children, but not yet at the level of an adult. In Adjumani, adolescents in the host community suggested that only adults could give '*constructive ideas*', whilst an adolescent refugee girl concluded, '*The mind of a teenager is not equal to that of an adult*'.

Household responsibility: In Moroto district, household jobs for girls included mopping, fetching water, collecting firewood, thatching huts and carrying supplies between the *manyatta* and town, and the *manyatta* and *kraal*. Preparing food for the household and looking after younger siblings were key activities emphasised by adolescent girls in their photowalk activity. Married adolescents and adolescent mothers had similar responsibilities, but cared for their own children rather than their siblings. In the participatory workshop in Atedeoi, girls described the heavy workload they faced,

Girl 1:	<i>All the work at home is piled on you whether it is light or heavy, it's all on you.</i>
Girl 2:	<i>Sometimes when I come back from school I find that all the work is waiting for me, right from looking for greens to cooking and fetching water</i>

The pattern of fathers being '*technically unemployed*' due to reduced livestock, and women assuming additional responsibilities as income generators was frequently described in Moroto. As such, household responsibilities had started to shift to eldest daughters, but the level of work and responsibility was often difficult for them to manage. As one 11 year old girl in Moroto admitted, '*I find it hard to do the work my mother does*'.



Our Responsibilities - Adolescent Girl, Atedoi



Our Responsibilities - Atedoi, Moroto District



A picture of weeding

Photographs taken by adolescent girls during their photowalk activities in Moroto.

In the refugee community, responsibility for siblings was particularly strong, as households were reported to include an average of 10 children. Adolescents in ‘divided’ families assumed particularly heavy sibling responsibilities. One adolescent girl explained, *‘My father is in Sudan. My mother also returned to Sudan, she had to go to the hospital. So I am the one taking care of my younger brother and sister’*.

In both Moroto and Adjumani participants at all levels agreed that girls had more responsibilities than boys. In Moroto, younger male adolescents had similar household responsibilities to adolescent girls. As they aged, older boys shifted focus towards animal care, milking animals and extracting their blood, fencing the *manyattas*, and digging latrines. In Adjumani, girls in this age group discussed *‘needing to work hard’* and be *‘more serious’*, whilst boys spoke about having more time to play with friends. The workload of girls was often described as protecting them from *‘idleness’*, a criticism often levied at adolescent boys in both districts. As a religious leader in Moroto asserted, *‘It’s easy for girls, the girls can go to look for work, buy food and then bring home and cook but for boys, they have nothing to do, they sleep under trees and starve all day’*.

A move to independence: Fostering independence and navigating away from reliance on parents or other caregivers was seen to be unique to this life stage. Dependence on parents was described as a marker of childhood, and was a key difference between the younger adolescent groups (who were still reliant on their parents) and older adolescent groups (who had a higher degree of autonomy). Adolescents’ desire for independent decision-making was an issue raised by many caregivers, and a source of tension.

It was suggested that refugees may find adolescence to be a more challenging period because of the limitations in resources and freedom particular to their environment. Stakeholders confirmed that young refugees lacked opportunities to develop independence and responsibility. This was verified by adolescent participants. As one adolescent refugee boy explained, *‘You may think I have to go and help my father in the field, but he doesn’t have a field’*. Adolescents who had lost one or both parents, either because they were separated by country borders or because their parent had died, spoke emotionally about their loss. It was notable that during the participatory workshops, when drawing self-portraits, adolescent refugees were more likely to depict themselves holding hands with an adult, projecting their loss and grief in the images.



‘Me holding hands with my father’.
Drawing, adolescent workshop, Adjumani.

Testing boundaries: The adolescent life-stage was described by many as being a unique period for testing limitations and rules, often manifesting in unruly behavior. One local leader from Moroto explained,

They don't want to listen. For example, when you tell them 'don't marry many women', 'don't go to raid cow's, 'don't drink alcohol', they think you are depriving them of something, they want to test things out and see how things work for them. They want to discover, they don't take instructions as they have been told. For an adult, if you told them don't go and raid animals, they would believe you and stay back, but for an adolescent, they will want to experiment and see what comes out.

This perception was more aligned to the behaviour of older adolescents, whilst younger adolescents were seen to be more obedient. During the photowalk in Mungula, one adolescent refugee girl took a photograph of her friend pretending to steal a goat. In describing her photograph, she explained that she had wanted to show this because, *'By the time I am older in adolescence, it sometimes makes me want to go steal things'*.

Participants from the refugee community described psychosocial consequences of previous trauma and displacement as particular concerns for this age-group, suggesting vulnerabilities could manifest in expressions of anger and fear and result in conflict and violent behavior. Drinking alcohol was also described as common-place amongst older adolescent boys in both the refugee and host communities of Mungula.



Stealing A Goat - Adolescent Refugee, Mungula, Adjumani District



'This is me'. Drawing, adolescent workshop, Adjumani.

A move to communalism: In-line with moving towards greater independence from family, communal living practices with peers were commonly described. In both fieldsites in Moroto and in the Adjumani host community, boys and girls aged around 14 years were reported to begin living and sleeping communally with peers in a separate building to their family structures. In Moroto specifically, older and younger adolescent girls lived in different groups as the older adolescents may be visited by 'boyfriends'. When they married, girls move to their husband's household. Sleeping communally was not a practice reported in the refugee community because of the limited land they had available to construct separate spaces. Refugees identified strongly with their particular ethnic group, a bond strengthened by moving to a new country. This sense of community belonging was clearly depicted by adolescents in the workshops. In one self-portrait drawn by a refugee boy in Adjumani for example, he portrayed himself wearing football shorts with the name of his ethnic group (Dinka) written on the shorts. Participation in traditional dances (in Moroto) and discos and nightclubs (in Adjumani) also signalling older adolescents' move to communalism and independence.

Interest in opposite sex: Growing interest in the opposite sex was a theme to emerge across all fieldsites, particularly amongst older adolescent boys and girls. In describing her mud moulding, an adolescent girl in Moroto explained, *'Mine is a female about 16 years old who is still growing. She goes to the garden to farm, she does the cooking, has boyfriends'*. In discussing relationships, an adolescent girl from the host community in Mungula confirmed *'We even think of staying with the opposite sex'* and an adolescent boy from the same community concluded, *'He or she wants to explore sex before marriage'*. Girls in the refugee community were described as needing to be *'under the protection'* of their families because they were perceived to have greater sexual awareness, and were therefore vulnerable to becoming involved in sexual activity and/or being taken advantage of.

Gaining assets: The significance of gaining assets was emphasised by many adolescents. Adolescent girls in Moroto, particularly the older girls, made themselves beads to wear, of which they were very proud. One caregiver in the refugee community explained,

Well, talking of my life when I was 10 to 19 years old, getting assets was important. I would love to see that my sleeping hut was very clean. To be well dressed. To have curtains, bedsheets, a mattress. The bed should also be clean Meaning that I had to work hard at least to get this. Already I was coming to the mentality of an adult. So during that time I need to organise myself. I got the bed and then curtains when I was in South Sudan. Then I was at least to make sure I had at least enough clothes. That was the assets that I was struggling for, and a set of tables. You know somebody is growing when they focus on all these things I was focusing on.

An interim period: In the research sites in Moroto district, participants raised questions regarding whether an interim period between childhood and adulthood existed, but some suggested that if it did, it may be more significant for boys rather than girls. As one programme implementer in Moroto explained,

For the setting of this region, you may find males who exist in that gap, but it will be extremely hard for you to find females. For this sub region, the females of that age are already mothers. Certainly by the time they are 16 years old, but you can also find mothers as young as 14 years. So that 'overlapping time' may not be there for females, but for males it might be. As a male, for you to be considered as an adult you have to possess something like a wife at home, and children, and cows. To be 19 years and married, I am considered an adult in the community, and even my views are respected in meetings. I could also be 30 years old, but if I don't have animals and no woman at home, they will always consider me a young boy.

In Moroto, younger adolescent boys saw themselves as children (*ikoku* singular, *ngidwe* plural), but 'not very young ones'. Peri-urban younger boys recognised they were still dependent on their parents. Rather than making their own decisions, they were mostly 'given instructions'. They were clear, however, that they were not adults, but instead belonged in-between adults and children. Older boys saw themselves as 'still growing', but suggested that other people may already see them as adults. As an older boy in rural Atedeoi, Moroto, confirmed, 'Even at home parents look at us as people who can take care of ourselves. This leaves us at a cross-roads'. Older boys in the peri-urban setting regarded themselves as 'youth' and 'heading to adulthood'. They voiced frustration that the government classified them as children, suggesting that their ages denied them access to politicians, and left them 'side-lined'. As one adolescent refugee girl in Moroto explained, 'Now you have breasts, you have developed. Your parents see you as mature but you are not mature for the government, you are still a child'.

Younger adolescent girls also identified themselves as in-between children and adults. Unmarried older adolescents labelled themselves as *nga'kobain* (discussed above) and in-between children and adults. Married adolescent mothers identified themselves as already being adults, particularly those living in more rural areas, because of being married, having children and sharing responsibilities with their husbands. One adolescent girl used her mud moulding to illustrate that she will become an adult, 'When I get married, get pregnant and give birth'. Programme implementers highlighted that it was common for adolescent mothers to not engage with relevant youth services as they already identified themselves as adult.

We have young mothers as early as the age of 16 or 17. When you call for a meeting, they may exclude themselves because they are parents. They are within this age bracket, but just because they have a child and they say they are grown-up.

In the peri-urban site in Katanga, Moroto, married adolescents and adolescent mothers were less likely to self-identify as adults, and in contrast to external perceptions, explained, 'Traditionally when you get married, you are a woman. So, I am now a woman, basing this on tradition, but I am still a growing girl'. These adolescent girls described



Photograph of adolescent participant holding her mud moulding during a workshop in Moroto district.

the difference between the way they viewed themselves and how they were perceived by others to be challenging. As one girl concluded *'Like now, I know am not old enough, but just because I am pregnant makes them think am a grown-up'*. Similarly, older adolescent refugee girls in Mungula affirmed, *'Adolescence makes you to pretend you are mature but you are not mature'*.

An interim period between childhood and adulthood was most recognised in Mungula, Adjumani, amongst both the refugee and the host community. As a local leader from Mungula stated, *'They are not adult and they are not younger'*. The younger adolescent girls in the host community saw themselves as adults (*madii amba* in the singular, or *ba'amba* in the plural), or as still growing, depending on their level of household responsibilities. This was in comparison to the younger boys who saw themselves as children (*baranwa*, singular; *baciri*, plural) due to their playfulness and reliance on their parents. Both genders of the older host community adolescents identified with an interim phase between childhood and adulthood.

Amongst the refugee population in Adjumani older adolescent girls were familiar with the English term and concept of *'adolescence'* whilst both younger adolescent girls and boys saw themselves as children (*yaal sukaa*) or as being between children and adults (*nas kubaar* or *mukthuline*). It was also acknowledged, however, that circumstances could result in children growing-up quickly particularly if they became the head of their household, or needed to be the primary income generator because of the absence of relatives. One 13 year old refugee boy in Mungula explained,

For me, I am a businessman... Because my brother is not there and my father is not there. That is why I decided to make business so that our people can also benefit... I went and borrowed from the Village Saving and Loans Association. I borrowed 80,000 Ugandan shillings [22 USD]. I am going to return with an interest of 20,000 [5.50 USD] to make 100,000 [27.55 USD]. I need someone to give me a hand to make my business grow so that I can pay the school fees for my brother and my sister to go back to school.

Adolescent girls aged 10-14 years old, participating in a creative workshop, Ateдеоi, Moroto



2. Food and nutrition

The chapter is structured around three sections: available food and food sources; food responsibilities and self reliance; food preferences, motivations and aspirations.

Available food and its sources

Moroto is an agro-pastoral zone with the major food sources coming from both land and livestock. Typically grown crops were reported to be sorghum, greens, sunflowers, and less commonly maize, beans and cowpeas. Foodstuffs originating from livestock included meat, milk and blood. Usually, these were more readily available in the *kraal* (the mobile pasture area away from the settled village or *manyatta*). As well as home produced food, the other major source of foodstuffs was the market. Market options included flour, beans, oil, rice and a small range of vegetables although participants reported that they often purchased the cheapest goods due to limited financial resources. For children, another source of food was school meals. Many school children received one school meal per day provided by WFP and supplemented by produce from small school gardens. Table 5 (below) lists the commonly available foods reported by participants in Atedeoi and Katanga and Table 6 presents the typical daily diet as reported by adolescents in Moroto.



The most common meal described was green vegetables, boiled or cooked with onions, tomatoes and oil; *posho* a mix of sorghum flour, water and oil cooked into a thick paste, and beans (either harvested, or, if they could be afforded, bought in the market). At the time of data collection, Moroto was experiencing significant food insecurity, and as one Village Health Team member described, '*Now everyone is crying of hunger, hunger is everywhere*'. Food insecurity was also documented by the adolescents during their photowalk activity (as photograph above).

Food options in the *kraal* were described as being more varied (see the produce presented in Tables 5 and 6). In the *manyatta* and town there was reported to be little choice over foodstuffs. The food consumed was typically whatever survived from the harvest or the cheapest item available in the market.

Boy 1:	<i>It's easier in the kraal because in the kraal you can hunt rats to roast, eat wild fruits, you hunt birds. But here in the village it's really hard because you are idle. Watching the sun moving.</i>
Boy 2:	<i>Here in the village it's very hard, you can see some snacks but you don't have money to buy it yourself, but the kraal is good because everything is available, you find a tree with good fruits and you just climb and eat, animals are also there and you are milking so the kraal is really good</i>

Meat was described as rarely available, except for during ceremonies such as marriage or elder initiation. When an animal was slaughtered, all present would eat a share of the meat using every part of the animal except for the head which was left for male herders and adult men. Blood was an important source of protein, and two types were consumed: blood mixed with milk and consumed by elders and herders during ceremonies; blood cooked with oil or ghee and consumed by all members of the community. In the second scenario, taking blood was seen to be a '*desperate measure*' as it stressed the animals, so when food was in good supply blood was rarely drawn. Community members noted that the variety of food is greater when '*the seasons are more variable*'.

Table 5 – Foods participants reported as being available in the areas they lived

		Moroto		Adjumani	
		Atedeoi and Katanga	Kraal (pasture area for Atedeoi)	Refugee community in Mungula I	Host community in Mungula I
Staples	Rice	✓			✓
	Beans	✓			✓
	Sorghum	✓	✓	✓	
	Cassava			✓	✓
	Maize	✓	✓	✓	✓
	Sweet potato				✓
Fish and eggs	Eggs			✓	✓
	Fish			✓	✓
Meat <i>(rarely consumed in Moroto and usually as part of rituals)</i>	Cow Meat	✓	✓		✓
	Goat Meat	✓	✓		✓
	Donkey Meat	✓			
	Bushmeat ¹⁹		✓		
Fats	Oil	✓	✓	✓	✓
Other animal products	Milk	✓	✓	✓	✓
	Blood		✓		
	Ghee ²⁰		✓		
	Sour milk		✓		
Vegetables	Green leafy vegetables ²¹	✓	✓	✓	✓
	Tomatoes	✓			✓
	Onions	✓			✓
	Cabbage	✓			✓
	Yams				✓
	Irish potato	✓			✓
	Cowpeas				✓
	Eggplant			✓	✓
	Okra				✓
Fruit/Seeds/Nuts	Mangoes	✓		✓	✓
	Bananas			✓	✓
	Guava			✓	✓
	Groundnuts				✓
	Soya beans				✓
	Ballanite seeds	✓			
	Sunflower seeds	✓			
	Wild fruits ²²		✓		
Pre-prepared road-side snacks <i>(eaten rarely in Moroto)</i>	Chapatti			✓	✓
	Mandazi ²³	✓		✓	✓
	Samosa ²⁴			✓	✓
Shop-bought snacks <i>(eaten rarely)</i>	Biscuits				✓
	Sweets	✓			✓
	Cakes	✓			✓

¹⁹ Commonly rat meat.

²⁰ Made from letting milk ferment, then shaking it heavily for up to one hour before skimming off the surface layer.

²¹ *Eliaro, akeo, ekamalakang, ekorete, asuguru, alilot* and *edoodo* were the most common greens consumed in Atedeoi and Katanga. In Mungula, the vegetables most commonly consumed were dodo and white kidney beans leaves, referred to by refugee caregivers as '*korufo lubyia*' and by adolescents as '*ngeette*', and cow-pea leaf referred to as *osobi* by the host community.

²² Including *Ngalam* and *Ngableblebuo*.

²³ Fried dough.

²⁴ Fried with meat or vegetable filling.

Table 6 - Common food adolescents reported eating

		Moroto		Adjumani	
		Atedeoi and Katanga	Kraal (pasture area for Atedeoi)	Refugee community in Mungula I	Host community in Mungula I
Morning	Tea alone (with / without milk)	✓		✓	✓
	Tea with bread			✓	✓
	Tea with porridge (sorghum, cassava or maize flour)		✓	✓	
	Tea with cassava				✓
	Tea with yams				✓
	Tea with <i>githiri</i>				
	Tea with leftover food from the previous night	✓			
	Nothing	✓	✓	✓	
Daytime	<i>Githiri</i> (maize and beans) – (in school)	✓		✓	✓
	Blood cooked with ghee		✓		
	Boiled maize			✓	
	<i>Posho</i> and green leafy vegetables			✓	
	<i>Posho</i> and green leafy vegetables with sesame seed paste				✓
	<i>Posho</i> and beans				✓
	<i>Posho</i> and cabbage				✓
	<i>Posho</i> and eggplants				✓
	Nothing	✓	✓	✓	✓
Evening	<i>Posho</i> and green leafy vegetables alone	✓		✓	
	<i>Posho</i> and green leafy vegetables cooked with oil, tomato and onions	✓		✓	✓
	<i>Posho</i> and green leafy vegetables and beans	✓		✓	✓
	<i>Posho</i> with sour milk		✓		
	Roasted bush-meat		✓		
	Boiled cassava			✓	
	<i>Posho</i> / cassava / sweet potato / rice with: fish or meat with: green leafy vegetables / okra / cabbage				✓
Any-time Snacks	Cups of local brew	✓			
	Residue from brewing alcohol	✓			
	Seeds	✓			
	Tea			✓	✓
	Guava			✓	✓
	Mango			✓	✓
	Soya beans				✓
	Groundnuts				✓
	Milk	✓	✓		
	Wild fruits		✓		

In Adjumani, amongst the refugee community in Mungula, sources of food included: rations provided by external stakeholders; the land (both private land and school gardens); the market; and livestock. During the time of data collection, the content of rations supplied to refugees in Mungula included oil, beans, maize and sorghum. WFP explained that due to the scale of their operation, rations needed to be uniform and cost effective, however one local government stakeholder believed that the ration allowance showed a 'Lack of balanced diet for body growth and development', a perception shared by adolescents across ages



Photographs taken by adolescent participants during their photowalk activities in Moroto.

and genders. As one adolescent boy explained, *'Here we are eating the same food, in the morning, in the evening, tomorrow also. Every day the same food. The food is just beans that is brought by WFP per month'*.

On arrival, refugees had been granted access to land *'loaned'* to them by host community landlords (estimates of plot size ranged from 20 x 30 metres, to 30 x 30 metres). This land had to be lobbied for by the Office of the Prime Minister (OPM), and landlords did not receive compensation for loaning land, beyond sharing the use of services (health, education and otherwise) provided to the refugees. Whereas rations were the primary source of food for refugees, the land (which in Mungula was generally considered fertile and productive) was the primary source for the host community. The land was also a source of income to the host community, opening up the market to them as another source of food. Those with enough land could produce cassava, beans, cowpeas and other crops including maize, which they could sell to buy rice, meat and fish. As such, food options for the host community were described to be more varied compared to the *'normal food'* documented by adolescents in the host community.

Tables 5 and 6 (above) demonstrate that adolescents in Atedeoi and Katanga had reduced access to animal products and more access to starchy staples, with the opposite trend observed in the *kraal* areas where animals were kept to pasture. The food that was available for adolescents in Adjumani was more likely to be vegetables and fruits than in Moroto. Tables 5 and 6 demonstrate that despite living side-by-side, the host community had a greater range of available foods in Mungula compared to the refugee community.

Table 6 also highlights a difference in meal patterns across the sites, most notably between the *kraal* in Moroto where the need to take animals to pasture during the day placed greater emphasis on the morning and evening meal. Adolescents in Atedeoi and Katanga reported eating leftovers from the night before for their morning meal. A number of adolescents across both sites in Moroto and in the Mungula refugee community explained that they often did not eat a morning meal. Adolescents in the host community in Mungula had more access to regular meals with a variety of foodstuffs. For the other groups, diets were limited and uniform.

Food responsibilities and self-reliance

At the household level in Moroto, males usually control how resources and income are used. One programme implementer explained,

When the produce is harvested women don't have much say over the produce, even if they harvest 100kg of sorghum the men say take this much for brewing [alcohol], take this much for food and when money comes out of the produce, it's the men who have control over it.

Bringing food into the household was regarded as a female responsibility however. As one participant concluded, 'what is to be eaten, even if there is food at home, is left on women, men don't consider it as an important aspect'.

With adolescent boys more involved in herding animals, milking and extracting blood, the task of sourcing (or supporting the sourcing of) food for the household fell on adolescent girls. As noted above, girls were responsible for carrying foodstuffs between the *manyatta* and *kraal*, usually milk from the *kraal* to the *manyatta* and sorghum flour back. The burden of responsibility, especially for younger siblings was felt sharply by older adolescent girls in both rural and peri-urban sites. As one adolescent girl explained,

Even at night when am sleeping, I don't have peace, I sleep while thinking what the family will eat the next day, so I wake up at 4am to go for firewood just to make sure the young siblings have something to eat.

In terms of food preparation, women in Moroto were generally in charge of household food preparation, including overseeing the eldest daughter preparing food. Adolescent girls were often responsible for cooking meals for their family members, as depicted in drawings made during adolescent workshop (see image below).

Male community members suggested that with the food shortages and reductions in livestock (at the time of data collection) everyone had a role to play in sourcing food.

In our community, here we have a major problem of hunger. Early morning, I go to the bush to burn charcoal and cut firewood. The children of school-going age go to school, wait for their food, eat then they come back home. The other young ones go to look for greens and the wife goes to look for work in gardens. In the evening, we all meet at home and everybody submits what they have collected and mother cooks together with the girls. Then we all eat.

In this situation, a high degree of responsibility was directed towards agencies such as WFP to provide food. When discussing the shortage of food, the solution most commonly suggested by adolescent participants was that food distributions should be increased.

Similarly amongst the refugee community in Adjumani, responsibility for food security was seen to be the responsibility of external agencies that provided rations. One programme implementer explained, 'The refugees sometimes have negative perceptions and think that as refugees they need to be fed by an NGOs'. This was supported by female caregivers who confirmed 'We are just waiting for the UN, if they bring, we eat'.

With a move to provide cash instead of food, there was hope that greater responsibility would shift to the population. One local leader in Mungula concluded that with cash 'you can improve the issue of malnutrition because we can buy different food that we like'.

At the family level in both the host and refugee communities, the male household head was seen to control money and household resources, where the main female caregiver was generally responsible for sourcing food. Whilst the senior female caregiver was



'My sister cooking'. Drawing, adolescent participatory workshop. Moroto district.

likely to decide what to buy, it was often the adolescent girl who was sent to the market to actually purchase the food. For child-headed households, responsibility for providing food fell on the elder siblings. There was consensus in Adjumani that women and girls did most of the cooking in the refugee community. In families separated from parents, that role fell to the eldest girl, *'I am the only one at home, so I have no helper'*. Some adolescent girls joked that *'men are afraid of cooking'*. There was recognition that boys in the host community were more involved in cooking food, but had less responsibility when compared to girls.

Across all research sites, adolescent girls described having specific responsibilities around food preparation and adolescents of both genders described looking after siblings, and as such felt particularly concerned about sourcing food, despite not always having the financial or decision-making power to do so. The commonly held view was that once an adolescent girl had married, they became responsible for sourcing food for their new family.

In discussing their experiences, 'typical day-in-the-life' narratives of adolescents were built from the workshop participants' self-reported activities. The narratives therefore represent a composite character rather than any one individual, and reinforce the many similarities girls and boys from each location described in their daily life, most notably their food responsibilities and need for self-reliance.²⁵



Narrative 1 – Daily routine, 14 year old boy, Atedeoi, Moroto

I have two brothers, one older, one younger. I wake up at 3am, set a fire and start to collect cow urine for washing milking containers. I start milking which can take an hour. By 7am I take the animals for their early morning grazing and return them at around 8am. At 9am we all eat together, usually porridge made of sorghum or maize flour, whichever is available, mixed with sour milk. Then I take the animals for grazing deep into the bush with the other boys at around 10am. In the bush I pass time eating wild fruits. We return before the evening hours. I then need to milk again. At 7pm we eat. In the dry season when the animals have no milk, we drain blood from the neck of a cow and cook it, or if there is some milk, we mix it with the blood and take that as the meal. At night if there is traditional dance or wrestling we might go, but then we return to sleep as we always have to get up early.

I prefer to be in the kraal. In the manyatta there is nothing for me to do. Maybe I would be able to go to school. More likely though, I would be sent to town to look for work, through boda boda or construction. Boys fall into bad ways there, drinking and being in the wrong crowds.

Narrative 2 – Daily routine, 14 year old girl, Atedeoi, Moroto

I am the eldest child in my family. I wake up in the morning, wash and get dressed. Then I sweep the compound. If there is nothing to eat, my mother tells me to go to town or to the quarry, so that I can buy food for my siblings. I'll walk to town with a few girls of my age. When we reach town, I grind yeast first and then I wash utensils. When we are paid, we go to the market to buy food items. The balance I use to buy alcohol to be sold in the village. When I arrive at the manyatta I go to fetch water and sell my booze to my parent's friends. In the evening hours I start cooking with my sister, or sometimes with my friends. I serve the food and people eat. Then finally I eat. I still sleep with my siblings close to my parents, but soon I move to a different hut to sleep with my friends.

If I am in the kraal, things are a little different. I wake-up as early as 5am, and start shaking the milk in the guourd to make sour milk. At 6am I go to the bush to collect firewood for cooking porridge for the herders. The bush is very close so I get back early and then prepare porridge for all herders. After serving porridge I go to cut wood either for buildings, for charcoal, or to be taken to the village for cooking. The very young girls stay back at the kraal taking care of infants. I get back at around 3pm and start shaking the milk for sour milk in the evening. I mingle posho and wait for the herders to return and serve food.

²⁵ For further details of the use of composite characters in qualitative research see Narayan (2012) and Angrosino (1998).

Narrative 3 – Daily routine, 14 year old girl, refugee community, Mungula I, Adjumani

We are four children in my family. I am the second eldest. I came to Uganda with my family from South Sudan seven years ago. I wake up in the morning and firstly I always go and brush my teeth. Then the first thing I need to do is to make a fire and put the saucepan on. After doing this I sweep the compound while the tea is boiling. Then I serve the tea and food, if we have something to eat. I always serve the food to my family who are at home. It is my job to wash the utensils afterwards. Then I get washed and put on moisturiser. Then I am ready to put on my clothes and go to school. I work hard in school and listen to the teacher well.

After school I come home, I change out of my school clothes and spend some time reading my books. After reading my books I have to dig in the garden for a short time. Then I can start cooking. While food is on the fire, I collect water to wash the little kids. After bathing them, I serve the food and eat and then I wash the utensils again. Then I can sleep.

We all still feel sad and confused at times because we do not know here our father is. He did not come with us when we fled South Sudan, and there is still no word. My oldest brother is always listening for news of South Sudan on the radio. We try to keep updated with what is happening there although we agree our life is here now and we must make the best of it.

Narrative 4 – Daily routine, 15 year old boy, refugee community, Mungula I, Adjumani

I came here five years ago from South Sudan. I came with my parents and my brother. I wake up at 6am and I cook breakfast which is usually porridge. After that I go to bathe. After this I go to school to study. I stay in school all day and after afternoon lessons I go to fetch water for home. I can then go and play. Sometimes when I go home I will go to the garden to dig. If there is a radio I turn it on and listen to the BBC, or the Voice of America to hear if there are people who are being killed on the road to Juba. Sometimes I will be the one to cook. I also need to look after my young brother, like washing him and sometimes making sure he eats. Here, some of our parents do not look after the younger children so we need to. After dinner I might go to play cards with my friends. Usually though, I go to collect my books to try and study because I want to succeed in my education. Because my place does not have light to read my books at night I will go to sleep, usually worrying that at the end of the year I will fail my exams.

Narrative 5 – Daily routine, 15 year old girl, host community, Mungula I, Adjumani

I have five brothers and sisters. One is older than me, and three are younger. I am the oldest girl. I wake up, brush my teeth and wash my face. I wash utensils and prepare tea for breakfast. After this I must sweep the compound, fetch water and clean the jerry cans if they are dirty. Every day I must wash my younger brothers. Then I cook food and eat, then take lunch to my parents in the garden. Sometimes I can dig too. Then I bring the utensils back from the garden and maybe rest at home for a little while. I go to visit my friends in the afternoon, we usually go to the market and walk around together. When I return, I cook dinner and serve food for the family. For my father and brothers I give them water for washing their hands first. After eating I wash utensils, clean the table and sleep. Sometimes I like to sleep in the same hut as my friends so we can talk about life.

Narrative 6 – Daily routine, 15 year old boy, host community, Mungula I, Adjumani

I wake up, brush my teeth and take a bath with water my sister has already collected. I mainly just go to the garden to dig in the morning. Then I eat lunch because it is work that makes you really hungry. I might go home to rest for a bit, but then I need to take the goats for grazing in the afternoon. I usually come home and take another bath because it is hot. I then go back to the garden to dig and cut down some trees for burning charcoal. Of course I then need to bring the goats back from grazing. Finally, I can eat supper. My mother and sisters cook for us. After this, maybe I can go to the video hall to watch some television for a bit with my friends. Usually after this we go back either to our own houses, or to one of the boys' houses to sleep.

Food preferences, motivations and aspirations



*'Meat and milk – I don't want dodo'.
Drawing, adolescent participatory
workshop. Moroto district.*

A number of themes emerged around adolescents' food preferences and their underlying motivations and aspirations related to food.

In Moroto district, most adolescents explained that they could not risk having food preferences as food was so limited. One adolescent boy explained, *'choice is rare'*, whilst an adolescent girl concluded, *'every day we eat greens and posho so it's entirely dependent on the availability of food or the availability of money to buy food'*. The only food items that adolescents described wanting were additions to their normal diet such as tomatoes, onions and cooking oil to give the green vegetables a *'nice taste'* and beans for added protein. A number of *'treats'* were mentioned by adolescents and their caregivers, including *mandazis* (a fried dough), sweets and cake, but these were only available in peri-urban Katanga, close to the trading centre.

Livestock represented more than a food source in Moroto. Ownership was a meaningful symbol of status. Older adolescent boys who were based in the *manyatta* in order to attend school expressed nostalgia for herding animals in the *kraal*. A lack of access to animal produce such as meat and milk also impacted the diet of adolescents in the *manyatta*. Milk and meat were perceived to be the most nutritious foods across all participant groups in Moroto as these foodstuffs were perceived as *'giving energy'*. Several adolescents depicted their food desires and preferences in drawings made during participatory workshops (as above).

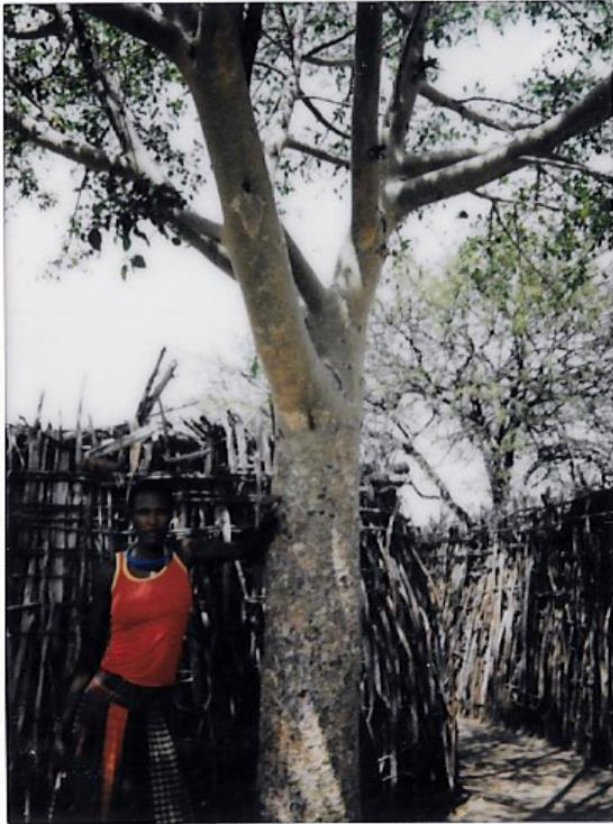
Adolescent participants were highly articulate about their food situation and conveyed the issues of sourcing food through the creative activities. In describing a photograph she had taken during the photowalk in Atedeoi (below), one girl explained,

Girl:	<i>It's a photo of a fig tree which no longer has fruits and this girl has nothing to eat now.</i>
Interviewer:	<i>Why did you take that photo?</i>
Girl:	<i>To communicate that the hunger situation in Atedeoi is really wild and even the alternative sources of food are drying up.</i>
Interviewer:	<i>What name shall we give this photo?</i>
Girl:	<i>A photo of hope</i>

In Mungula, Adjumani, there was a perception that adolescent refugees require specific foods according to their cultural backgrounds. Adolescents reported a preference for their traditional foods because *'it has energy'*. They expressed nostalgia for such traditional foods with one adolescent boy explaining his favourite food was *'Kisra – South Sudanese food made out of posho'*. Adolescent refugees disliked food they ate regularly, mainly green vegetables which they described as *'boring'*. One adolescent boy explained, *'Now we are eating these things by force which are not in our hearts'*. As in Moroto, meat was regarded as the most nutritious food in Mungula. Participants explained that meat *'gives energy'* whilst green vegetables did not. Frustration with uncertain and uniform rations combined with nostalgia for their traditional foods led some adolescents to consider returning to South Sudan, whilst realising this was not a viable possibility.

In general, adolescents from the host community in Mungula, Adjumani, expressed a wider range of preferred foods, almost all of which were sourced from agricultural land, and they recognised that a healthy diet is a varied one, *'I eat different thing for lunch and dinner. Eating the same is bad.'* Older boys desired food that gave them energy and kept them *'strong'*, in accordance with their heavy responsibilities digging the land, *'I waste a lot of energy during digging so I have to eat a lot to recover the energy'*. The

emotional attachment host community members felt for their land was clear. To 'dig' was the most common activity discussed in the adolescent workshops, and was documented in both drawings and photowalk materials (see below). To the host community, land was seen as a way to provide financial access to more varied foods, school fees and education. Participants (both adolescents and adults) expressed a respect for the land and an appreciation of what it could offer. As one adolescent girl from the host community explained, *'It is because you get a lot of food when you dig'*.



A Picture of Hope - Atedoi, Moroto District.



Boy digging -
Host Community, Mungula, Adjumani District

Photographs taken by adolescent participants during their photowalk activities in Moroto and Adjumani.

3. Factors affecting adolescent nutrition

A number of interrelated factors were found to determine adolescents' access to adequate and healthy food: conflict and governance; climate and agricultural practices; household economy and income generation; alcohol; social norms; sexual and reproductive health; access to education; and service provision issues.

Land access and governance

With the influx of refugees into Uganda as a result of escalating conflict in South Sudan, programme implementers in Adjumani Town reported being *'overwhelmed by the number of refugees in the area'*. Without adequate funding, this had led to rations cuts. Consequently, insufficient ration size was a priority issue voiced by adolescents in Munguala, Adjumani.

Another major barrier facing the refugee community was that the land they were loaned was too small to produce sufficient food. One local leader explained, *'They just give a small area, you dig there, in just this small area, you have latrine there, and you have everything there'*. The restricted plot size was demonstrated by adolescent refugee girls during the photo-walk activity whilst they explained that the size of the land limited the food yield which they needed to supplement rations.



*'This is our plot of land, from me to her. It is small'.
Photograph taken by adolescent participant, Adjumani.*

In addition to the small plot size, adolescents reported it was not uncommon for landlords to reclaim the land once it has been prepared for harvest, when it was yielding produce and/or asking for payment for land loaned. Limited land was also an issue raised by adolescents from the host community as many families also rented their land from landlords. Programme implements discussed challenges in land access and the lack of space to establish *'demonstration gardens'* for agricultural projects.

Although it was not raised directly during the fieldwork, cattle rustling has been well documented in Moroto and is often escalates as a result of limited resources, food insecurity and resulting malnutrition (Famine Early Warning Systems Network, 2005).

Climate and agricultural practices

National strategies have advocated for settled agricultural practices in the traditionally pastoral Karamoja region, but it has been contended that this can contribute to *'artificial natural emergencies or artificial droughts; because it creates a situation where households can no longer survive independently when the rains are poor, which did not exist when families could survive from their livestock'* (Simon Levine, 2010).

Across Moroto, adolescents and community members reported that the recent lack of rain had had a devastating impact on harvests and resulted in high levels of food insecurity. During a group discussion in Atedeoi, male caregivers agreed,

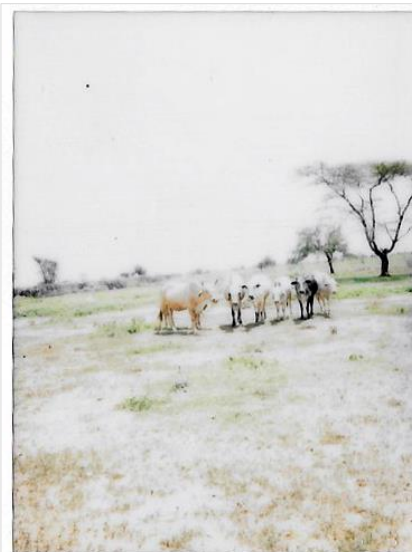
We have a lot of challenges; drought is making life really hard. I had one goat, it died in the drought of starvation. The sorghum in the gardens is like our bank, when you have sorghum in the garden and you have a cow. You see the gardens people are trying really hard to make sure things work out this time. We are a pastoralist community, but most have lost animals due to drought and now we are empty.



Drought - Atedoi, Moroto District



Empty Granaries - Atedoi, Moroto District



A picture of thirst
- Atedoi, Moroto District.

Photographs taken by adolescent participants during their photowalk activities in Moroto.

In their photowalk activity, many adolescent girls documented the effects of the lack the drought and poor harvest yields. In describing her photograph of the empty granary, one girl concluded,

This is a photo of a granary, it is empty and has only old rugs of sacks. The granary is also dilapidated, almost falling down meaning that it has never been rehabilitated for a very long time. Usually granaries are rehabilitated each time harvest comes closer, this means that these granaries have not tasted sorghum.

The dry weather had also necessitated communities to take animals to pasture in far-away *kraals*, further distancing this source of food from the *manyattas*. Many animals had died, yet families had also been forced to sell livestock to buy food from the market further depleting the longer-term food and economic security of the household. This was also depicted by girls during the photowalk activity. In describing her photograph, one girl in Atedeoi explained,

This is a photo of animals that are hungry and struggling to look for grass since the ground is bare and [they] have no water for drinking.

Although participants asserted that *'for the last two and half years we haven't harvested anything at all'*, many explained that even during times of good yields, post-harvest handling practices were often ineffective, with individuals more likely to immediately sell rather than to store produce. This sometimes led to exploitation from middle-men buying produce to re-sell to larger businesses at a significantly inflated rate, and as one local leader concluded, *'You find that people cultivate but when people harvest this food, they handle food in a very bad manner, they sell everything forgetting they are supposed to feed on this food in the next year'*.

In Adjumani, host community members with access to land also described drought conditions affecting crop yields, although the impact was less significant that in Moroto. In Adjumani, participants from both host and refugee communities discussed issues related to the limited size and security of the land available, lack of seeds and tools and poor knowledge of good farming methods such as irrigation, crop rotation and post-harvest storage. Adolescent participants noted that poor farming practices coupled with the climate affected the yield from the school garden in Mungula. The blight of pests such as army worm was also documented by adolescent girls in their photo-walk activity and described by caregivers as a *'disaster'*. The adolescent girl who took the photograph below explained, *'The leaves have been affected by the pest'* and

recommended, *'the communities outside Mungula should bring pesticides for spraying the maize crops otherwise there will be famine in the long run.'*

One innovative programmatic approach to building skills in agricultural practices was highlighted in Adjumani district. Welt Hunger Life works with refugee and host community members in Adjumani and Arua districts, including adolescents. Using the 'Farmer Field Schools' methodology designed originally by FAO in South Asia in 1989, they take a participatory approach to helping young people succeed in agricultural practices (FAO, 2016). Using small plots of land to provide real hands-on experience, a number of topics are studied including the cultivation of vegetables, livestock care and rearing, hygiene, income generation and basic management skills.



Household economy and income generation

In both fieldsites in Moroto, limited employment opportunities and the lack of household income were widely reported barriers to accessing food as community members had minimal purchasing power. Concerns about rising food prices were highlighted and participants noted that one of the most common reasons for using village savings and loans association (VSLA) schemes was for buying food. In Adjumani, the lack of resources to buy food from the market was particularly challenging for the refugees community, who had fewer opportunities to engage in income-generating activities. Although some participants reported receiving financial support from family in South Sudan, remittances were often insufficient. The lack of local employment opportunities was also raised as a concern by the host community.

Across both districts, adolescents were a key component of the labour market but due to their age, employment was usually informal and often led to exploitation and risk. Uganda has clear guidance on what constitutes child labour (MOGLSD, 2006) and the Ugandan Employment Act outlines conditions under which children aged 14-17 years may engage in gainful employment without infringing their rights and putting their lives and health at risk (Parliament of Uganda, 2006).

In both study sites in Moroto district, children aged seven years and over were described as crucial income generators and were reported to engage in activities including open-cast gold mining, agricultural day-labour, cutting firewood, making charcoal and stone quarrying. Participants discussed income-generating activities synonymously with household responsibilities and conveyed the widely-held expectation that this age group must work to contribute to the household economy. As one school teacher in Katanga explained, *'These children are used for survival purposes'*. Adolescents themselves explained that they had to work more when the harvest was poor and as one adolescent girl in Atedeoi concluded, *'When we get a good sorghum harvest that is when I will stop stone quarrying, otherwise if it is still like this [high levels of food insecurity] we shall still do the same work'*.

Adolescent girls used the photowalk activity as an opportunity to document their participation in the labour market (see photographs below). One adolescent girl in Atedeoi explained,

I took this picture to show that I go to the bush, cut logs and burn them. I cut other firewood and bring it to town and exchange it for [alcohol] residue and my family feeds on it... It's a picture of charcoal burning, it's this tree which feeds my family.

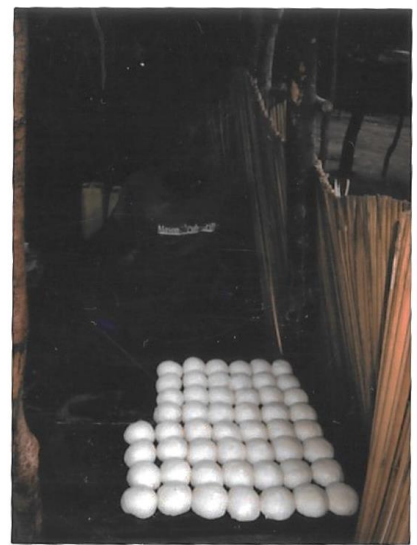
The work was described as both dangerous and physically exhausting. Cracking rocks in stone quarries required substantial physical exertion and often led to injuries including broken bones. Once the firewood had been cut and charcoal prepared, girls described walking as far as 50km to sell the goods in town. One younger adolescent girl from Atedeoi explained,



Firewood - Atedoi, Moroto District



Charcoal - Atedoi, Moroto District



Chapatti - Katanga, Moroto District



Selling eggs - Katanga, Moroto District



Aggregates, Adolescent Girl, Katanga



Bodaboda - Katanga, Moroto District.

Photographs of their income-generation activities, taken by adolescent participants during their photowalk activities in Moroto.

It's very hectic to carry firewood and charcoal and its really a long distance from our home to the town. Also during charcoal burning, we are exposed to very high temperatures, especially when getting charcoal from the burning pit. But at the same time we are supposed to provide for our family's needs.

Adolescent girls in Moroto expressed concern that their income-generating activities negatively impacted the environment. Describing their photographs, one girl concluded,

'This is a photo of a tree. There is a tree from which we burn charcoal and these trees are now depleted because people have cut all of them down. People should go to farming and leave burning charcoal so that rain can come and help our crops.'

Many of these jobs were undertaken by adolescent girls (rather than boys) because they 'grow more quickly' and the tasks fit with the traditional female role of carrying and transporting goods. Many of the

adolescent girls who participated in the study were direct or primary caregivers for their younger siblings, and felt great responsibility to provide for and feed their families.

Some, but not all, boys engaged in income-generating activities including agricultural day-labour, construction site labour or loading trucks with aggregates from stone quarries. Overall, fewer jobs were available for boys except in the *kraal* herding animals. Some older adolescent boys felt this disparity particularly strongly, and several in the *manyatta* in Atedeoi described themselves as *'idle and just watching the sun moving'*. There were more income-generating opportunities for boys in peri-urban Katanga than in the other fieldsites, through activities including cooking and selling street foods, construction site labour, crushing rocks or *'aggregates'* and riding motorbike taxis (*bodabodas*) (see photographs below). Boys expressed frustration that they had a high responsibility to provide for their family in the eyes of other community members, but few opportunities because of their legal age, *'Sometimes they tell us you are still young you can't do this, so providing for the family becomes a big challenge'*. In discussing the photographs, one boy concluded, *'I chose these photos to show that people in Katanga don't sit back and wait they try their best but sometimes they suffer'*.

Adolescent girls also engaged in washing plates and clothes, babysitting or acting as 'house-girls' for wealthier families in town, which could sometimes lead to sexual exploitation. As one local leader described, *'Even those who go to town to look for work should be careful with people who employ them because such people can force you to have sex with them and they can easily infect you with HIV/AIDS'*. Whereas babysitting was predominately seen as a job for younger unmarried girls, quarrying and selling alcohol, firewood and charcoal were seen as appropriate for both unmarried and married girls. This is in-line with nationally representative findings from the Adolescent Risk Behaviour Survey (MOH et al. 2017) that transactional sex was common (26.9%) particularly among 10-14 year old females. Adolescents raised such issues in the participatory workshops, and as one adolescent boy in Katanga concluded, *'These children go to work in people's houses where they meet a lot of abuses including sexual harassment'*.

Financial exploitation was faced by all adolescents involved in income generation in Moroto. An older adolescent boy in Katanga explained,

Sometimes they pay us little because of our age. Sometimes when we work we are two people, the older one and me. They first pay the young person so that he doesn't complain when he sees the bigger one being paid more and then later they pay older person. Most times they pay us little although my output can be equal or greater than that of the older person.



Because of the intense physical exertion of many income-generating activities, a young person was unlikely to generate enough money to purchase sufficient food to balance the energy deficit. As a local leader explained, *'At the end of the day, the food that you can buy with the money earned is shared by the entire family, but this food might not be enough even for the person who worked for it'*. In addition to purchasing food from the market, income was also used to pay school fees and for school supplies, including uniforms.

In Adjumani, which has more land to farm, host community members reported having more diverse income generation options than refugees, for example transporting and selling produce. Agricultural labour was the main income-generating activity of both younger and older adolescent boys and girls from the host and refugee communities. The distinction between agricultural labour being a household 'chore' versus 'child labour' was debated amongst adult participants at both the district and community level. Although much of the work conducted by adolescents takes place at the household level on family land, some undertake paid work for non-relatives. Again, participants highlighted the intense physical expenditure required by these activities. Adolescents reported digging to pay for food, but noted that the activity itself made one hungrier. As one adolescent refugee boy described, *'Here in Uganda, you can only think to go and dig at someone's garden to get money. Sometimes*



'Digging'. Drawings, from the adolescent participatory workshops.

you go and dig you can become hungry. And you eat the money'. Within the refugee community, unaccompanied adolescents looking after siblings were more likely to be involved income generating activities, for as 13 year old 'business man' quoted above explained, 'I have a shop, I have sodas... because my brother is not there and my father is not there...I decided to make business so that our people can also benefit'.

Alcohol

Alcohol served a number of functions in both districts that related directly to food and nutrition. In Moroto, the most common local 'brew' was *Ekutete*, made from maize, sorghum, yeast and cassava flour. The brewing business model revolved around adolescent girls and was a major source of income generation, with females from 15 years and older leading the brewing process in peri-urban areas. Their involvement in brewing alcohol was discussed by adolescent girls in both Atedeoi and Katanga, and documented in their photowalk activities (see photographs below).

Peri-urban girl:	<i>People come from different places to buy what we have brewed... In homes where booze is brewed, the seller puts a sign in front of the home using leaves, a broken bucket and maybe residue, and people will interpret that there is booze in this home.</i>
Rural girl:	<i>I burn charcoal and take it for sale in town. Then with the money, I buy booze in the town which I then bring home to sell and then use the profit to buy food to feed the family.</i>
Rural girl:	<i>I have to wake up early, at 3 am so that I can go to town to book the booze. I bring it to the quarry site and start breaking rocks as I sell the booze.</i>

The process for brewing another local alcohol, *Lojuru*, was also described in detail by adolescent girls from the host community in Adjumani, but not by the refugee community.

Girl 1:	<i>The process for making Lojuru is you buy the fresh cassava, peel it, dry and pound it in order to get flour. You then mingle the cassava flour with hot residue of the alcohol. Allow it to cool and mix it with cold water and yeast. You allow it to stay for three days then distillation process starts. You set a fire and put the metallic can on the fire, pour the crude waragi [local gin bought in sachets] and water into the cans and extract alcohol.</i>
Interviewer:	<i>What age do people start brewing?</i>
Girl 2:	<i>Starting from 15, 16, 17 and 18. If they do it as 14, then they are young.</i>

In Moroto, the need to brew and sell alcohol was linked to agricultural failure by adolescent girls in both the rural and peri-urban sites, and as one girl explained, *'Selling booze is an alternative livelihood activity since farming is always disappointing'*. In addition to generating income, however, alcohol was also regarded as a food source for as another girl concluded, *'It is situation of hunger that forces us to drink and sell booze at this time. If we sell it, we can buy more food that is better for us, and if we drink it, it stops us being so hungry'*. As well as liquid alcohol, of which adolescent girls reported drinking one to two cups a day (*'It's like our breakfast'*), the residue from the brewing process was also eaten *'To fill the stomach'*. It was widely reported that local beers were being consumed daily. Adolescents described both liquid alcohol and the residue as key components in their daily diet (see Table 6 above) although when animal milk was more available, drinking alcohol and eating residue was less common. Adolescent girls in both the rural and peri-urban sites of Moroto discussed their consumption of alcohol residue. Girls in the peri-urban site agreed, *'Sometimes we sleep hungry or just eat residue until you go back to school where you eat a meal'*. In the rural site, girls concluded,

It's the last resort. Since food is absolutely scarce, residue helps to postpone death from starvation. It's just like food. Even children, when they eat it, they become happy and start playing.

There was no evidence of alcohol residue being eaten as a source of food in Adjumani. In Mungula, adolescent girls used residue to make other alcohol, layer it on the walls of adobe houses, or would just discard it, highlighting again the greater food security enjoyed by communities there compared to Moroto.

It was reported that in previous times when food was in abundance, and milk, butter and other animal by-products were widely available, alcohol consumption was traditionally restricted to rituals and ceremonies, being mainly consumed communally during the evenings of events including initiations and marriages. It was strictly consumed by adults and elderly male and female community members only and customarily, young people were forbidden from drinking alcohol. Participants confirmed that in the past, alcohol was not categorised as an alternative source of food, but was a recreational drink, taken after eating meat or other food to *'relax the body and mind whilst talking with friends'*. Similarly, residue was not commonly eaten and as one participant concluded, *'In the past, if you saw somebody eating residue you knew you were looking at a very poor person'*. Residue was used for feeding cows, goats and chicken. Regular drinking, early morning drinking and getting extremely drunk were all viewed as an *'abominable social vice'*.

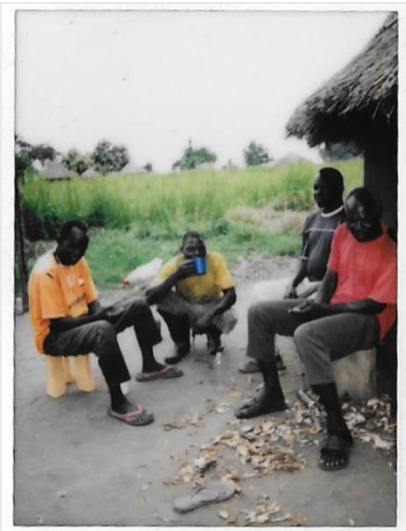
The negative impact of alcohol was well understood by many of the adolescent participants who described various ways in which alcohol abuse had directly affected their own lives. They explained that the brewing process used staple food for ingredients and that dependence on alcohol further reduced the chance of communities successfully cultivating the land. As well as local brew, other *'harder liquors'* were available and consumed in all fieldsites, mostly as manufactured sachets of gin, whiskey and wine. Girls in Adjumani concluded, *'If the family head drinks, they don't dig so there will be a low production of food and hence famine for the family. Lojuru is bad because it can also damage your internal organs and your brain'*. A younger adolescent boy in Katanga suggested that, *'The community needs to be sensitised on the dangers of alcohol'* and in Adjumani, adolescent girls from the host community emphasised, *'Young girls should not brew. The government should encourage people to cultivate and sell their produce in order to get money'*.



Drinking Alcohol -
Adolescent Girl



Selling local brew -
Atedoi, Moroto District.



Drinking Alcohol -
Adolescent Girl

Photographs of brewing, selling and drinking alcohol, taken by adolescent participants during their photowalk activities in Moroto.

Social norms

Social norms were also found to influence food access. For example, animal products (meat, milk and blood) were more available to boys than girls because of the boy's role in rearing livestock in the *kraal*. This was discussed by programme implementers who participated in the study.

Participant 1: *You will notice that the girls are more malnourished than boys. This can be attributed to one thing, that the boys take care of animals in far places and in the day, they milk animals. The sources of food for the boys and girls is different in this regard. The boys can also ferment some milk and it's so nutritious and keeps them healthy, but when you look at the girls they really look small and malnourished. So the role that boys play gives them access to milk in addition to what they find at home.*

Participant 2: *Whereas the boys have regular access to milk, girls have the normal staple sorghum bread that they eat day-in and day-out. They girls don't have a wide variety of nutritional intake because they are deprived of those other foods.*

Boys who attended school and lived in the *manyatta* rather than at the *kraal* also had less access to animal products, but there was general agreement that boys eat more than girls. As one adolescent in Atedeoi concluded, *'The boys usually receive more than the girls. The girls usually get fairly little and the boys and father get more than girls and mother'*. Despite the high-level of physical activity girls engaged in across all fieldsites, there was a general perception that boys needed to eat more than girls, *'because they want to be strong'* and *'because boys are digging and girls are not digging, so boys have to eat much more than girls'*. In both Moroto and Adjumani, there was a common narrative amongst male participants that as girls do most of the cooking, they eat (or *'taste'*) during the meal preparation, and as such (need to) eat less when the family sits together. In the host community in Adjumani, the father (or male household head) was reported to eat the most, followed by the adolescent boys present. Adolescent girls from the host community in Mungula explained, *'Men usually eat first and they eat without fear'*.

An adolescent's transition towards independence was reflected in where they eat. Whereas adolescent girls brought their food and ate together in a communal place, boys moved around eating at different houses. If a father had many wives, he ensured that food was reserved for his male children in each of his wives' houses. An adolescent boy in Atedeoi explained,

We eat at a friend's place. We go to one person's place and we eat, then we go to the next household and also eat from there. If you are many then as friends you eat from each of these families and if you get satisfied along the way, the other food becomes breakfast tomorrow. This sharing really helps because even that particular friend whose family doesn't have food, benefits from the other friend's place.

In Moroto, female caregivers described being responsible for portioning the food and deciding who eats what. Children were likely to eat from one bowl, with older siblings helping younger siblings. Food was shared and eaten communally at the *kraal* but in the *manyatta* was usually sourced, prepared and eaten within a household. In the refugee community in Mungula, Adjumani, families ate together, putting food in one pan with each family member having a bowl for themselves. The food preparer was described to be the one to portion and serve the meal. The same practice was reported within the host community, with the additional detail that if meat was prepared, the mother or senior female caregiver would be the one to portion and serve it.

In the rural site in Moroto, a number of proscriptive eating practices, or taboos, were noted to have been common in the past, for example women were not allowed to eat the intestines and liver of animals and the yolk of eggs, and many proscriptive practices were directed towards pregnant women. The recent Link Nutrition Causal Analysis (NCA) study in Moroto district reported that half of the pregnant women engaged in the study ate less during pregnancy than before they conceived (Action Against Hunger, 2016). Due to the general scarcity of food, however, participants suggested that such taboos were no longer actioned and

as one younger adolescent in Atedeoi concluded, *'Is there any food I am not allowed to have? No, any food I find I eat'*.

In Mungula, Adjumani, refugees noted that proscriptive and prescriptive eating practices and food taboos (such as pregnant women were not permitted to eat chicken) were common in their countries of origin (e.g. South Sudan) but due to food shortages and their changed circumstances, food taboos were no longer widely followed. Female caregivers confirmed, *'We do not have foods that girls cannot eat'*, and as one Village Health Team member explained *'There are those taboos, but currently they have been stopped because there is hunger now, so it would be tricky. And it is a different country, so those taboos are not so common here'*. There was no evidence that food taboos were practiced by the host community in Mungula.

Sexual and reproductive health

Starting menstruation is a key marker experienced during this life stage, and was discussed by adolescent girls across the fieldsites. The Adolescent Risk Behaviours Survey (MOH et al., 2017) reported that for menstrual hygiene, disposable sanitary pads were most commonly used, followed by reusable materials although a very small proportion of women, mainly in rural areas, did not use anything during their periods. Girls in both fieldsites in Mungula, Adjumani, described finding menstrual management to be difficult, mainly because they lacked access to sanitary pads. Some girls had received washable pads that could be reused, donated from different organisations, but several explained that they did not have soap to wash the pads properly. One adolescent refugee explained, *'When you are in class and sometimes you are on your monthly period, there are some people staying at home due to menstruation'*. This supports the findings of the Adolescent Risk Behaviours Survey which concluded that 26% of girls were out of school due to challenges related to menstrual management (MOH et al., 2017).

As discussed above, adolescents across all fieldsites discussed growing interest in relationships and sexual activity. Adolescent girls in Moroto felt that they knew enough about sexual health issues suggesting, *'we have nothing to worry about, we are not even married yet'* despite engaging in risky behaviours including having boyfriends and sleeping separately to their families. Although the minimum age for marriage and the age of consent for sexual relations are both 18 years according to Ugandan Law, nationally 15% of girls are married by 15 years old and nearly half by 18 years (UBOS and ICF, 2017). In Moroto, adolescent girls explained that early marriage was often initiated by parents,

Girl 1:	<i>The parents call you and ask you how many boyfriends you have, then you tell them all and then they will advise you on whom to marry.</i>
Interviewer:	<i>What happens if you refuse?</i>
Girl 1:	<i>They will get a rope, tie you up and beat you until you accept.</i>
Girl 2:	<i>Now if you want to escape the beating, you run to police and tell police that my parents are forcing me to marry a man I don't want, then police can help you.</i>

The Karamajong are polygamous and bride price is common. Because of their high-level of household responsibilities, adolescents are often regarded to be an adult by their family and community before they turn 18 years old, and marriage under the legal age is accepted as a social norm. One stakeholder explained, *'Early marriage is high because some parents still don't consider the defilement laws. All they know is 'my daughter is 16 years old and ready for marriage''*. With the economic challenges faced by communities in Moroto and Adjumani, it was reported that families often married their daughters in order to receive the bride price. As one local leader in Mungula explained, *'The parents are offering the girls for wealth because of poverty. The man can give two cows to the girl's family, and the girl remains with the boy'*. It was reported that this was common practice, particularly in more rural areas where young girls would be married to much older men (over the age of 50 years) if the man had cows to give her parents.

Adolescent refugees from broken families were more likely to marry in order to have help taking care of siblings and to re-form new families. One older adolescent refugee boy explained, *'When you lose a parent you are very few. That thing will force you to marry such that you become a big family'*. In Mungula, peer influence was considered an important instigator of early marriage. One local women's leader explained that this often led to the phenomenon of *'convoy marriage'* in which a girl who gets married introduces her friends to her husband's brothers and friends who will then marry them creating close social networks.

District-level government officials in Moroto felt that adolescents were *'not sensitised'* to issues relating to reproductive health, and *'ignorance'* led them to engage in early sexual activity, leaving them vulnerable to pregnancy outside marriage. Data suggest that contraception use is low. The Adolescent Risk Behaviours Survey (MOH et al., 2017) reported 57% of sexually active unmarried adolescents did not use a condom during their last sexual encounter, and the latest DHS suggested that amongst married women aged 15-49 years, 19.7% in Karamoja region (including Moroto district) and 43.2% in West Nile (including Adjumani district) have an unmet need for contraception (UBOS and ICF, 2017). Adolescent boys from the host community in Adjumani suggested that fear, caused by lack of understanding, could prevent contraception uptake, whilst caregivers and community leaders commented that making contraception more easily available appears to condone and *'promote pre-marital sex'*. Married adolescents in Moroto reported their preference for *'natural family planning methods'* and in one participatory workshop, girls discussed being taught about their menstrual and fertility cycles by a visiting missionary sister.

The rate of adolescent pregnancy is 24% in Karamoja region and 22% in West Nile region (UBOS and ICF 2017) and is known to perpetuate the inter-generational cycle of malnutrition, as well as being more likely to result in adverse pregnancy outcomes and curtailing girl's educational attainment (WHO 2014). Community leaders engaged in the study across all sites confirmed the rate of teenage pregnancy continued to rise in their areas. In Mungula, Adjumani, caregivers of adolescents regarded early pregnancy to be a *'huge burden'* that brings shame and stigma to the household. As one local leader explained,

Once a girl gets pregnant, she will be neglected by the community and they will be talking about her name and she will be stressed. She will be just staying indoors at all times and she will plan to remove the child [try to have an abortion] if the parents are not close to her.

Ugandan Law allows abortion to save a woman's life if she is a victim of fatal anomaly, rape, incest, or if she is HIV-positive, but home abortions were discussed by adolescent participants in Mungula and several cases of death related to secret adolescent pregnancies were reported. Other adolescent participants described cases of boys and men being reported to the police or taken to court if a girl fell pregnant outside of marriage, and/or if the man could or would not pay her bride price. In the participatory workshop in the host community in Adjumani, older adolescent boys explained,

Boy 1: *I can't afford to pay dowries.*

Boy 2: *I fear to go to prison if I marry a young school going age girl and fail to pay dowry.*

Interviewer: *And how much is the dowry?*

Boy 3: *You will pay for knocking the door of your mother-in-law one million, Kasurube which is one million or one cow, school fees is one million or one cow, transport reimbursement is one million or one cow before paying bride wealth.*

Interviewer: *And if you can't pay, what else will happen to you?*

Boy 3: *You go to prison for 7 years, sometimes the parents will take their girl back to their family.*

Boy 1: *Sometimes the boy will run away from the home because he can't manage to pay dowry.*

Interviewer: *If you can pay you don't go to prison?*

Boy 3: *Yes.*

Nationally, 22% of women aged 15-49 years are reported to have experienced sexual violence (14% in the Karamoja region; 22% in the West Nile region) although due to under-reporting, the actual rate is likely to be significantly higher (UBOS and ICF, 2017). Adolescent girls aged 15 to 19 years old are twice as likely to experience sexual violence than their male counterparts (UBOS and ICF, 2017). In Moroto, the older girls in the *Ngoco'bain* groups reported needing to 'move together' to protect each other from sexual assault.

Girl 1:	<i>I am stressed because these men come at night to the girls' house, so I sleep with open ears. At daytime, they wait for me when I am going for firewood and water. These guys keep attacking.</i>
Interviewer:	<i>So, what do you do?</i>
Girl 1:	<i>Fighting is the main option and in the night, I have to keep awake so that these guys don't take advantage of my sleep to rape me.</i>
Girl 2:	<i>The worst ones are the ones you don't want, those are the one that keep attacking each time.</i>
Interviewer:	<i>Is that why you move together?</i>
Girl 1:	<i>Yes, so that when these guys attack you have good numbers. We back each other up during the fight because even the men don't move alone, they move in groups.</i>

Sexual violence was identified as a priority issue by refugee adolescent girls in Mungula, Adjumani, and related to the consumption of alcohol. In their participatory workshop, girls explained that whilst drunk men were a dangerous threat, the consumption of alcohol by girls was also dangerous as 'This can lead to someone raping you and that can make you pregnant, but you won't be able to fight them off and you won't know who raped you or who made you pregnant because you were drunk'.

In Moroto, participants raised HIV as a growing concern, 'HIV is there and it's real and it's in our communities'. Older adolescent boys discussed hunger as driving employment which was a significant risk factor in contracting HIV/AIDS.

Another thing fueling HIV/AIDS infections is hunger. Some women work as maids/nannies in town and they stay with the person employing them, what's so scaring now is that some men in town who are not married employ these girls to work for them and later end up having sex with these girls at the end someone gets infected with HIV virus and even pregnant.

Adolescents living with HIV are a particularly hard-to-reach group, and are at significant risk of malnutrition. Health-workers perceived malnutrition as a potential indicator of HIV/AIDS, with one district-level health-provider explaining, 'What we have seen with malnourished youth is that they are either having AIDS or TB'. Nutrition was seen as key to adherence with treatment. The importance of having adequate food in order to take medication was raised by several participants and as one community leader noted, 'it's really hard to take the medication on an empty stomach'. Adolescents with HIV were not purposively recruited as participants for this study, and further in-depth study is required to more directly understand their experiences.

Access to education

Education attainment has strong links to nutritional status (UBOS and ICF, 2017). Low education attainment perpetuates various risk factors of poor nutrition among adolescents: early marriage, teenage pregnancies, sexual violence and engagement in energy-demanding agricultural work (and other forms of child labour).

School was seen as a protective factor against a number of the threats facing adolescents. In both Moroto and Adjumani, participants described that attending school helped to delay pregnancy and marriage for



'This is me going to school in my uniform'. Drawing, adolescent participatory workshop.

adolescent girls and provided them with valuable knowledge for self-protection, including how to avoid vulnerable situations. Education was also seen as a method of protecting boys from becoming 'idle' and 'causing trouble'. There was a perception that being in school reduced the physical burden of alternative familial or income-generating responsibilities, and as one adolescent girl from the Mungula host community expressed, 'Girls who are out of school do more heavy work than girls in school'.

In addition to protecting adolescents, school was also seen by community members as a vehicle for 'becoming someone important' and adolescents described it as the key to 'seeing a bright future'. In Adjumani, education appeared to be considered more important by the refugee community than the host community. Affording school fees was particularly difficult for refugee orphans and although parents usually provided the necessary resources, many adolescents assumed responsibility for themselves and their siblings. Many adolescent refugee participants explained trying to find time to study or revise even on non-school days and an Accelerated Learning Programme was offered to

students who had missed a number of school years.²⁶ To them, school attendance was both a source and mark of status and a teacher in Mungula described his refugee pupils as having 'a love for education' in contrast to the host community for whom pride and status was more closely linked to the land and material assets. Having 'mixed' primary schools (pupils and teachers from both refugee and host communities) was also seen as a way to promote cohesion between different ethnic refugee groups, and between refugee and host communities.

Sharp decreases in attendance rates have been reported between primary and secondary school in Karamoja and West Nile regions and it is the most vulnerable pupils who are more likely to leave school, including those with heavy family or community-level responsibilities, pregnant adolescents, married adolescents and those from poorer backgrounds (UBOS, 2014).

Across all research sites there was difficulty in differentiating children and adolescents who were 'in-school' and those who were 'out-of-school'. Teachers explained that those registered as in-school were not necessarily attending regularly. High levels of absenteeism was reported to affect learning and exam performance and often resulted in students needing to repeat school years that could consequently lead to full drop-out. Not all participants placed a high value on education and a number of pervasive underlying issues contributed to non-attendance, absenteeism and drop-out that disproportionately affected girls.

Across the fieldsites, familial and domestic responsibilities were described as key reasons that adolescents did not attend school. Adolescent boys in Atedeoi explained the reasoning behind how parents select who goes to school,

For instance, if someone has three children, two boys and one girl. The lazy boy is sent to school, the hardworking one goes to the kraal to look after animals and the girl stays home to do home chores and also do other works to feed the family.

In the host community in Mungula, family responsibilities, notably digging and farming land, were prioritised and the phenomenon of 'seasonal schooling' was also noted, whereby during harvest and times of drought, children were removed from school.

In contrast to the national education system in which six to 12 year olds attend primary school and 13-18 year olds attend secondary school, the normal age of starting primary school in Moroto was 12 or 13 years for boys and nine years for girls, mainly due to the various household responsibilities children had before this age. In general, boys were reported to have a greater degree of choice about whether to attend

²⁶ Involving the provision of basic education to adolescents (10-19 years), who had either dropped out of school or had never been to school before.

school, but could expect to receive little parental support for school fees after the end of primary school. Girls were given little choice and most often kept at home, and as one adolescent girl in Atedeoi concluded, *'Parents give least priority to girls to go to school. Most times they see no value in educating girls.'*



Ariok is going to school

'Going to school'. Drawing, adolescent participatory workshop.

In Moroto, being in school requires a young person to be in the *manyatta* rather than taking animals to pasture and living in the *kraal*. This means choosing between an education and caring for livestock, and areas where herding carries high status, school is often deprioritised. Favoured boys were often kept at home to herd the animals, protect the community and become 'warriors', whilst other children were sent to school, and as one teacher in Moroto explained,

In fact, in this community it's funny. They think they have categorised themselves into those who are 'warriors' and those who are not warriors. Those who go to school are said to be spoiled, and they give respect to the warriors than to the school educated ones.

It was noted, however, that with the reducing number of livestock, and particularly in urban centres, this distinction was becoming less clear. Rather, as another teacher commented, *'In town now what I know is education is better than being a warrior'*.

With the loss of livestock and other sources of income, bride price is often a critical means of familial income (as discussed above), and once married, girls leave school. Similarly, girls not in-school for other reasons were more likely to marry earlier. The idea that school attendance reduces the desirability of a girl and therefore her bride price was also highlighted as a demotivating factor. As one local leader in Moroto explained, *'They think that a girl who is educated attracts little bride wealth compared to non-educated ones'*, whilst a community stakeholder in Adjumani agreed, *'Girl child education is not paid attention to in schools or the community because they believe girls are meant for dowry'*.

Across both districts, there was consensus that once a girl becomes pregnant, she is likely to drop out of school, both because of the embarrassment and shame, but also because it signaled a new stage of greater responsibility and childcare. Whereas other countries in the region (notably Kenya) have policies in place to ensure re-entry of pregnant girls into education – Uganda, has no such policy.

The opportunity cost for adolescents in-school being unable to generate income through casual labour was another barrier to attending school. A teacher in Moroto explained how this particularly affects girls,

They can decide to keep all the girls to feed the family with casual work. These girls actually force themselves to come to school. They can even report and say our parents are denying us to come to school. One girl pupil was once beaten because she came to school when she was not supposed to. Instead she was made to go and look for work until we handled it here, and only then was she transferred to another school.

In Moroto, the lack of opportunities beyond primary school reinforced some parents' perception that school was a *'waste of time'*. Similarly, according to the Adjumani District Development Plan, the limited number of secondary schools and the lack of tertiary institutions devalues the education system and can cause early drop-out (Adjumani District Local Government, 2015). Refugee adolescent boys reported that despite the danger, some of their peers travelled back to South Sudan in order to continue studying,

For us we don't have interest to go back, but it is condition forcing us to go back. Because here is a peaceful country we don't want to go. But continues make us to go back because of school, we are supposed to continue with our education. When we go back there we face a lot of problems on the way.

This research highlights that education and income generation are often mutually exclusive so that participation in one often precludes the other. That said, some positive examples of merging education with the demands of income generation on adolescents emerged. Vocational training was discussed with

enthusiasm by participants in Adjumani as a way to make education link more directly to income generation. This was also considered relevant to the host community, and as one local leader described, *'The government should introduce vocational skills training because some of them can't manage academic subjects'*. Adolescents recommended that to make vocational training as effective as possible, start-up kits and materials should be provided post-training. It was also recommended that training should be flexible in order to accommodate children of adolescent mothers. Particular emphasis was placed upon the need for training in agricultural methods.

Service provision

Several key services were identified as having the potential to improve the nutritional status of adolescents: school meals; ration supply; and health facility services (including complementary food packages). Unfortunately, structural issues related to each service reduced their ability to achieve maximum impact.

School Meals

School meal provision was reported to be a primary motivator for school attendance in Moroto. As one school teacher emphasised, *'If there is no smoke from the kitchen, children will not come to school'*. Although some participants complained about the amount of food that was provided, overall school meals were highly valued. An adolescent boy in Katanga explained that even unregistered children would come to school to receive a meal: *'There are very many children in school because all the children come just to eat something. School rations should be adjusted to cater for these unregistered children'*. Similarly, a teacher in Atedeoi expressed concern that the school was being used as a *'feeding centre'*, that children were coming at break-time for food, then leaving afterwards to rejoin domestic chores or labour.

The lack of school meals in Adjumani was cited as a reason for non-attendance, absenteeism and drop-out, and as one adolescent refugee girl explained *'When you are hungry, you cannot listen. You cannot be at school. So we are requesting food to be prepared in the school, then we have energy to support our studies.'* A school garden had been established in Mungula, but it did not produce sufficient food to serve the influx of pupils. At the time of the study, the main objective of the school garden was to provide an educational platform for the children, and to only provide supplementary food if possible. Multiple stakeholders recommended that rather than introducing a vertical school meal programme, resources should be directed towards improving the yield of the school garden as this was seen to be a more sustainable and locally-owned intervention.

Ration supply

The unpredictability of ration supply was an issue frequently raised by participants and was compounded by unclear communication. Programme implementers observed, *'Communication with communities must be improved when they are delays in food, it is serious'*. This was seen to be of particular significance for adolescent girls, who had many responsibilities within the household, largely around food, but often received information last. Asked who receives information on ration supplies, adolescent refugee girls explained, *'They will send the information to the elders'*. That rations did not reach the most in need was another common issue. One adolescent refugee boy alluded to possible corruption in the system suggesting *'those who say they are vulnerable are given special care by UNHCR, whilst those people who are now vulnerable miss out'*. Adolescent refugees in Adjumani explained that families would resort to selling food rations to buy larger quantities of cheaper, lower quality goods.

Health facility services

Antenatal care (ANC) is a common platform for delivering nutrition services to pregnant women and lactating mothers. Available data in the Uganda DHS comes from the uptake of ANC, delivery and post-natal health services by women of reproductive age (15-49 years) (UBOS, 2014). Service uptake in Karamoja and West Nile compares favourably with the national averages, but district level data and data specifically for the 10-19 year old age group were not available. It was reported that attendance data (and particularly for the adolescent age group) was not regularly scrutinised at the facility level in either district, although Mungula Health Centre in Adjumani shared data appertaining to the attendance rates of 10-19 year olds during 2016. The number of 10-19 year old girls attending delivery services was markedly higher than the rate of ANC attendance for the age group, supporting the perception of health workers across fieldsites that adolescents use health facilities primarily for curative treatment services rather than preventative services. In both Moroto and Adjumani, adolescents did not necessarily appreciate the value of attending ANC services unless there was an immediate, tangible and useful reinforcement, such as the food/hygiene kits provided when a woman delivered at the facility (often called 'Baby Mama kits', and in Adjumani, are provided by UFPA and called 'Dignity Kits').

In Moroto district, some community leaders blamed programming that provided food supplies to pregnant and lactating women for encouraging young women to become pregnant. One female caregiver explained, *'The problem with these supplies is it promotes rapid childbearing. I wish the government would stop supplying these foods'*. Adolescents in Moroto reported that some people, including their peer group, were known to sell the supplementary rations provided by the health centre *'So that they can buy food that the entire family can eat'*.

According to facility staff, the 'Youth Corner' in Moroto Referral Hospital, also referred to as the Adolescent Friendly Service and Youth Friendly Service, was open from 0900 to 1500 during weekdays and on Saturday mornings. It was described as offering a package of health services and acting as a health resource centre for young people, with a focus on sexual reproductive health but also offered nutrition assessment, health education and referral, but not ANC services. Service providers reported having limited resources to carry out community outreach either directly through visits, or indirectly through radio communication and concluded, *'We have the knowledge but still impacting the knowledge is the challenge. We don't have the resources and logistics to deliver the knowledge to adolescents'*. At the time of the study, there were no active adolescent/youth friendly services in Adjumani, apart from an under-used tented area in Mungula Health Centre. One local health provider explained that *'youth friendly services are a burden on the already over-stretched health system'* adding that it would require a large investment in terms of time and resources to *'create awareness about youth services and to address the social myth and perceptions'* held by communities surrounding the type and purpose of services offered.

Across both districts, adolescents admitted to being reluctant to attend the government health centres, often due to *'fear'* including of explaining a health issue to a medical professional, fear of being judged by other community members waiting in the facility, and because of and fear and rumours around certain procedures. One adolescent girl from the host community in Mungula explained, *'people fear they will be found positive or infected with HIV/AIDS is they are referred for a laboratory test'*. Distance to the facility as also an important barrier to attendance, particularly when people were based at the *kraals* in Moroto. Long waiting times, the number of other patients needing to be seen and the opportunity cost of missing out on household or income generating activities were also identified by local health providers as key barriers deterring adolescents. Drug shortages were also a deterrent, particularly as patients had limited finances to buy medication if they were referred. Another challenge highlighted in Moroto was the notion that if a girl wanted to attend ANC, she had to be accompanied by her male partner. Whilst this was not national policy, it was widely perceived to be compulsory in Moroto, even amongst local leaders and given the stigma associated with pregnancy out of marriage was seen to be a significant challenge for attendance.

Overall, few alternative sources of sexual and reproductive health information and care described by adolescents. Older adolescent girls and adolescent mothers in Moroto preferred the missionary health centre to the government facility, and seemed to have a good opinion of the services offered at this facility although they noted the financial barrier of paying the fees. Adolescents living in the *kraal* in Moroto tended to rely on outreach visits from the members of the Village Health Team and other health facility staff for health information, but it was noted that animal health-workers were particularly mobile and dynamic in terms of conveying information to the *kraals*. Amongst the host community in Adjumani, alternative sources of care included buying drugs without prescriptions from the pharmacy, visiting local healers and using local herbs. Traditional Birth Attendants (TBAs) were widely reported to no longer actively support births but instead direct young people to the health centre, although some participants suggested that they were still active and were used as an alternative source of care during delivery. Other sources of health information were family members, usually one step removed from parents, such as aunts or grandmothers. The practice of receiving basic sex education from aunts was frequently reported in the host community in Mungula. This correlates with the Ugandan cultural institution of the *ssenga* (father's sister) being a primary provider of reproductive health information for adolescent girls (also discussed below). Such sources of information, laying outside the formal healthcare system, were regarded as being more welcoming, positive and inclusive and were more accessible as they were physically and socially embedded in the community.

Girls in Moroto - a Ngoco'bain group



4. Engaging adolescents

The UN Convention on the Rights of the Child, ratified by Uganda in 1990, emphasises that children and adolescents have the right to participate in decisions affecting their health and wellbeing. One of the guiding principles of the Convention is that child and adolescent views should be voiced, respected, and utilised effectively to enrich decision-making processes.

Engaging adolescents is key to the full realisation of this fundamental right, yet adolescent voices are not often (if at all) incorporated in the evidence-base used to shape policy and programming. Engaging adolescents requires a commitment to user-focused design so that interventions respond to their needs and priorities, are contextually relevant, and utilise a range of the most appropriate engagement and communication channels for reaching adolescents girls and boys over time.

By emphasising a systems-based approach to adolescent programming, where adolescents are seen as an integral part of the social fabric of their communities, this chapter presents data on key adolescent influencers, appropriate media channels for reaching adolescents, and local structures that can be utilised for direct engagement with adolescents, their families, and their communities.

Analysis is underpinned by the social ecological model (SEM), that places the individual (i.e. the adolescent) at the core, surrounded by nested levels of interpersonal, community, organisational and policy-level influence that represent the multifaceted and interactive effects of personal and environmental factors determining behaviours (UNICEF 2014, CDC 2015). Interrogating the power dynamics between adolescents and their environment can lead not only to greater engagement for nutrition-specific and nutrition-sensitive programming, but also support effective cross-sectoral programming (e.g. linking health, education, sexual reproductive health etc.).

The first section of this chapter explores the key influencers of adolescents. The second section triangulates results from the technology survey and the workshops to report the various technology platforms adolescents engage with. The third section details findings from the landscape analysis of national delivery channels reaching adolescents, and presents the channels adolescents preferred and prioritised and their key recommendations on how to best operationalise these.

Influencers of adolescents

As Aubel (2012) concludes, *'Most policies, research and programmes on child nutrition in non-Western societies focus narrowly on the mother-child dyad and fail to consider the wider household and community environments in which other actors, hierarchical patterns of authority and informal communication networks operate and influence such practices'*. This also holds true for adolescent programming. It is critical that the various actors who influence adolescents, are better understood. During the participatory workshops, adolescents were asked to create social network maps that helped to identify the people they spend time with and where, how they get advice and information, and who they trust. In their consideration of who and what influences them, and in what ways, adolescents were articulate about the level of agency and self-determination their age group had in different contexts. In terms of key influencers, the following groups emerged: family members (particularly mothers, aunts and siblings); peers and peer groups; mentors; religious leader and institutions; teachers; health workers; and community leaders.

The importance of engaging systems around adolescents and the *'circles in their life'* was emphasised by participants in order to create an enabling environment for adolescents to access knowledge and information in a timely and appropriate way. Interpersonal communication appeared to be the most highly valued mode of communication and local leaders in both districts spoke negatively about the *'rapid*

influence of Western culture' on the adolescent age-group. This suggests that the use of innovative means of communication, including but not limited to technology, may require buy-in and understanding not only from adolescents but others in their spheres of influence. Three types of influencers were described: those whose buy-in and support was seen to be vital (including family members, peers, and from a broader structural perspective, community leaders); 2) those who can be used as a delivery channels for messaging (including family members, peers (particularly for older adolescents) and teachers (for those in-school, and particularly for the refugee community in Adjumani); and 3) those who needed to be direct beneficiaries targeted programme activities to build capacity to influence and work with adolescents.

Family members

Caregivers, primarily parents, were regarded as adolescents' main gatekeepers and influencers, and could be both positive enablers, and/or restrictive forces depending on the relationship and context. Younger adolescents in both Moroto and Adjumani reported listening to and being more influenced by their parents (or main caregivers) than older adolescent groups did, and caregivers described younger adolescents as *'easier to control'* than their older counterparts. Mothers were considered more *'hands-on'* than fathers. Participants confirmed that, in general, mothers spent a more time with adolescents and were described as a more important and approachable source of advice and information than fathers who were usually seen to play a more authoritarian role in both the household and in terms of child rearing. Such relationships were well captured in the drawings adolescents made during their participatory workshops although it was notable that adolescent refugees living without parents lacked this immediate sphere of influence, and in general demonstrated a greater degree of self-reliance at an earlier age.



*'My mother and father'.
Drawing, adolescent
participatory workshop.*

Through their social network maps, younger adolescent boys and girls in Moroto highlighted that they spent significant time with their aunts or *'auntie'* figures. Aunts (usually paternal aunts) were trusted influencers and adolescents reported that they often preferred to receive their advice over that of their parents. As mentioned above, this relationship is linked to the important cultural role that the *ssenga* (father's sister) traditionally played as the primary provider of reproductive health information to younger adolescent girls (a model has been utilised in sexual reproductive health programming in Uganda). Younger adolescents (both boys and girls) also emphasised the role that older siblings played as influencers in their lives, and girls frequently highlighted the time they spent with their older sisters preparing and cooking food.

Although adolescents across all fieldsites asserted that they greatly respected their parents, many caregivers suggested that they felt unable to influence older adolescents, particularly around behaviours such as sexual activity and early marriage. A number of girls confirmed that older adolescents were less likely to seek advice, particularly intimate guidance, from their mothers and as one refugee girl in Mungula concluded, *'When you reach 17 years old, your mother can advise you and you don't listen because you feel mature'*.

Married adolescent girls engaged in the study explained that after their marriage, their key influencer shifted from their own mother to their mother-in-law and husband. Few married adolescent boys were engaged in the study so the relative influence of mother versus wife could not be clarified.

Peers and peer groups

Older adolescent boys and girls in Moroto and Adjumani reported being influenced by their peers. Most chores done outside the home and income-generating activities were undertaken with others of a similar



*'We boys love to play football'.
Drawing, adolescent participatory
workshop.*

age and (as described above), boys and girls from 14 years of age often lived in age sets, such as *Nga'kobain* girls who moved into a communal living space to live, eat and work together. Adolescents emphasised their desire to socialise with their peers, and in Moroto organised events for adolescents included traditional dances (rural areas) and discos (peri-urban centres). Football games were a key place for meeting, socialising and exchanging ideas and experiences for boys of all ages and across all fieldsites.

Peer pressure was seen to have both positive and negative effects. Community leaders suggested that peer pressure often promoted early sexual debut and early marriage, whereby girls (and their families) were encouraged to consider early marriage if one of their peer group had married.

Several organisations used peer groups as an effective platform for adolescent programming. In Adjumani, for example, Save the Children and War Child Canada worked through peer groups with both host and refugee communities to address issues including peace building and stress management. Similarly, the 'Youth Corner' adolescent/youth friendly service at Moroto Regional Referral hospital employed young people to 'bridge the gap' and encourage adolescents to utilise the services.

Mentors

Regular face-to-face social interactions were prioritised by adolescents in all research sites. Their preference for in-person exchange and dialogue was related to frequency of exchange (it could happen every day), because it enabled greater participation and because a range of information could be discussed. Building on this, adolescents favoured a system of mentors who could act as role models and influencers. In Moroto, local stakeholders emphasised that such engagement was well aligned to their oral tradition of knowledge cascading from older to younger generations. In Moroto, Concern Worldwide had established a 'Peer Mothers' system in which a focal person was empowered to provide support and guidance on health issues to groups of young mothers living close to each other. This focal person was described more as a mentor than a peer, as they tended to be slightly older and more experienced than the adolescent mothers and the group acted as a peer-support network for its members.

Church and religious leaders

The majority of adolescent participants in both the refugee and host communities in Adjumani described the church as a familiar and trusted influencer. This was particularly notable amongst the host community in Mungula and religious institutions and church attendance featured in many of the adolescent participants' drawings.

Religious leaders explained how information was often passed to them from their central authorities (such as the Inter-Religious Council of Uganda) to convey to their congregations. In this way, adolescents in Moroto saw the church as a source of information from and about the outside world and across both fieldsites, adolescents appreciated that the church used their local language(s).

Despite multiple meetings, outreach and a high adolescent following, churches in Adjumani reported challenges faced by their congregations including high transportation costs to attend church and the limited availability of new bibles. In Moroto, adolescents reported attending church, even if it meant walking many



*'Going to church'. Drawing,
adolescent participatory
workshop.*

kilometres, and would often travel to church with their age-mates, with younger adolescents and older adolescents moving in separate groups, again highlighting the importance of their peers. Adolescents in Moroto also confirmed that it remained popular for age-mates living in distant *kraals* to visit shrines related to traditional religious practices.

Teachers

Teachers featured in the adolescents' social network maps to a varying degrees. As discussed in the previous chapter, school was experienced differently across different groups but for those who did attend, school was a valued source of information. Adolescent refugees were most likely to report teachers as sources of advice, information and respect and whilst school attendance was less regular in Moroto, participants noted that those adolescents who did go to school would often pass on information to their peers and siblings, particularly those residing in the *kraal*.

Health facility and health personnel

In the participatory workshops, health workers and Village Health Teams were mentioned as sources of information, the latter being particularly relevant for adolescents living in the *kraal* who had limited access to static health facilities. None of the adolescents aged 10-14 years in either fieldsite reported the health facility as an influencing factor. Older adolescent boys and girls talked about the health facility when prompted, and but only married adolescents or mothers discussed its role in their lives. When asked, older, married adolescent girls in Moroto spoke favourably about their local private health facility as a source of information, however none had heard of or used the adolescent/youth friendly 'Youth Corner' at Moroto Referral Hospital, reflecting its minimal outreach capacity.

Community leaders

There was consensus amongst participants in Moroto that adolescents are influenced by community leaders, but they mainly act as a source of authority called on by parents. As one local leader explained, '*For the stubborn ones, the parents inform the chairman and local leader to talk to that child and the chairman organises a meeting*'. In general, adolescents rarely attended community meetings, largely because of their age, and according to an adolescent boy in Katanga, '*Only big people go to meetings*'. Issues of age and gender were also raised by programme implementers in Moroto,

Even if you go for a [community] meeting, you will find females sitting separately. Much as you are asking for opinions from the community, it's very rare for you to see a female raising the hand in the presence of males and offering information in case a question is asked. The females will never speak, and it's worse when it's a female of a younger age. The females will never talk even if they have information because they think it's the men to speak. So, if you really want information you need to engage them separately, that's when you can generate many ideas.

Similarly in the *kraal*, divisions were evident in community meeting spaces such as the *aperit*, an area in the *kraal* where junior and senior elders converse and recount stories in an evening, and to which adolescent boys (although not girls) may be invited.

A common theme to emerge from older adolescents, however, was their lack of trust in local leadership. This was largely related to the impression that some leaders were involved in corrupt practices that limit support to those most in need. Although programme implementers in Adjumani described the communication structures in the refugee settlement as being robust and effective, with leaders cascading information to their communities, several adolescent refugee participants stressed that although structures were in place, they were often the last group to receive important information. For example, as discussed

above, several adolescents reported that they did not receive information about rations although sourcing and preparing food was a major responsibility for them. In comparing the refugee and host community, programme implementers commented that the host community *'don't always get real information the way refugees get it'*. As in Moroto, adolescents from the host community reported being *'cut-off'* from community meetings and many considered them to be *'a waste of time'*. Although community leaders were to be respected and played a role in the governance structures of an adolescent's life, they were not widely regarded as direct influencers by adolescents themselves.

Media and communication landscape

As part of the research, a technology survey was conducted with 79 adolescent and youth participants aged 10-19 years old (see Table 7 below). This quantitative data provided details about the use and penetration of technology which was triangulated with the qualitative data regarding adolescent participants' self-reported access and use, preferences and trusted channels of communication. Access to and use of different forms of technology varied between the fieldsites and also between adolescent boys and girls (see Graphs 1 and 2 below).

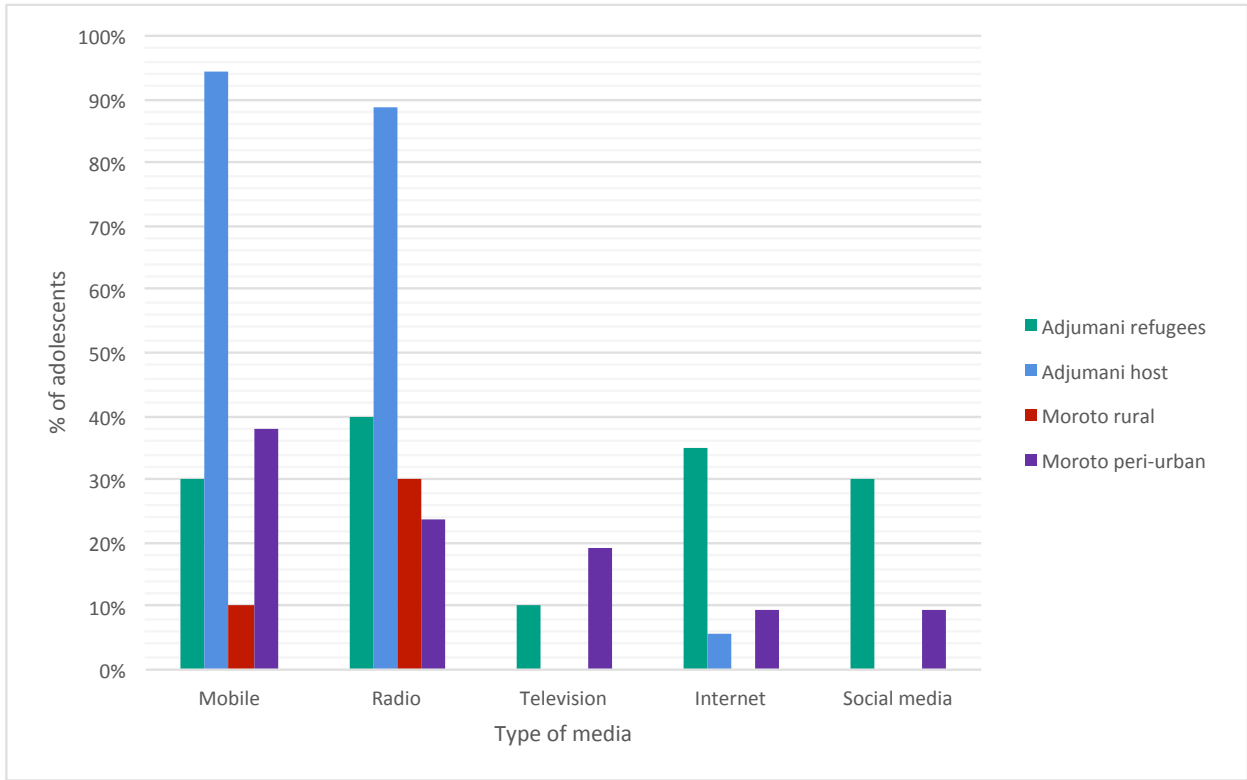
Table 7 – Demographics of the adolescent survey respondents

Demographic		% of participants	
		Moroto district (n=41)	Adjumani district (n=38)
Gender	Male	41	60
	Female	59	40
Ethnicity	Matheniko	100	0
	Dinka	-	34
	Madi	-	32
	Nuer	-	10
	Kuku	-	8
	Lugbara	-	5
	Bari	-	5
	Acholi	-	3
	Teso	-	3
	Community	Host community	-
Refugee community		-	47
Primarily in-school / work	In-school	54	90
	Work	22	10
	Did not disclose	24	-
Marital status	Married	15	10
	Unmarried	85	90
Children	Have children	15	10
Religion	Christian	95	97
	Muslim	5	3

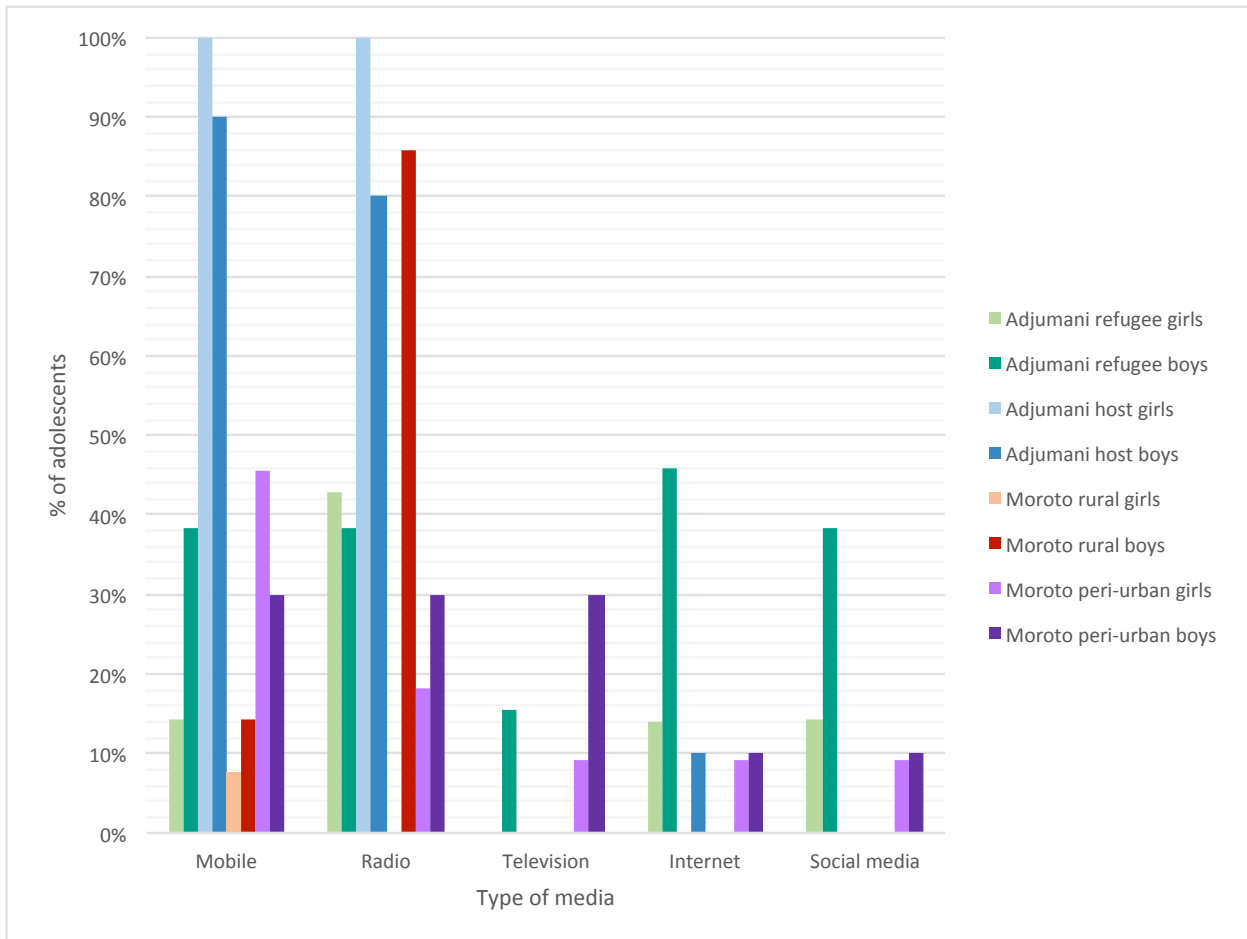
Radio

In the Adjumani workshops, adolescents from both the host and refugee communities had access to the radio, and many suggested that they listened every day. The technology survey indicated that adolescents from the host community may have enjoyed comparatively greater access and listened mainly from home to information-based or educative programmes. Although not all participants from the refugee community had personal access to a radio, many adolescents reported liking it, particularly because *'the radio can bring stories from South Sudan'*. Adolescents from the host community reported listening to a greater number of stations including the 'Voice of the Nile', but the most popular radio station for adolescents

Graph 1: Technology use by location and group

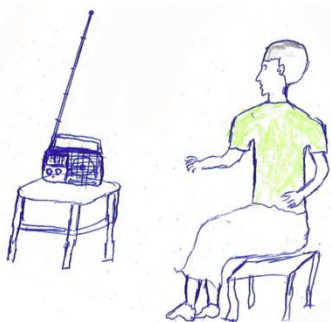


Graph 2: Technology use by gender, location and group



from both communities was Radio Amani. Amani FM included cross-border programming in Arabic and as well as music, drama and competitions aimed to make 'refugees know what is happening in their country, particularly the age group who like to share stories'. Stakeholders from Radio Amani also spoke about the importance of being participatory as possible with their listeners from this age group,

Usually when we are running our programme we don't run one-sided programme where we pass messages to the community, but at times we go to the community to find out their problems and they give their own solutions to their own problem... They [presenters] go to the field to collect issues in a community dialogue or sometimes an organisation calls us to attend their community dialogue meetings where we record what is happening and it is discussed within the programme. The recording can be played, then the presenter goes on air, with an open line for the community to call in and also say something about what has been recorded.



*'Listening to the radio'.
Drawing, adolescent participatory
workshop.*

Participants suggested that adolescents should be involved in designing radio programme content, but may need encouragement and support to raise issues important to them, although it was noted that access to adolescents in the settlement camps was limited as this required permission from camp authorities. A positive example raised in the stakeholder consultation meeting, however, was a project by UNHCR in which 'Listening Groups' had been established to facilitate community members to listen together and use the programme as a basis to discuss pertinent topics.

In their participatory workshop in Mungula I, older girls from the refugee community discussed 'Straight Talk' radio as their preferred channel.

'Straight Talk' and 'Young Talk' newspapers and Straight Talk Radio Shows aim to provide sexual and reproductive health information to older adolescents, those both in- and out-of-school and including adolescents who are illiterate. A 2007 study found that Straight Talk materials had reached nearly all secondary and two thirds of primary students, as well as over half out-of-school youth. Exposure to programme materials was positively associated with greater sexual and reproductive health knowledge although the impact on behavior was less clear (Adamchak et al., 2007).

In Moroto, technology survey responses indicated that radio was most listened to amongst rural boys although no rural girls reported listening. A smaller number of girls and boys in the peri-urban areas reported listening each day. The most popular radio stations reported in both the technology survey and workshops in Moroto were Nengah FM and Karamoja FM, and of the participants who did listen to the radio, many spoke with enthusiasm about their favourite DJs. Participants suggested that they particularly enjoyed radio programmes in their local Ngakarimojong language and as one media stakeholder confirmed,

When you go to talking to them and recording their voices and playing them on air, they know that this is what is exactly affecting us, they get involved and feel they are part of the radio, and they speak their minds because they know the leaders are listening and they will act on their challenges, so the radio becomes their link.

Community leaders that although they did not necessarily own a personal radio, many communities had communal radios, and broadcasts were an important means of communication and conveying information quickly. It was unclear whether broadcast messages directly reached adolescents, however, and although adolescent respondents reported listening to news and educational programmes, local media stakeholders confirmed that listeners from this age group rarely contributed to phone-ins.

Television

Many of the adolescent participants in the rural area of Atedeoi in Moroto had never heard of television, a finding reflected in the technology survey in which none reported ever watching television. Similarly, in Adjumani, television was not a frequently used media, but was referenced more amongst the refugee than the host population. Some adolescents in peri-urban sites of Moroto were more familiar with television through public video-halls, and a small number of boys reported watching football or movies for entertainment. Across the two sites, older adolescents were likely to watch more television than younger adolescents as a result of their greater access to video-halls and televisions in communal spaces.

Mobile phone

A greater number of adolescents in Adjumani had access to mobile phones than their peers in Moroto. The technology survey indicated that respondents from the host community had more access to a personal or shared mobile phone than adolescents in the refugee community, but even then, users reported only using a mobile once or less than once per week. A greater number of refugee respondents knew someone with a mobile phone, but reported to 'never' or only 'occasionally' being able to borrow it. In Moroto, adolescents in rural Atedeoi reported minimal access to mobile phones, and despite often knowing someone with a phone (primarily male relatives), were mostly never allowed to borrow it. There was slightly more access in the peri-urban site of Katanga, both to a personal or shared mobile phones, but again everyday use was rare.

Internet and social media

In Moroto, online access by adolescents was rare across both sites, and many had never heard of the Internet. Those who did access the Internet were all older adolescents. In their participatory workshops, adolescents from the refugee community in Adjumani were the group most vocal about their use of internet and social media. In the technology survey, refugee boys reported the greatest use of the Internet (although still under half of refugee boy respondents), and more boys than girls from the refugee community reported to use social media. Facebook was the most popular social media platform, and was used to connect with friends, particularly those in South Sudan and to learn cross-border news.

Adolescent programming and delivery platforms

The landscape analysis mapped programmes delivering activities for adolescents in the following sectors: adolescent sexual and reproductive health; livelihoods; agriculture; education; social protection; participation, and nutrition.²⁷ Most programmes were not implemented at scale and often had only local coverage. The mapping exercise revealed various delivery channels that had been effectively used by programme implementers to reach adolescents. With the recent entry of the nutrition sector into the adolescent programming space, there is a valuable opportunity to leverage the good practice and lessons learnt from other programmes, and in parallel, to integrate evidence-based nutrition interventions into successful programme models.

Through the mapping exercise, several trends became evident. Activities were identified focusing on sexual and reproductive health, including HIV; economic empowerment/livelihood support; education; school health and nutrition and nutrition supplementation; and life-skills training (which was commonly integrated into sexual reproductive health, economic empowerment and, to a lesser extent, education programmes).

²⁷ The results of the mapping exercise were compiled in a spreadsheet database that was deposited with WFP at the conclusion of the research.

There was particular bias towards sexual and reproductive health and HIV programming targeting females, but the coverage was patchy and interventions were localised rather than at scale. Adolescents (10-19 year olds) were rarely targeted as a distinct group and adolescent girls were more likely to be rolled into programming for women of reproductive age. In the mapping, only one programme was identified in which adolescent girls were defined as the key beneficiaries, whilst three other programmes were directioned towards 'young women'. No programme was identified that focused on adolescent boys.

The situational analysis conducted as part of the project highlighted various delivery channels had been used by programme implementers to reach adolescents including radio, SMS and web-based platforms, but with a focus on community-based interventions. Group-based approaches and interpersonal communication via a peer educator or mentor were the most common strategies adopted.

Engagement preferences

Understanding how to effectively engage adolescents is essential for assessing how nutrition-specific and nutrition-sensitive interventions can be delivered and best related to other components of the 'adolescence equation'. Key influencers, modes of engagement, delivery channels – the mechanisms, but also the tone of the engagement is critical. Throughout the research, adolescents clearly articulated their priorities and needs related to engagement.

- *'Come to us, fit around our lifestyle'*: Adolescents stressed the importance of accessibility and preferred to be 'reached' in places they already frequented and at convenient times. Interventions must be tailored to fit the often-chaotic lifestyle of adolescents and must recognise their competing priorities. This was particularly relevant in Moroto district in relation to adolescents who were at the *kraal* to herd animals during daylight hours. Adolescent mothers in both districts emphasised that to enable them to fully participate in any kind of project, they had to be allowed to bring their children, or arrangements had to be put in place for them to be cared for.
- *'Use our groups, don't group us'*: Unless interactions were likely to be particularly sensitive (in which grouping by gender was more appropriate), adolescents expressed preference for being grouped together, including those in refugee and host communities. They did suggest grouping according to age and life stage however: married girls and young mothers should be engaged separately from unmarried girls (including the *nga'kobain* social groups in Moroto); older boys (including junior elders) separately from younger boys; and some suggested that in-school adolescents should be engaged separately from those who were out of school.
- *'Make it entertaining'*: Great importance was attributed to the need for activities to be primarily entertaining, followed by being informative and understandable. The use of music to attract and sustain the attention of adolescents was highlighted, and dance and sports activities were also popular.
- *'Show us real experiences'*: Adolescents confirmed that they found '*real life stories*' to be the most engaging and affective way of sharing and learning from experiences, and preferred to be '*shown things visually*'.
- *'Ask us, include us'*: Adolescents stressed that they wanted to be involved in a participatory manner. They suggested that rather than passive or one-directional methods of conveying information, they wanted to be included in interpersonal activities. This would give them a chance to ask questions and to ensure that their voices were heard and their opinions recognised. It was recommended that adolescents be involved in the design of interventions to ensure they were appropriate and relevant. This was seen to be particularly important for refugee adolescents as given the lack of agency they had in many areas of their life, they needed '*to own information*' and see it to be of direct benefit if it was going to change their behaviour.
- *'Speak our language'*: The importance of conversing with adolescents in their local language was stressed. Adolescents highlighted the benefit of tailoring language to fit their colloquialisms. They also

stressed the need to be spoken to with respect in order for them to feel comfortable engaging with services and programmatic interventions. Some adolescents reported being *'attracted'* to materials produced in English, but to have a deeper understanding of information they agreed communications were more appropriate in their local languages. Aural rather than written communication was stressed given the low literacy rate of some adolescents, particularly those out of school and living in more rural areas.

- *'Be fair'*: Adolescents stressed that different and multiple modes of engagement may be needed to interact with their age group, but that all engagement should be transparent. Great value was placed on being fair and avoiding favouritism. The importance of trust and privacy was repeatedly emphasised and adolescents were wary of information or situations they perceived to be discriminatory or associated with corruption. Ensuring equity in both engagement and the provision of services was highlighted as a priority (particularly in terms of interactions between refugee and host communities).
- *'With food, we need energy now'*: The need to show the immediate benefit of food to secure adolescents' interest was highlighted across the fieldsites. Adolescents reported that having energy was their priority to ensure they could complete their daily workload.
- *'Build us for the future'*: Adolescents wanted engagement activities to *'help [them] see a bright future'* through building skills and interests. They were most receptive to learning when it built on activities they enjoyed and were good at and which prioritised issues they identified to be important. Participants emphasised the importance of engaging adolescents holistically, providing health and nutritional information alongside sexual and reproductive health services, education and vocational training. This was particularly emphasised by adolescents who were not in-school and felt that they needed a space for learning, skills training and/or livelihood activities.

Adolescent boys, 10-14 years old, participating in the creative workshop, Moroto.



Conclusion and recommendations

The world currently has the largest generation of 10-19 year olds in history (UNFPA 2017). As a population group, unique health concerns and needs are associated with adolescents and as target group they require specific nutrition interventions. There is clear evidence of the growing disparities among adolescents and youth within and across countries. Demands on young people are new and unprecedented and those who live in poverty face major disadvantages. With the Sustainable Development Goals, the global policy landscape has shifted and adolescents are being recognised as a significant population that deserve greater visibility and attention.

The research gathered new empirical data in Uganda on the experiences, needs and priorities of adolescents regarding their health, nutrition and sustainable development, and established their engagement preferences in different contexts. In conclusion, a series of user-centered recommendations are made in relation to strengthening the visibility of adolescents; influencing adolescent nutrition; engaging with adolescents; the platforms for engagement; and entry points for strategic partnerships. A summary table that collates key policy and programming implications is presented at the end of the chapter.

Strengthening the visibility of adolescents

- Uganda has a valuable window of opportunity to further develop its enabling environment for adolescent nutrition. To strengthen the evidence base, there is a need to disaggregate available data for adolescents and to systematise routine collection of adolescent-specific data. To complement and supplement routine quantitative data, high quality qualitative data should be collected to better understand the lived realities of adolescents, and the complex root or underlying causes for their nutrition practices and food-related behaviours. At national and sub-national levels, competencies must be developed to analyse, interpret and apply both qualitative and quantitative data.
- The definition of adolescence at the national level is not consistent with definitions used at the community level. This results in some adolescents self-identifying in ways that preclude them being recipients of youth-orientated services. Interventions must be sensitive to variables including age, gender, socio-economic status, life stages, livelihoods and ethnicity. Effective engagement should target groups as defined and understood at the community level.
- The tendency at both policy and programmatic level to group adolescents with 'children', 'youth' or 'women of reproductive age' reduces the visibility of adolescents, hampers the identification of adolescent-specific problems, and limits the development of appropriate strategies and programme design to meet their specific needs. Although it may not be possible to agree on definitions and terminology across all sectors, it is important that measures be taken to prevent adolescents' needs from becoming diluted, or insufficiently addressed. This will require focused advocacy with national stakeholders and partners to ensure their commitment to this age group, regardless of the terminology used.
- Promising policy developments include the Adolescent Health Policy, which includes a detailed section on nutrition, and the Maternal, Infant, Young Child and Nutrition Roadmap, which offers guidance on promotion, prevention and treatment with a focus on multi-sectoral working (both in draft form at the time of writing). The Anemia Policy also specifically highlights adolescent girls. The challenge is to support the effective implementation of these policies, and to advocate for the inclusion of adolescent nutrition across the policy spectrum.

Influencing adolescent nutrition

- When taking adolescents as the central unit of analysis, it becomes clear that this group is uniquely affected in Uganda. Programmes targeting adolescents must take account of the nutritional challenges faced in different contextual settings, and the impact these have on their overall growth, development and wellbeing.
- Increasing communication and information about nutrition alone will not improve the diet or healthy behaviour of adolescents. Rather, interventions should adopt a systems-based approach that addresses the nutritional needs of adolescents in the context of and in combination with other key components of their lives. Communication and information should be combined with improved access to healthy food and other services.
- Reducing poverty by increasing safe income-generation opportunities (and raising household economic status) is key, but such opportunities should be designed around keeping adolescents in school, e.g. scheduling activities for afternoons and weekends. For adolescents who are older or do not attend school, vocational training that develops business skills and provides resources such as start-up equipment is an important avenue of constructive engagement.
- In addressing agricultural practices for adolescents and their households, an agri-nutrition lens should be adopted. Knowledge, skills and resources should be developed for effective and efficient irrigation systems and post-harvest storage, and consideration given to issues of land access. New and emerging urban-agricultural methodologies (e.g. sack-gardens) may be particularly relevant and appealing for adolescents residing in urban and peri-urban localities.
- Addressing adolescent nutrition requires a systems-based approach that considers restrictive social norms, sexual and reproductive health issues including early marriage and teenage pregnancy, and access to education. These are critical components related to improving nutritional status and wellbeing.

Engaging with adolescents

- As target beneficiaries, adolescents should be engaged as active participants in the design, implementation and monitoring of interventions. Programmes should be sensitive to the needs, preferences and priorities of adolescents. During the research, they clearly articulated suggestions that should be operationalised including ease of access, the strategic use of language, and showcasing real experiences. They emphasised the importance of privacy, trust and transparency in all engagements. They wanted interventions to develop their skills for the future, but to be dynamic and entertaining, using music, dance and sport.
- Several key influencers in the lives of adolescents were identified, including caregivers and parents, particularly mothers (for younger adolescents); husbands and mothers-in-law (for married female adolescents); peers (particularly for older adolescents); teachers (for those in-school and particularly refugee communities); and community leaders (for adolescent girls and boys of different ages). Securing their buy-in and support is vital in both generating demand and facilitating utilisation of programmes and services. In line with the strong oral culture in all fieldsites, mentors from the community who could serve as positive role models were also highlighted as key influencers. National level stakeholders agreed that to successfully programme for adolescents, it is critical to work within their *'circles of life'*.
- Adolescents took a high level of responsibility for household food preparation, and can therefore be agents of change regarding healthy eating practices for their family members and broader communities. In addition to receiving information about nutrition and nutrition-related services for their own wellbeing, adolescents should be considered primary targets for cascading knowledge and improving the nutrition of other vulnerable groups (e.g. children under five, pregnant women).

- There is need to support trusted adolescents to assume positions of leadership to represent the voice(s) of their peer group(s), to ensure appropriate user-centred design, and to provide monitoring and evaluation feedback to ensure programmes are appropriate, relevant and effective.

Platforms for engagement

- Considering the dynamic needs of adolescents, there is no ‘one size fits all’ delivery channel. Interventions should respond to the complex realities of an adolescent’s life and rather than being an additional burden, should be mindful of the conflicting responsibilities they may have. Adolescents should be engaged through multiple avenues or platforms that are mutually supportive.
- The formative research and stakeholder mapping documented existing programmes that engaged adolescents and implemented activities related to nutrition; sexual reproductive health, including HIV; economic empowerment, livelihood support and life-skills training; education; school health and nutrition; and nutritional supplementation. There was a particular bias towards girl-centred programming and sexual reproductive health and HIV programming. Overall, however, programmes were not implemented at scale and coverage was limited. Only a few programmes were designed with ‘adolescents’ (defined as 10-19 year olds) as the primary beneficiary.
- Adolescents discussed their preference for being engaged at informal community spaces, through clubs and groups with peers and with a strong support/mentoring component. At the national level, platforms and ‘safe spaces’ have also been highlighted in adolescent livelihood projects that combine life-skills training with economic empowerment (see also Amin, 2011, and Austrian and Muthengi, 2014). Other innovative platforms that were highlighted included Farmer Field Schools (interactive agricultural training) and Wellness Visits (health worker extension visits to primary schools).
- A number of adolescents suggested engagement through religious institutions, although practices varied even within the same district. This is an area that requires further research. If religious institutions are to be engaged, it will be important to form a strong alliance with the Inter-Religious Council of Uganda at the national level, particularly given their influential role in cross-sectoral policy decisions. It is challenging, however, for religious institutions to actively tackle sexual and reproductive health and family planning related issues, and this may limit the potential impact of the church as a delivery channel.
- For adolescents in formal education, school was identified as a positive and trusted platform for engagement, although it was noted to be a highly selective channel given that many adolescents do not regularly attend school (such as adolescents at the *kraal* in Moroto).
- Technology platforms are a promising way to engage adolescents, yet the research provided further evidence that the penetration and use of technology is highly context-specific, and differs according to social groups, age and gender. Mobile phones were only rarely accessed by peri-urban adolescents in Moroto and host community adolescents in Adjumani, and even then, only infrequently. Radio was the most commonly used media and was popular across the fieldsites, although access appeared lower for adolescent girls than boys. Programme implementers suggested that, in order to increase the effectiveness of community radio, adolescents should be involved in the design of programme content, and strategies such as ‘listening groups’ (in which people are brought together to listen and then discuss programmes) should be established. Both host and refugee communities in Mungula were more engaged and interested in using the internet and social media than participants in Moroto, although again access was limited. In Moroto, it was notable that many adolescents had never heard of the internet. Local leaders in both sites spoke negatively about the ‘*rapid influence of Western culture*’ on the adolescent age group. This highlighted the importance of negotiating the use of new technologies with parents, caregivers and other gatekeepers, particularly if girls and younger adolescents are the target group for social media-based interventions.

Entry points for strategic partnerships

- As the coordinating body for the Uganda Multisectoral Nutrition Policy, the Office of the Prime Minister is key to driving the adolescent nutrition agenda forwards. The ministries of Health and Agriculture are mandated to address nutrition, and they should be supported to help mainstream nutrition-sensitive and nutrition-specific activities. Similarly, the Ministry of Gender, Labour and Social Development is key, particularly given the newly developed National Multisectoral Framework for Adolescent Girls policy document (in draft at the time of writing). Actors already engaging adolescents in other sectors should be encouraged to include nutrition in their activities.
- Services aimed at women of reproductive age should purposefully try to reach all adolescents and services aimed at pregnant women should ensure that pregnant adolescents are effectively included. By advocating for the adoption of a youth-friendly approach, adolescents could be engaged in ways and through channels that they have suggested and prioritised. Services must be presented in a way that helps adolescents see them as directly relevant and inclusive, particularly in terms of preventative as well as treatment-orientated services. Engaging adolescents when they are younger (e.g. 10-14 years) is important. Normalising health facility visits for this age group can reduce stigma related to attendance and will help move away from the negative association between health facility attendance and sexual reproductive health issues.
- Expanding school feeding programmes to further include adolescents may be a positive driver to encourage adolescents to maintain school attendance and benefit from the protective capacity of the education system for longer, delaying early pregnancy and marriage, with the resulting positive impact on nutrition. Structural weaknesses inherent in the school system, including storage facilities for food products, and poor access to water and sanitation, need to be simultaneously addressed. In Moroto, the provision of school meals attracts children and adolescents who are not registered at school, and there is need to build the value of school beyond it being a '*feeding centre*' to encourage regular attendance. Flexible education structures that allow children and adolescents to continue to contribute to herding activities and other responsibilities should be further explored. In Adjumani, school feeding programmes that incorporate agricultural learning (e.g. through school gardens), may be a positive driver to encourage and maintain attendance.
- The food industry should be positively engaged to ensure low-cost and healthy food is produced and sold, and to influence market trends towards the recognition and consumption of food that is healthy and has a high nutrient value. The Scaling Up Nutrition (SUN) business network could be strengthened and with apex bodies such as the Private Sector Foundation, could serve as effective entry points to develop strategic partnerships with the private sector.

Summary of key policy and programme implications

Theme	Key considerations
Available food and food sources	<ul style="list-style-type: none"> • Make diverse, healthy, natural and affordable foods available and attractive to adolescents and their families, particularly in times of scarcity. • Production of a variety of foodstuffs should be encouraged, alongside pastoralist practices as appropriate. This should include improved irrigation, better management of food and harvest losses, and social protection via cash transfers.
Food responsibilities	<ul style="list-style-type: none"> • Because adolescents have high levels of responsibility for their own and their families' nutrition, particularly that of their younger siblings, it is important to target messaging aimed at benefitting other vulnerable groups (e.g. children under five years old) towards adolescents. • Household decision-makers and 'financial controllers' should be engaged so they allow and actively encourage healthier food options to be priority purchases. • Amongst the refugee communities, messaging regarding food rations and cash payments should be targetted towards adolescents.
Food preferences	<ul style="list-style-type: none"> • The promotion of healthy foods should focus on components adolescents value in terms of choice and consumption, primarily that they are energy-giving, filling and tasty. Incentivising adolescents to choose healthy food and adopt healthy food practices should be linked to positive identity markers and social status. • When novel and fast food enters the market, avenues should be developed for promoting traditional and healthy food that align with adolescent aspirations.
Climate and agricultural practices	<ul style="list-style-type: none"> • Recognising the ramifications of climate stress on adolescent health and nutrition and how it affects their education and future employment is critical. Humanitarian assistance linked to drought and food insecurities should purposively consider adolescent issues and constraints and the role of adolescents in household and societal structures. • Poverty is widespread and exacerbated by climate change-induced vulnerabilities. Policies invoking the activation of social safety nets and food assistance should be strongly linked to drought, and should purposively consider adolescent issues and constraints. • There is a need for more resilience work that better protects livestock and livestock-feeding areas in the event of a drought. Livestock and crop insurance systems could also be considered. • If rations are to be supplemented by household crops, then land rights for refugees is an important issue that urgently requires greater understanding and advocacy.
Household economy and income generation	<ul style="list-style-type: none"> • Income-generating activities are often prioritised over school attendance, and adolescents and their families need strong incentives for this age group to continue formal education. Social protection mechanisms such as cash transfers may help address poverty and underlying issues that result in families sending their adolescents to work. • Many of the income-generating activities adolescents engage in require a high level of energy expenditure and are exploitative. Safe income-generation opportunities should be made available but designed around keeping adolescents in school, e.g. scheduled for afternoons and weekends. • For older/out-of-school adolescents, vocational training that develops business skills and provides resources for start-up equipment is a key avenue for constructive engagement. • Alternative income-generation opportunities should be made available to families to deter their reliance on the production and consumption of locally brewed alcohol.
Social norms	<ul style="list-style-type: none"> • Knowledge of healthy food does not directly translate to healthy food practices, so investment should be made to ensure adolescents assume healthy diets and consumption patterns. This is linked to making healthy food not only available and accessible, but also aspirational and attractive. Interventions that focus on food and meal preparation may be helpful. • Ingrained gender norms related to food allocation within the household prevent girls' healthy nutrition. Raising awareness about the importance of an adolescent girl's nutrition should focus on her strength and role in the (household) economy (in terms of immediate value) and on the importance of her health for the next generation (in terms of future value). • Engaging with key male and adult influencers is critical.
Sexual and reproductive health	<ul style="list-style-type: none"> • Reducing adolescent pregnancy and HIV is key in ensuring the healthy development of adolescent girls, and is linked with poverty reduction and education promotion efforts that have been proven to have a positive impact on adolescent nutrition and broader wellbeing. • The risks of early marriage and pregnancy should be discussed in community forums and the benefits of delayed marriage and pregnancy advocated for. • Raising awareness around good nutrition during pregnancy is needed. In parallel, initiatives should improve antenatal care, delivery practices and postnatal care. Delivery with skilled attendance should be actively promoted. • Greater awareness is needed around the problems of sexual violence against adolescent girls. Adolescent girls should be empowered to protect themselves (e.g. through personal protection skills and self-defense) and perpetrators should be brought to appropriate justice.
Access to education	<ul style="list-style-type: none"> • The value of adolescent education should be promoted through community-based role models and linked to attractive incentive structures for adolescents and their wider family unit. To help facilitate school attendance, it is important to explore ways to reduce income-generation activities and housework / household responsibilities of both boys and girls. Subsidising informal fees for poorer families could be considered. • Menstrual management support should be considered as this could improve school attendance rates for adolescent girls.
Service delivery issues	<ul style="list-style-type: none"> • Health facility services should actively try to reach adolescents and sustain engagement. Services should be carefully designed to ensure this age group perceives them to be relevant. Normalising health facility visits for preventative care is important and should aim to shift association away from sexual and reproductive health and HIV issues. In parallel, the provision of quality care for adolescents must be further strengthened and an appreciation for preventative services developed. • Outreach visits to the community can be beneficial in overcoming stigma associated with facility attendance and to 'build bridges' between facilities, services and adolescents. • The quality and delivery of school meals need to be improved, including consistency in availability, nutritional value and portion size. Consideration should be given to allotting school meals to non-registered children. • Expanding school meal programmes to include adolescents at secondary-school level may be a positive driver to keep this target group in school, although for this to be effective, the perceived value of adolescent education must be built at the community level. • Structural weaknesses in the school system (storage, WASH, workload of teachers etc) need to be overcome if schools are to be an effective delivery platform. Despite the potential value of school as a platform for sustained engagement, it must be recognised that schools do not reach all adolescents or the most vulnerable, and interventions must therefore be combined with engagement channels that can reach out-of-school adolescents, including mature minors.



Annex 1 – Ethical clearance



May 22, 2017

Dr. Theresa Jones
C/o Ms. Gloria Kusemerwa
World Food Programme

- Initial review
 Continuing review
 Amendment
 Termination of study
 SAEs

Dear Dr. Theresa,

**Re: Approval of concept paper #REC REF 2017-064
"Formative research for adolescent nutrition programming in Uganda"**

Thank you for submitting an application for approval of the above – referenced concept paper. The committee reviewed it and granted approval for one year, effective May 22nd, 2017. Approval will expire on May 21st, 2018.

Continuing Review

In order to continue work on this study (including data analysis) beyond the expiration date, the School of Medicine Research and Ethics Committee must reapprove the protocol after conducting a substantive, meaningful, continuing review. This means that you must submit a continuing report form as a request for continuing review. To best avoid a lapse, you should submit the request six (6) to eight (8) weeks before the lapse date. Please use the forms supplied by our office.

Amendments

During the approval period, if you propose any change to the protocol such as its funding source, recruiting materials, or consent documents, you must seek School of Medicine Research and Ethics Committee approval before implementing it.

Please summarize the proposed change and the rationale for it in a letter to the School of Medicine Research and Ethics Committee. In addition, submit three (3) copies of an updated version of your original protocol application- one showing all proposed changes in bold or 'track changes,' and the other without bold or track changes.

Reporting

Other events which must be reported promptly in writing to the School of Medicine Research and Ethics Committee include:

- Suspension or termination of the protocol by you or the grantor
- Unexpected problems involving risk to participants or others

Adverse events, including unanticipated or anticipated but severe physical harm to participants.

Do not hesitate to contact us if you have any questions. Thank you for your cooperation and commitment to the protection of human subjects in research.

Documents approved for use along with protocol

- Informed English and translated consent forms
- Informed assent forms
- Data Collection tool

Yours sincerely,



Assoc. Prof. Ponsiano Ocama
Chairperson School of Medicine Research and Ethics Committee

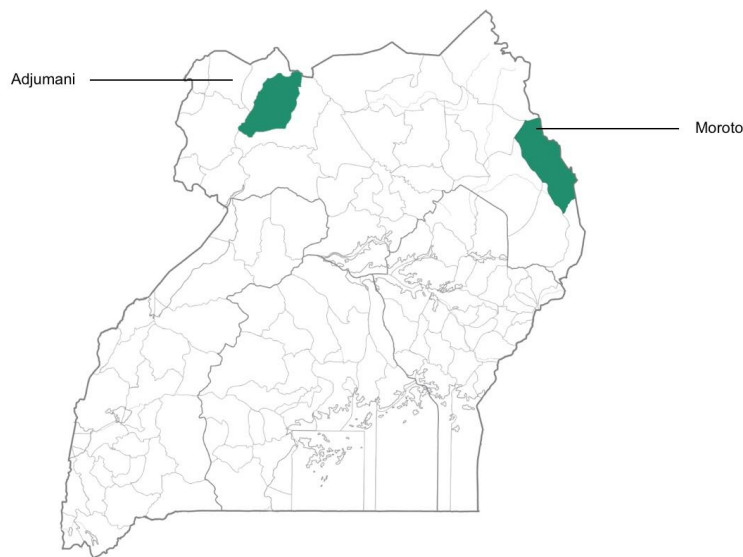
Annex 2 – Stakeholders involved in the mapping of adolescent programmes

Type	Organisation
United Nations	UN Women
	UNAIDS
	UNFPA
	UNICEF
	WHO
	UNHCR
	ILO
	WFP
INGOs	Harvest Plus
	Save The Children
	Mercy Corps
	Africa Humanitarian Action (AHA)
	BRAC
	International Rescue Committee
	FHI-360
NGOs	Alliance Forum for Development (AFOD)
	Peer to Peer Uganda (PEER U)
	Uganda Youth Development Link (UYDEL)
	Uganda Network of Young People living with HIV and AIDs (UNYPA)
	Medical Face International
	Andre Food International (AFI)
	The Action Foundation (TAF)
	Straight Talk Foundation
	Uganda Girl Guides Association
	Mildmay Uganda
	Restless Development
	War Child Canada
Religious Institution	Inter-Religious Council of Uganda
Government	Ministry of Health – Nutrition
	Ministry of Health – Reproductive Health -
	Ministry of Gender, Labour and Social Protection – Social Mobilisation
	Ministry of Education – School Health and Nutrition
	Ministry of Agriculture
Private sector	Private Sector Foundation
	Nike Foundation

Annex 3 – Research schedule

Date (2017)	Location	Activity
29 May	Kampala	WFP briefings
20 May	Kampala	National Level Key Informant Interviews
31 May	Moroto district	Briefing with sub-office focal person and research team
1 June	Moroto district	District level key informant interviews Pilot testing technology survey
2 June	Moroto district	Fieldwork in Atedeoi
3 June	Moroto district	Fieldwork in Atedeoi
4 June	Moroto district	Fieldwork in Atedeoi and Katanga
5 June	Moroto district	Fieldwork in Katanga
6 June	Moroto district	Fieldwork in Katanga and debrief with research team
7 June	Adjumani district	Briefing with sub-office focal person and research team
8 June	Adjumani district	District level key informant interviews Attendance at Reproductive Health Working Group Briefing with district nutrition focal person
9 June	Adjumani district	Fieldwork with refugee community, Mungula I
10 June	Adjumani district	Fieldwork with refugee community, Mungula I
11 June	Adjumani district	Fieldwork with refugee and host communities, Mungula I
12 June	Adjumani district	Fieldwork with host community, Mungula I Meeting with district-level programme implementor
13 June	Adjumani district	Fieldwork with host community, Mungula I Debrief with research team
14 June	Kampala	National level key informant interviews and preliminary analysis
15 June	Kampala	National level key informant interviews and preliminary analysis
16 June	Kampala	National level key informant interviews and WFP debrief
17 June	Kampala	Preliminary analysis
19 June	Kampala	Stakeholder workshop to present initial findings
5 July	Remote	National level key informant interviews (via Skype)
10 July	Remote	National level key informant interviews (via Skype)

Annex 4 – Background to study sites



Map of fieldsites in Uganda

Moroto district

Moroto district lies within the North-East, in the Karamoja sub-region of Uganda, covering 8,516 km², with a population of 103,432 making it one of the least populated districts in the country (UBOS and ICF, 2014). Moroto district is made up of 2 counties (including 1 municipality), 6 sub-counties (including 2 divisions), 26 parishes (including 4 wards) and 160 villages (including 13 cells). The Karamojong are the main ethnic group and include the Matheniko clan in the rangelands and the Tepeth clan in the mountains. Sparsely populated, the majority live in rural areas, with the few urban areas based around trading centres. The majority live in clusters of 50 to 400 individuals in *manyattas* that are fenced off with wood and thorns. Houses are made from mud walls and grass thatched roofs, can lack proper sanitation and storage facilities and are prone to natural disasters like strong winds and sand storms (UNDP and Republic of Uganda, 2014).

Moroto district is largely semi-arid with the main vegetation including forests at high altitudes, Savannah woodland, semi evergreen thickets, deciduous thickets, Riparian communities, and grass steppe communities (UNDP and Republic of Uganda, 2014). The hottest months span January and February, and the coolest October to December. Rainfall is in the range of 300mm to 1200mm per year with mean annual rainfall of 800mm. In recent years the district has experienced unpredictable climate change which has contributed to crop failure and livestock reduction resulting in food insecurity, malnutrition among children, environmental degradation and an increase in pest infestation and human epidemics/disease.

Poverty is reportedly increasing due to a range of factors including: poor harvest, cattle rustling and insecurity, animal death, lack of water, poor farming practices, ill health and disability, high bride price for marriage, lack of skills and unemployment, limited sources of income, poor governance, and landlessness (UNDP and Republic of Uganda, 2014). The livelihood pattern has changed over time due to loss of livestock; power has changed due to increase of poverty among the households. This has led to women taking on livelihoods such as, charcoal burning, firewood and sale of local brew (UNDP and Republic of Uganda, 2014). Inopportune and scarce water resources are unevenly distributed, which makes people and livestock more vulnerable and has further affected agricultural production (UNDP and Republic of Uganda, 2014).

Conflict analyses inter-relate aridity, pastoralism and conflict in the Karamojong Cluster. Livestock, pastures, water, minerals, and access routes are all contributors to conflict (Famine Early Warning Systems Network, 2005). In the last decade and a half, the government of Uganda has pursued a disarmament exercise in Karamoja, which has not always been a smooth process, with some reported unwillingness to give up their guns and continued cross-border gun trade with Kenya.

At the time of the research Moroto district had nine level-two health centres, seven level-three health centres, and one referral hospital; 31 primary schools (of which 74% were Government funded), and five secondary schools (of which 40% were government funded).²⁸

The World Food Programme (WFP) has supported the provision of school meals at pre-school, primary-, secondary- and tertiary-level schools in Karamoja since 1972, with the aim of encouraging routine attendance, and worked with the District Education Officer to monitor school feeding activities. At the time of the study, WFP activities in Karamoja also included food provisions to extremely vulnerable households during the rainy season and community-based supplementary feeding for curative support, including supplementation for children under five years showing signs of Moderate Acute Malnutrition (MAM). Village Health Team (VHT) members were responsible for screening and referring children with MAM to partner-managed outposts. Moroto district had 26 outposts managed by Andre Food Consult. Preventative nutrition support was targeted towards pregnant and lactating women and children under five years, embedded within ANC and Post-Natal Care (PNC) services. Beneficiaries that qualify for such support received monthly rations of corn-soy blend and vegetable oil. Although the initiative was not being implemented in Moroto, WFP was supporting market activities included training farmers in proper post-harvest storage and creating market linkages in Nakapirit, Napak and Kotido districts.

Other active organisations in Rupa Sub-County reaching the adolescent age-group, as discussed by key informants, included Marie Stopes (SRH), Straight Talk Foundation (SRH and Hygiene), Samaritans Purse (Sanitation and Hygiene), KIDEP (Child Protection) and Community-Based Services (Child Protection) Danish Refugee Council (DRC) were also explained to offer Food For Work activities for adults.

Karamojong

The Karimojong (Nikarimojong), the largest Karamojong group, live in southern Karamoja and are traditionally subdivided into the Bokora, Matheniko and Pian. The Karamojong language is called Ngakaramojong.

Within the Karamojong tradition, household responsibilities depend on gender, age and status. Building huts is generally the job of females, including older girls from 14 years and women. Within the *manyattas*, girls traditionally clear land, plant, weed and water or milk animals not in the *kraals*. If there is a harvest, girls participate in bringing in the harvest, threshing, winnowing and storing the grains. In the *kraal* they prepare food, milk animals. Girls carry food and water between *kraals* and *manyattas* and also make the trips into urban centres. Males are responsible for fencing enclosures. Young boys shepherd smaller animals until they become old enough to look after cattle. Older boys are also responsible for security from intruders or wild animals, often sleeping outside. The trade of livestock is also traditionally handled by men.

Elders supervise daily events in the *manyattas* and *kraals* and are in charge of decision-making around rituals such as initiation (such as *Asupan*) and marriage. The Matheniko clan of the Karamojong tribe are polygamous and men may have between 2-10 wives, depending on their wealth. Bride price is common practice, as described by one male caregiver below,

²⁸ Uganda has a decentralised health system. At the most local level are Village Health Teams and volunteer community health workers. Level-two health centres provide outpatient services run by a nurse and are supposed to be one per parish, serving several thousand people. Level-three health centres are run by a senior clinical officer and provide basic diagnostic services and maternal health services. Level-four health centres are run by a medical doctor and provide surgical services, blood transfusions and comprehensive obstetric care.

All women are the same, they are like a shop, you go and negotiate and agree on a particular price. Bride wealth is highly negotiable so the parents of the boy need to have a good understanding with the parents of the girl and good bargaining power. If the parents of the girls force her to leave the man she loves because he cannot afford the high bride wealth they are asking for, the girl will leave and go for the one she loves. So, it's the will of the girl, bargaining power of the boy's parents and good relations between both parents determine bride price not a specific girl's characteristics

Adjumani district

The 2014 Population and Housing Census established the total population of Adjumani District to be 231,623 (52.2% female and 47.8% male) inclusive of 34,743 10-14 year olds and 50,957 15-19 year olds.

According to the Adjumani District Development Plan (Adjumani District Local Government, 2015), Adjumani, is principally gentle undulating land merging into rock outcrops, with the southern parts highlands dropping into broad flat-bottomed valleys and the northern parts standing at a low slope gradient. Adjumani has considerable vegetation cover, permanent wetlands and seasonal swamps. With a tropical climate and a bimodal rainfall pattern, the rainfall seasons fall between April to June and August to November, with peak rainfall usually experienced in May. Dry conditions are experienced from December to March. The mean annual temperature is 19 degrees to 36 degrees. Adjumani district is located in West Nile sub-region of Uganda and consists of 2 counties, 9 sub-counties, 54 parishes and 206 villages.

Beyond agriculture, livestock keeping, including cattle, goats, sheep, pigs and poultry, is the second most important economic activity in Adjumani district. Other economic activities include the sale of local building materials, firewood, charcoal, mat making, brewing, petty trade and casual labour. Primary income expenditures include payment of school fees, and purchase of consumables (daily household needs), domestic animals and health care

There are a number of ethnic groups in Adjumani including the Madi as the single largest group followed by the Lugbara. The Southern Sudan tribal groups (Madi, Kuku, Dinkas, Acholi Bor, Zande) make up the majority of the refugee population. Ethnic groups are organised as patrilineal clans that divide themselves into families and households. The households are composed of a nuclear-type family (Adjumani District Local Government, 2015).

The Roman Catholic Church is the most dominant religious denomination in the district followed by the Anglican Church, Islam and the Pentecostal Church. Traditional religious beliefs are centred around ancestor workshop. It is common practice to mix Christian beliefs with traditional religious practices amongst the Madi population, especially with marriage and funeral ceremonies. Adjumani district has 27 Level 2 Health Centres, 8 Level 3 Health Centres and one Level 4 health centre, located in Mungula. In the district there are 412 VHTs (2 VHTs per villages) and 70 Community Health Workers in the Refugee settlements. Adjumani Hospital is a Level 5 hospital. There are a total of 80 primary schools (66 government grant aided and 14 private/community schools), 6 government-aided secondary schools and 6 private secondary schools (Adjumani District Local Government, 2015).

At the time of the study, WFP activities in Adjumani included monthly food distributions to the refugee population. All registered refugees received 2,100 kilocalories a day for the first three years, after which provisions reduced by 50%, before phasing out entirely. The ration amount was calculated per individual but provided in bulk to the entire household. Extremely vulnerable households including persons with chronic illness, physical disabilities, unaccompanied minors or single-headed households were supported indefinitely. At the time of data collection, WFP was trialing the implementation of cash transfers rather than distributing food rations in selected sites. Nutrition-related services included support for immunisation and deworming services at the community level, as well as targeted supplementary feeding through 13 health facilities across the district. The target group for these activities included pregnant and

lactating women and children under five years. WFP agricultural and market-support activities in Adjumani built the capacity of farmers, provided training and sought to establish links between farmers and local market systems and with WFP for refugee ration procurement. Services were delivered to both refugee and host community members.

At the time of reporting, the population of Mungula refugee settlement was estimated to be at 4,744. Mungula had two primary schools, one government-aided secondary school and one early childhood development centres. In terms of static health facilities, it had one level-three and one level-two health centre. At the time of the study, a number of health and social service projects were being implemented in Mungula by the Ugandan Red Cross (for water, sanitation and hygiene), Danish Refugee Council (for livelihoods and agricultural groups), World Vision (for food distribution and vocational schooling) and Caritas (for village, savings and loan activities). Cross-sectoral technical working groups had been established in relation to child protection, peace, livelihood, environment, education, psychosocial and health.

Uganda's Refugees Act (2006) is widely perceived to be progressive and open, and states that refugees have the right to, *'Fair and just treatment without discrimination on grounds of race, religion, sex, nationality, ethnic identity, membership of a particular social group or political opinion..., the right of association with non-political and non-profit organisations..., the right to reside permanently in Uganda..., the right to access employment..., and the right to travel outside Uganda and return'* (Refugee Act, 2006, paragraphs 2-5). A number of programmes have been established to support refugees living in northern Uganda, coordinated by the Office of the Prime Minister (OPM) and UNHCR. In-line with national strategies to better integrate refugees into host communities, at least 30% of all programme beneficiaries should be from the host communities.

Annex 5 – Research tools

1. Topic Guide
2. Interview guide – UN agencies, I/NGOs stakeholders and research implementation partners
3. Interview guide – Representative from government ministries
4. Interview guide – Representative from private industries
5. Focus group discussion/interview guide – Community leaders, members and caregivers
6. Technology survey – Adolescent/youth communication and technology channels
7. Adolescent workshop, 10-14 years old
8. Adolescent workshop, 15-19 years old

1 – Topic guide

DEFINING ADOLESCENCE

- How to define this concept? (childhood, adolescence, adulthood)
- Bio-socio-cultural markers of adolescence
- Rituals and transition markers (e.g. rites of passage toward becoming an adult, etc.)?
- Validity and usefulness
- Does the existence/length of adolescence change with context (e.g. during drought, civil unrest etc.)?
- Recreational activities of adolescents? Routine daily life activities?

INGO/GOVERNMENTAL POLICY & PROGRAMMING

- *Background / Overview*

Work with adolescents: Where? National/District levels? What programmes/interventions here and why?
For which types of adolescents (gender, age, etc.)? Other typologies (out of school, teen mothers, etc.)?
Work on nutrition: Where? National/District levels? What programmes/interventions here and why?

- *Policy implications of working with adolescents*

National policy around adolescents/nutrition
National sexual and reproductive health policies for adolescents
National gender policies, legislation and programs
Social accountability for adolescents/nutrition
Areas for collaboration with government? NGO coalitions? Etc.?

HEALTH (GENERAL)/SEXUAL AND REPRODUCTIVE HEALTH (SRH) ISSUES

- *Social, cultural and economic barriers to health services for adolescents*

Socio-cultural norms
Gender norms and practices
Household and village (priorities and negotiation)
Informational sources (e.g. social network, Internet, peers, etc.)
Social relationships, decision making continuum and agency to act
Role of healthcare workers/Bias in access for underage or unmarried girls (e.g. contraceptive services)

- *Social, cultural and economic barriers to SRH services for adolescent girls*

Socio-cultural norms

Household and village (priorities and negotiation)

Informational sources (e.g. social network, Internet, peers, etc.)

Social relationships, decision making continuum and agency to act

Role of healthcare workers/Bias in access for underage or unmarried girls (e.g. contraceptive services)

- *Drivers and consequences of teen pregnancy*

Perception of issues

Increasing or decreasing occurrence (why?)

Consequences for adolescent girls (school drop-out, marriage, etc.)

FOOD AND NUTRITION

- *Perceptions of food and nutrition*

Food status (e.g. high/low status foods, high/low status locations for eating) – the anthropology of food

Views and attitudes about proper nutrition

Level of knowledge

Food/nutrition seeking practices

Access barriers (availability, cost, time, preparation, location of market)

Food taboos for adolescent girls and women (portion size, speed, order of eating, food status, etc.)

Food taboos for pregnant and lactating women (change in diet, hot/cold observance, do's and don'ts)

Relationship between HIV and nutrition, including knowledge of importance of nutrition for people living with HIV

- *Perception of adolescents' participation in healthy eating*

Acceptability, appropriateness, feasibility, potential

Advantages/disadvantages

Existing participation mechanisms/networks

Practical suggestions (case study, role models?)

EDUCATION

- *Perceptions about adolescent education*

Decision making and authority to act for starting/stopping school (who?)

Gender norms/Family differences in priority

Reasons for adolescent girls and boys to drop-out

Timing/frequency of drop-out

Impact of menstruation on education attendance/completion

Urban/rural/pastoralist /refugee differences?

Consequences? Alternatives?

School feeding services offered? To who? Where?

Out-of-school feeding services offered in community? To who? Where?

CHILD REARING & ADOLESCENT INFLUENCERS

- *Impact of family/peers/communal setting for raising children*

Background on family situation (raised by mother, grandmother, etc.)

Who makes decisions regarding child/adolescent care

Key adolescent behaviour influencers (both inside, e.g. siblings and outside the family, e.g. actor, singers, religious leader, teacher, politicians etc.)
Family/peers with the most impact/authority over adolescents
Importance of peers as adolescent influencers?
Other key influencers (e.g. religion)?
Aspirations for adolescents (e.g. complete school, parenthood, career, etc.)?

MESSAGING

- *Messaging channels / Access to adolescents (particularly girls 10-19 yrs.)*
Popular (in general) communication channels (e.g. TV, radio, Internet, church, community meetings, etc.)
Adolescent specific delivery mechanisms/communication channels
Best way to access the programme intended beneficiaries
Innovative/virtual methodologies (e.g., SMS, Smartphones, Facebook, etc.)?
Lessons learned, good practices, impact/outcomes achieved
Pitfalls, challenges and limitations
Adolescent groups excluded from messaging? Access barriers?
How to reach the *hardest* to reach? (e.g., girls not in school, married, working, disabled, ethnic minorities)
Case study (most impactful platform?)

RESEARCH NEEDS

- *Areas where there is lack of data / Need for more data on working with adolescents*
DHS data? Gaps? Inconsistent/confusing reporting?
Research ideas? Requests?
Location?
Target group/Age/Gender?
Theme (programmatic focus)? Programmatic challenges that require further understanding?
Neglected areas which require advocacy/increased advocacy?
- *Knowledge sharing*
How best to share data/present findings?
How best to package data? Suggestions?

IT/COMMUNICATION CONTEXT (LESSONS LEARNED & FUTURE CONSIDERATIONS)

- *Communication channels*
Urban vs. rural context
Pastoralist context, Refugee context
Appropriate/available technologies and platforms (SMS, mHealth, radio and TV, Internet, etc.) – distinction between in-person and via remote technology
Future capabilities/New opportunities to explore
Target populations (age, gender, ethnicity, etc.)
Thematic programming (reproductive health, nutrition, family planning, etc.)
- *Collaboration*
Partners in previous or current projects
Potential partners – suggestions?
National IT, communication policy (e.g. media freedoms in general, restrictions on media, etc.)?

- *Challenges*

From previous projects/studies?

Communication projects attempted and failed (Why?) Lessons learned?

Success stories (case study)

- *Recommendations*

Appropriate/suggested methods for reaching adolescents (adolescent girls?)

Best methods to reach the hard to reach? (out of school, married, working, etc.)

- *Research*

Gaps in communication strategies? Where? Why?

Interesting/innovative topics for further investigation

CORPORATE RESPONSIBILITY (e.g. private food sector)

Consumer research expertise (target populations?)

Consumer related questions

Delivery channel inventory

Understanding local market (contextually relevant marketing needs)

Actions private sector can take (in consideration of needs of adolescent girls?)

Behaviour change communication (BCC) and message development

Promotion of good nutrition / healthy cooking practices

Collaboration/partners in industry and social accountability

DOCUMENTATION & OTHER REQUESTS

- *Documentation requests*

Do you have any project documentation you can share?

Do you have any recommendations for literature to review? Collected for this project?

- *Other organizations working with adolescents and/or nutrition (free list)*

Existing programmes on AG/nutrition?

Potential areas of collaboration

Adolescent nutrition to follow another ongoing activity, or could lead (e.g. and be followed by RSH)?

- *Potential future partnerships?*

2 – Interview guide: UN agencies, I/NGOs stakeholders and research implementation partners

DATA SHEET

- Country: _____
- Region/District/Community: _____
- Venue: _____
- Date: _____
- Name of interviewer: _____
- Name of translator (if used): _____
- Digital recording code: _____
- General comments and observations:

PARTICIPANT INFORMATION SHEET

Name/Gender	Position	Organisation/ Department	Time in service yrs and month	Type of organisation e.g. UN, INGO, NGO, CSO	Location of organisation e.g work areas

(UN) = United Nations interviews (e.g. WHO, UNICEF, UNFPA, etc.)

(INGO) = international organisational interviews

(NGO) = non-governmental and/or local civil society organisational interviews

[Interviewer will be selective about which questions to include, on the basis of the responses given by respondents. Additionally, the ordering of questions may change].

Q1 – Background

- Please describe your current position/role and responsibilities?
- In what areas of your country does your organisation operate? Who are the intended beneficiaries of your programming?
- In what ways is your organisation involved with adolescents, adolescent girls (more specifically) and/or nutrition?
- Is adolescence in your country understood as distinct time period in a person's life (e.g. childhood, adolescence, adulthood)? If so, what age range does 'adolescence' incorporate? Are any other markers of adolescence used in your country other than age (e.g. puberty, social roles, cognitive capacity, etc.)?
- Has your organisation been involved in adolescent and/or nutrition programme policy development?
- If not clear: What is your organisation's role in the adolescent strategy (or equivalent) and policy? What is your role in the nutrition strategy (or equivalent) and policy?

Q2 – Programme coordination

- Which are the main organizations involved in adolescent/nutrition programming? What do you know about the way they are coordinated? What do you think about the way they are coordinated? How are you involved in the coordination?
- How is the coordination between the government/public health sector and NGOs and civil society? (Probe: accountability of adolescent/nutrition programming)
- Are there different approaches to adolescent/nutrition programming in different parts of the country? Is there a mechanism for alignment across partners supporting adolescent/nutrition programmes that guides joint learning and action towards institutionalization? If not, how do you think this alignment can occur? What linkages can be made between community approaches and the national system?
- (UN, INGO) How is the support from the international community coordinated? (Probe: level of local ownership of programming?) (NGO) How is the support from the regional/district level coordinated?

Q3 – Budgeting

[Questions should reference responses on general coordination above].

- (UN, INGO) Is funding for adolescent nutrition activities available? From where? Do changes in funding vary across regions/districts? Why?
- (UN, INGO) How is the budget allocated for adolescent/nutrition programmes? Will funding be sustained in the long term? Are there any relevant initiatives that are government led but donor supported?
- (UN, INGO) For donor-only supported programmes, are there plans for government to take over?
- Has public/donor funding for adolescent nutrition increased or decreased? What was the impact of this? If it has increased, do you see this as sustainable? Are there important lessons to learn from how the funding is managed?

Q4 – Programme policies and implementation

- What are the existing governmental law or policies in your country that apply to the health of adolescents? Are there any governmental policies that apply specifically to adolescent girls? What are the existing governmental policies that apply to nutrition (if different from above)?
- In your opinion, how well are the current adolescent/nutrition programmes and policies working? Do you think current legislation or policies are sufficient to ensure the nutritional needs of adolescents are being met? Why or why not? Are there gaps in the policy? Where?
- What are the broader gender laws or policies in your country? Do they cover adolescent girls? Do they cover SRH/R? How do they cover women's health, nutrition and food security?
- From a policy perspective, what are the aspirations for adolescent/nutritional programming? On which areas do you feel it should focus?
- How much scope is there for consultation from a broad range of stakeholders on adolescent/nutrition policies? (probe: from practitioners, civil society, NGOs with design expertise etc.)

- What do you think are primary problems that adolescent/nutrition programmes should address?
- What governmental ministry or department do you think is best placed to address these problems?
- In addition to these existing policies, are there any planned or forthcoming policies that would apply to adolescents and/or nutrition? (If yes, probe on when policy is forthcoming, who will be involved in producing the policy, and how will it be implemented) Was your organisation involved in creating these policies? How?
- Over the course of your career, has governmental awareness of the nutritional needs of adolescents changed? Has responsiveness to these needs changed? What, in your opinion, has led to these changes?

Q5 - Challenges

- What are the nutritional needs of adolescents (particularly adolescent girls) in the areas where your programming operates?
- What are the challenges your organisation faces in addressing the nutritional needs of adolescents (including girls)?
- If not clear: What are the biggest challenges adolescents at your programme sites face in accessing adequate nutrition? Are there known barriers for girls in particular? (Probes: early marriage, teen pregnancy, school-drop out, early entrance into labour force, etc.) Do these challenges vary depending on the location of your programming in the country? (Prompt: urban vs rural difference, variations by ethnic group, pastoralism, refugee populations etc.)
- Do you think the government adequately protects the rights of vulnerable adolescents? How could the government do more to help support the nutritional needs of adolescent girls?
- Do you feel you know enough about the nutritional needs of adolescents in your country? If not, what additional data would you need from the communities where your organisation operates?

Q6 – Delivery platforms and communication channels

- What are the existing mechanisms/delivery platforms your organisation uses to communicate with adolescents and/or provide programming to adolescents?
- Who are the intended beneficiaries of these delivery platforms/communication channels? (Probe: school-aged children between the ages of 10-15, etc.) Differences in urban vs. rural, refugee, pastoralist channels? Are there any gaps in the coverage of adolescents in your country using these channels?
- Are there any delivery platforms/communication channels you think should be/can be utilised in your country in order to better reach adolescents? (Probe: Internet, cell phone, etc.) In your opinion, why are these methods not being used now? What are the foreseeable challenges in using these methods?
- Are there any counter communication platforms / delivery platforms / narratives that provide harmful counter narratives? (probe: marketing strategies, religions and cultural beliefs on nutrition)
- How best to reach the hardest-to-reach adolescents? Most vulnerable girls? (Prompt: girls out of school, girls who are married, girls who are working, etc.)

Local programme implementers only (i.e. provincial or district-level stakeholders)

Q7 – Local context (food/nutrition, education, health, economics, socio-cultural, etc.)

- (INGO, NGO) Probe individually on the specific areas of operation where research is to be conducted: In the communities where you work, what is the local food/nutritional context:
 - Foods most frequently available and most commonly consumed? Locations where they are consumed (e.g. school-feeding)? Differences by age group, ethnicity, etc.? Food taboos?
 - Food markets and restaurants (national/international, location, big/small, etc.)? Access barriers (e.g. cost, lack of constructed roads, lack of transport)?
 - Presence of mobile food sellers bringing items from large markets to local communities? Type and costs of selection available?
- Educational context:
 - Number of schools and categorisation by age group (i.e. primary, secondary)

- How long do girls typically stay in school (completion of primary, secondary school?) and what are the main reasons for dropping out? Different for boys?
- Health context:
 - Common concerns and health issues for adolescents, in particular adolescent girls? (Probe: teen pregnancy, SGBV, early/forced marriage, anaemia, son bias when food gets scarce, if married are her husband & children prioritised when food gets scarce, etc.) Consequences?
 - Commonly experienced health problems for pregnant and lactating women? Caregivers of small children?
 - Connection between HIV and nutrition? What challenges do people living with HIV face regarding nutrition?
 - Number and type of health facilities and clinics (public, private and category level)
 - Role of health workers/Bias against providing services for underage or unmarried girls (e.g. contraceptive services)?
 - Informal health services – e.g. traditional sources of care and their popularity of adolescents
- Economic context:
 - Most common source of income/employment (Adults? Adolescents)?
 - Presence of local industries for employing adolescents and young women (e.g. garment factory)
- Socio-cultural characteristics and/or demographics to be aware of:
 - Presence of ethnic groups (where, unique characteristics of)
 - Presence of migrating populations (where, why)
 - Important socio-cultural norms to be aware of
 - Gender inequalities (violence, abuse, sexual, economic, psychological, cultural/social)
 - (If programme targets adolescent girls) What parameters do you use to define this group and why did you choose these?
 - How does this compare to how adolescence is defined by members of this community?
 - Alternative definitions of ‘adolescence’ (i.e. distinct from what was communicated above)
- Communication context:
 - Is Internet easily available, accessible and affordable?
 - Use of mobile phones (type of phone, possession of phone (mother/father/adolescents, etc.)?)
 - Other forms of non-technology communication (e.g. sports clubs, religious platforms, recreational clubs, peers, etc.)?
 - Other forms of communication technology, social media, etc. often used by adolescents

Q8 – Service providers (local)

- (INGO, NGO) Probe individually on the specific areas of operation where research is to be conducted: Who are the main providers of adolescent/nutrition services in the provinces/districts/communities where you work?
- (INGO, NGO) Who are the main providers of health information in the communities where you work? (Probe: community health volunteers, public/private health facility staff, community and religious leaders, mothers/fathers, peers etc.)
- What nutritional services are currently provided at the community level? Do any of these services target adolescents? Adolescent girls?

Q9 – Conclusion

- Given our discussions, what do you feel has been the most important ‘take away’ for addressing adolescent nutrition needs, in particular the needs of adolescent girls, in your country?
- Do you have any project documentation you can share?
- Is there anything else you would like to discuss? Do you have any questions for us?
- Thank you and close

3 – Interview guide: Government representative

DATA SHEET

- Country: _____
- Region/District/Community: _____
- Venue: _____
- Date: _____
- Name of interviewer: _____
- Name of translator (if used): _____
- Digital recording code: _____
- General comments and observations: _____

PARTICIPANT INFORMATION SHEET

Name/Gender	Position	Organisation/ Department	Time in service yrs and month	Type of facility e.g. gov't department, ministry	Location of facility e.g work areas

(N) = national level interviews

(P, D) = provincial/district level interviews

[Interviewer will be selective about which questions to include, on the basis of the responses given by respondents. Additionally, the ordering of questions may change].

Q1 – Background

- Please describe your current position/role and responsibilities?
- In what ways are you involved with adolescents, adolescent girls (more specifically) and/or nutrition?
- (National) Have you been involved in adolescent and/or nutrition programme policy development?
- Is adolescence in your country understood as distinct time period in a person's life (e.g. childhood, adolescence, adulthood)? If so, what age range does 'adolescence' incorporate? Are any other markers of adolescence used in your country other than age (e.g. puberty, social roles, cognitive capacity, etc.)?
- If not clear: What is your role in the adolescent strategy (or equivalent) and policy? What is your role in the nutrition strategy (or equivalent) and policy?

Q2 – Programme coordination

- Which are the main organizations involved in adolescent/nutrition programming? What do you know about the way they are coordinated? What do you think about the way they are coordinated? How are you involved in the coordination?
- How is the coordination between the government/public health sector and NGOs and civil society? (Probe: accountability of adolescent/nutrition programming)
- Are there different approaches to adolescent/nutrition programming in different parts of the country? Is there a mechanism for alignment across partners supporting adolescent/nutrition programs that guides joint learning and action towards institutionalisation? If not, how do you think this alignment can occur? (Regional, District) What linkages can be made between community approaches and the national system?
- How is the support from the international community coordinated? (Probe: level of local ownership?)
- How are the approaches/programs for adolescents and gender coordinated? Is there a relationship between the two topics?

Q3 – Budgeting

[Questions should reference responses on general coordination above].

- Is funding for adolescent / nutrition activities available? From where?
- Do changes in funding vary across districts/provinces? Why?
- (N) How is the budget allocated for adolescent/nutrition programmes? Will funding be sustained in the long term? Are there any relevant initiatives that are government led but donor supported? (Probe: percentage of donor support and for how long?)
- For donor-only supported programmes, are there plans for government to take over?
- Has public/donor funding for adolescent nutrition increased or decreased? What was the impact of this? If it has increased, do you see this as sustainable? Are there important lessons to learn from how the funding is managed?
- How do you envisage the scale-up of adolescent/nutrition programming in the next few years? Do you have concerns?
- Are there known barriers to scaling-up and sustainability of adolescent/nutrition programmes in the country? (Probes: technical support, skills vacuum, political reticence, resourcing, accessibility, retention, coordination, training, inter-sectoral constraints (poor roads, logistics), competition for investment from other government ministries?)
- Is adolescent girls health recorded as gender budgeting?

Q4 – Programme policies and implementation

- What are the existing governmental law or policies in your country that apply to the health of adolescents? Are there any governmental policies that apply specifically to adolescent girls? What are the existing governmental policies that apply to nutrition (if different from above)?
- In your opinion, how well are the current adolescent/nutrition programmes and policies working? Do you think current legislation or policies are sufficient to ensure the nutritional needs of adolescents are being met? Why or why not? Are there gaps in the policy? Where?

- What are the broader gender laws or policies in your country? Do they cover adolescent girls? Do they cover SRH/R? How do they cover women's health, nutrition and food security?
- From a policy perspective, what are the aspirations for adolescent/nutritional programming? On which areas do you feel it should focus?
- How much scope is there for consultation from a broad range of stakeholders on adolescent/nutrition policies? (probe: from practitioners, civil society, NGOs with design expertise etc.)
- What do you think are primary problems that adolescent/nutrition programmes should address?
- What governmental ministry or department do you think is best placed to address these problems?
- In addition to these existing policies, are there any planned or forthcoming policies that would apply to adolescents and/or nutrition? (If yes, probe on when policy is forthcoming, who will be involved in producing the policy, and how will it be implemented)
- Over the course of your career, has governmental awareness of the nutritional needs of adolescents changed? Has responsiveness to these needs changed? What has led to these changes?

Q5 - Challenges

- What are the nutritional needs of adolescents (particularly adolescent girls) in your country?
- What are the challenges your country faces in addressing the nutritional needs of adolescents (including girls)?
- If not clear: What are the biggest challenges adolescents in your country face in accessing adequate nutrition? Are there known barriers for girls in particular? (Probes: early marriage, teen pregnancy, school-drop out, early entrance into labour force, etc.) If applicable, revert back to Q3 block: Are there any laws in your country that address child marriage, school attendance, child labour, etc.?
- Do you think the government of your country adequately protects the rights of vulnerable adolescents?
- How could the government do more to help support the nutritional needs of adolescent girls?
- (P,D) What local capacity is needed to address the nutritional needs of adolescents, particularly adolescent girls? (Probe: knowledge and training, partnerships, inter-governmental coordination, etc.)
- (N) What national capacity is needed to address the nutritional needs of adolescents, particularly adolescent girls? (Probe: knowledge and training, partnerships, inter-governmental coordination, etc.)
- What challenges do you face in implementing these/other changes within your role/department/ministry?

Q6 – Knowledge, training and data requests

- Do you feel you know enough about the nutritional needs of adolescents in your country?
- Do you feel you have enough training to support work on adolescent nutrition? Would you like more training or support? If so, what kind?
- Do you need additional data on the nutritional status of adolescents in your country? Adolescent girls in your country? (Probe: Is there any recently reported data such as DHS/MICS that is inconsistent or confusing are you would like additional clarity on?)

Q7 – Delivery platforms and communication channels

- What are the existing mechanisms/delivery platforms for governmental ministries to communicate with adolescents and/or provide programming to adolescents in your country?
- Who are the intended beneficiaries of these delivery platforms/communication channels? (Probe: school-aged children between the ages of 10-15, etc.) Differences in urban vs. rural, pastoralist community, refugee community channels? Are there any gaps in the coverage of adolescents in your country using these channels?
- Who are the hardest to reach group and why?
- Are there any delivery platforms/communication channels you think should be/can be utilised in your country in order to better reach adolescents? (Probe: Internet, cell phone, etc.) In your opinion, why are these methods not being used now? What are the foreseeable challenges in using these methods?

- Are there any communication methods / delivery platforms that are currently spreading harmful messages to adolescents?

Q8 – Conclusion

- Given our discussions, what do you feel has been the most important 'take away' for addressing adolescent nutrition needs, in particular the needs of adolescent girls, in your country?
- Do you have any project/policy documentation you can share?
- Is there anything else you would like to discuss? Do you have any questions for us?
- Thank you and close

4 – Interview guide: Representative from private sector / industry

DATA SHEET

- Country: _____
- Region/District/Community: _____
- Venue: _____
- Date: _____
- Name of interviewer: _____
- Name of translator (if used): _____
- Digital recording code: _____
- General comments and observations: _____

PARTICIPANT INFORMATION SHEET

Name/Gender	Position	Organisation/ Department	Time in service yrs and month	Type of industry e.g. food, garment, media	Location of industry e.g work areas

(FI) = food industry interviews

(MC) = media and communication industry interviews

(PC) = private clinic/private health facility interviews

[Interviewer will be selective about which questions to include, on the basis of the type of industry interviewed and responses given by respondents. Additionally, the ordering of questions may change].

Q1 – Background

- Please describe your current position in the organisation (probe: role and responsibilities?)
- In what areas of your country does your organisation operate?
- Who are the intended customers / consumers of your product or service?
- If not clear: in what ways is your organisation involved with adolescents, adolescent girls (more specifically) and / or nutrition? (i.e. customers, consumers, aim of organisation etc.)
- Is adolescence in your country understood as distinct time period in a person's life (e.g. childhood, adolescence, adulthood)? If so, what age range does 'adolescence' incorporate? Are any other markers of adolescence used in your country other than age (e.g. puberty, social roles, cognitive capacity etc.)?
- Has your company / organisation been involved the development of products, programmes, activities or services for adolescent girls?
- Would you like for your industry / company / organisation to be engaging with adolescent customers / consumers more? And why? How do you envision your organisation to contribute to the nutrition sector / work with adolescents in the future?

Q2 – Lay of the land: competition and coordination

- Which are the main organizations involved in adolescent nutrition or adolescent specific communication services your country? Do you work together with these organisations or do you compete against them? Who are your main competitors in market segment / space?
- Is there a mechanism for alignment across industry partners providing adolescent specific communication products / services / nutrition products / nutrition related services that guide institutionalization? If not – could this be useful for your industry?
- What linkages can be made between industries such as yours and adolescent/nutrition programming of INGOs / UN agencies? Are there any existing mechanisms, platforms, or meetings that private industries can use to communicate with the government, health sector and INGOs? Is there a need for such mechanisms?
- Are there any foreseeable corporate / political / practical barriers in your country that might prevent your industry's involvement in the adolescent engagement / nutrition space? (Probes: technical support, skills vacuum, political reticence, resourcing, accessibility, retention, coordination, training, inter-sectoral constraints (poor roads, logistics), competition for investment from other industries, prize of goods, import barriers, unfair competition through subsidies etc.). Can you recommend any solutions to address these barriers?

Q3 – Enabling business environment

- How is the coordination between the government and private industries in your country when it comes to adolescent engagement and / or nutrition?
- Are there any existing governmental law, regulations or policies in your country that impact your industry and would apply to the health of adolescents? (Prompt: (FI) labour standards, food standards, food subsidies, unfair competition structures (i.e. monopolies on specific type of food) (CI) communication policies, public TV licencing fees, costs of airplay; restrictions to broadcasting etc.)
- In your opinion, how well are these laws or polices working? Are they written, but not implemented or enforced? Are there 'unwritten' laws that *are* implemented or enforced? Do you think current legislation or policies are sufficient to ensure the effective working of industry partners? Why or why not? Are there gaps in the policy or practice? Where?

Q4 - Market behaviour

[Questions should reference responses on section Q3 above]

- Are people willing to pay for the service you offer? And who pays for which service / good? How is the market behaviour of adolescents and their caregivers in [enter name country]? Can you give an example of when you changed your strategy / product / service and the positive / negative this had on the purchasing behaviour of your customer / consumers?
- [If main focus is not on adolescent nutrition / adolescent communication strategies / platforms] Is part of your budget dedicated for adolescent nutrition activities and/or adolescent communications strategies? From where? Are there any relevant initiatives that are supported by your industry?
- How do you envisage the scale-up of adolescent/nutrition programming can occur within your industry in the next few years? Do you have concerns?
- Do you think it is profitable to invest in adolescent nutrition / adolescent specific communication activities / target the adolescent segment of the market? And why?

Q5 – Corporate responsibility

- Is there a push for Corporate Social Responsibility (CSR) projects / activities in your sector?
- (FI) What do you think is/can be the role of your industry in providing good nutrition for adolescents? (Prompt: fortification, marketing and nutrition education, vitamin and mineral supplements, healthy cooking demonstrations, etc.) Do you think that improving adolescent nutrition, particularly the nutrition of adolescent girls, will be beneficial to your industry? How so? (Prompt: increased worker productivity, increasing market for (other) goods, etc.)
- (MC) What do you think is/can be the role of your industry in communicating with adolescents on their health, well-being and nutritional needs? (Prompt: media savvy age groups, proponents for family/community change, etc.) Can your industry suggest any innovative communication strategies?
- (PC) What do you think is the role of the private health industry in providing for the health and nutritional needs of adolescents? What services, if any, do you provide for adolescents that you think are better utilised than publicly offered services? (Prompt: family planning and contraceptive methods, etc.) Why do you think adolescents prefer private health clinics over public institutions for these services?
- Has your industry made any commitments to developing policies that integrate responsible adolescent/nutrition practices into daily business operations? Has your industry made any commitments to report on progress made toward implementing these policies?

Q6 – Consumer insight and data requests

- From your experience which marketing strategies work to engage adolescents? And what does not? Is there a difference as to what works for girls / boys? Or to target adults (parents, teachers) buying for adolescents? And what kind of insights can you share for what works for reaching the most vulnerable girls?
- What kind of contextually relevant insight into marketing/understanding of local market in your country can you share? (Prompt: differences between urban vs rural, refugee, pastoralist populations, adolescent consumer preferences, etc.)
- Do you have any consumer research or market data related to adolescents/nutrition in your country that you can share?
- Do you feel you know enough about the nutritional needs and desires of adolescents in your country? And how does this knowledge help you sell your product / service? How do you think knowledge about adolescent girls' desires / needs help you sell your product?
- Do you need additional data on the nutritional status of adolescents in your country? Adolescent girls in your country? (Probe: Is there any recently reported data such as DHS that is inconsistent or confusing are you would like additional clarity on?)

Q7 – Delivery platforms and communication channels

- How do you market your goods (FI) / the goods that you are to market (MC)? What works to reach adolescent girls and what not?
- What are the existing mechanisms/delivery platforms for your industry to communicate with adolescents in your country? (Elicit inventory of delivery channels and the aim / objective of these channels, who they consider the hardest group to reach)
- Who are the intended beneficiaries of these delivery platforms/communication channels? Differences in channels for urban vs. rural, pastoralist, refugee populations? Are there any gaps in the coverage of adolescents in your country using these channels?
- (FI) Does your industry have any experience in behaviour change communication (BCC) and message development in order to mobilise change? (Prompt: promotion of good nutrition and nutritious cooking practices, purchasing power and persuasion of market behaviour of adults / adolescents etc.)
- Are there any delivery platforms/communication channels you think your industry can use in order to better reach adolescents? (Probe: Internet, cell phone, events in schools, sport clubs etc.) In your opinion, why are these methods not being used now? What are the foreseeable challenges in using these methods?

Q8 – Conclusion

- If not asked previously: Do you have any project documentation you can share? Consumer research?
- Is there anything else you would like to discuss? Do you have any questions for us?
- Thank you and close

5 – Focus group discussion/interview guide: Community leaders, members and caregivers

DATA SHEET

- Country: _____
- Region/District/Community: _____
- Venue: _____
- Date: _____
- Name of interviewer: _____
- Name of translator (if used): _____
- Digital recording code: _____
- General comments and observations: _____

(include characteristics of commune/village; may also include general impressions of nutritional status, or overall health of participants, e.g., weight to height ratio, etc. or any particular water, hygiene, sanitation observations)

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PARTICIPANT INFORMATION SHEET Focus group discussion guide – Demographic information

Gender	Age	Years of education	Role in community e.g. leader, member	How elected or recruited (community leaders)

Demographic Information

- Gender
- Age
- Marital status
- Religion
- Ethnicity
- Occupation
- Years of education (primary, secondary, etc.)
- Children? Number of children in care? Age and gender of children?
- Family setting/home life (i.e. number and type of persons in household)
- General income range/How do you make your living

[Interviewer will be selective about which questions to include, on the basis of the responses given by respondents. Additionally, the ordering of questions may change. Interviewees will be asked to specifically consider the adolescents in their own community/population when answering the questions].

(CL) = community leader interviews (community leader, women’s leader, religious leader, etc.)

(CM) = community member interviews

(CG) = caregiver interviews (persons currently caring for/living with adolescents)

Q1 – Background

- Please introduce yourself and describe your role in the community.
- Do you have a role with regard the health or well-being of the members of your community? How?
- In what ways are you involved with adolescents, adolescent girls (more specifically) and/or nutrition?
- Is adolescence in your country understood as distinct time period in a person's life (e.g. childhood, adolescence, adulthood)?
- How would you define adolescence in your community? (probe: what age range does 'adolescence' incorporate? Are any other markers of adolescence used in your community other than age such as puberty, social roles, cognitive capacity, etc.)
- Do you think the way you define adolescence and the way NGOs/government defines adolescence are similar? Different? Why or why not? If there is a mismatch, are there any consequences to this?

Q2 – Programme coordination and implementation (CL)

- Which are the main organizations / stakeholders involved in adolescent/nutrition programming in your community? What do you know about the way they are coordinated? What do you think about the way they are coordinated? How are you involved in the coordination?
- In your opinion, how well are the current adolescent/nutrition programmes working?
- How much scope is there for community consultation with adolescent/nutrition programme implementers? (probe: from practitioners, civil society, NGOs, etc.) How do you think you could be better included in consultations with programme implementers?
- What do you think are primary problems that adolescent/nutrition programmes should address? Are these problems currently being addressed in your community? Why or why not?

Q3 – Anthropology of Food

- Economics/livelihoods:
 - Who is responsible to provide food for the family? How? Who pays?
 - What economic activities are involved in providing money to pay for food?
 - Does household grow/harvest their own food? What?
- Social norms:
 - Who is responsible for shopping at the market? Selecting/purchasing food?
 - Cooking/preparing responsibilities?
 - How many meals eaten per day? What time? Snacking in between meals? What snacks (packaged foods, etc)?
- Cultural influences:
 - How is food divided in the household?
 - Who eats and when? (e.g. social hierarchy in the household)
 - How are portions determined?
 - Differences in types of food consumed according to age, gender, etc.?
- Locally available food/markets:
 - Normal food stuffs – essential food (e.g., rice eaten every day?)
 - Particular food stuffs for different consumers (gender / age components etc)?
 - Special food for occasions? What kind of food? What type of occasion?
 - Favourite foods, things considered 'treats'?

Q4 – Food & Nutrition

Part A: Socio-cultural norms and food taboos (women and adolescent girls)

- Are there any socio-cultural norms that apply only to girls or women regarding the harvesting, preparation or consumption of food? Who is responsible for food preparation? At which age? Any foods forbidden to girls or women? Why?
- Are there any specific food taboos or familial conventions that girls must follow? (Prompt: eating last, receiving smallest portion of family food, etc.) Why?

- Are there any specific food taboos or socio-cultural conventions that pregnant and lactating women must follow? (Prompt: forbidden/must have foods during pregnancy or while breastfeeding, hot/cold food consumption requirements, need to eat food at a certain pace or at a specific time of day, any other noticeable/preferred changes in diet during this period, etc.) Why?
- Do you see this as different from the needs of boys and men? What are the nutritional needs of adolescent girls and women of childbearing age in your community? Why or why not? Does this change when adolescents get older?
- If not clear: What are the biggest challenges girls and women in your community face in accessing adequate nutrition? (Probes: early marriage, teen pregnancy, school-drop out, early entrance into labour force, son-bias if resources are scarce etc.)

Part B: Definitions and barriers/access (good food, bad food, healthy food, not healthy food)

- What is nutrition for adolescents? What does it mean for an adolescent to have adequate nutrition? Is this different for girls and boys? What would this consist of the daily diet of an adolescent? Do adolescent girls eat differently than adolescent boys?
- Do you think adolescents in your community receive adequate nutrition? Why or why not? Are there any groups of adolescents in your community that struggle more than others to receive adequate nutrition? Why?
- What is the typical diet of an adolescent in your community? What would they typically eat/have access to in a normal day? Do adolescent girls eat differently than adolescent boys?
- Are there any **access barriers** in your community that prevent adolescents, and their families, from receiving adequate nutrition? (Prompt: cost, time, preparation, location of market) Any barriers faced by adolescent girls in particular (prompt: What if resources are scarce? Is there a son-bias)?
- What do you think is the most significant challenge in this community preventing adolescents from receiving adequate nutrition? Adolescent girls?
- What would make it easier for adolescents in your community to receive adequate nutrition? What would help them most to have access to nutritious food?

Q5 – Education

- Are children in this community typically in school? Is there a certain age at which children/adolescents in this community stop going to school? Does this general trend differ from boys to girls? Why?
- Do you think there are any differences in family priorities over girls' vs boys receiving an education? Why or why not?
- Who in the family/community typically makes the decision for children to go to school? Who typically makes the decision for children/adolescents to stop going to school?
- What, if any, are the consequences for adolescent girls dropping out of school? Are there any socio-cultural consequences for girls staying in school (e.g. not preferred for marriage)?
- What are the main challenges adolescent girls in your community face in receiving an education? (Prompt: teen pregnancy, entering the workforce, etc.)
- What would make it easier for adolescents, particularly adolescent girls, in your community to continue their education (i.e. not drop out)? What help would they need to stay in school?

Q6 – Sexual, reproductive & maternal health issues

- At what age do girls/women normally get pregnant in your community? (if at an early age) Is this considered a problem? Why?
- What are the primary sexual, reproductive and maternal health issues girls and young women in your community face? (Prompt: teen pregnancy, access to family planning, gender-based violence, etc.) Do you see these challenges as having increase/decreased in recent years? Why or why not?
- When adolescent girls in your community are in need of health services (cite above responses) whose advice do they usually seek? (For minor and major health issues) Who, if anyone, would they normally seek out for health services? (Prompt: public/private clinic, social workers, traditional or spiritual healer, etc.)

- Are there some provider's/places adolescent girls don't want to go for healthcare? Why? Consequently, are there some provider's/places adolescent girls would prefer to go to for healthcare? Why?
- What do you think is the most significant challenge girls and young women in your community experience with regards to access to sexual, reproductive and maternal health services?
- If unclear: Do you think these challenges are faced by adolescent girls and young women in particular? Are these challenges faced more frequently by younger girls and women rather than older women or others in your community? Why? (Prompt: bias against providing health services to adolescent girls or unmarried women, e.g. contraceptives, etc.)
- What do you think are the consequences for adolescent girls in particular when they do not have access to these services? (Prompt: school drop-out, maternal morbidity and mortality, adverse child health outcomes, etc.)
- What would make it easier for adolescent girls in your community to use community health services (i.e. sexual, reproductive and maternal health services)? What would help adolescent girls to start or continue using these services?
- What connection is there between HIV and nutrition? How important is nutrition for people living with HIV? What challenges do people living with HIV face regarding nutrition?

Q7 – Child rearing & adolescent Influencers

- Within your community, who typically raises children?
- What influence do you have over adolescents in your community?
- Who in the community or family has the most control over adolescent behaviour? Who in the community or family typically makes decisions on behalf of adolescents? How long does this period generally last? Does this responsibility shift/change over time (e.g. as adolescents grow older is community/family influence lessened? when girls and boys enter the workforce? when girls marry)?
- Who in the community or family do you think has the most influence over adolescent behaviour? (e.g. mother and father, grandparent, community leader(s), older peers, older siblings, other adolescents (boys? girls?), etc.)?
- If unclear: Who has the most authority over adolescents in your community? Is this the same for adolescent girls specifically? Does authority lessen as adolescents get older? Do key influencers of adolescent behaviour change from family to peers?
- Where do you think adolescent girls receive most of their information from regarding food and nutrition, education, and health services? Who gives them advice? Who communicates with them on a regular basis? How good/useful do you think these messages are?
- Who/what do you think is the most reliable source of information to adolescents? Adolescent girls?

Q8 – Knowledge and data requests

- Do you feel you know enough about the nutritional needs of adolescents in your community, particularly the needs of adolescent girls?
- Do you need additional data on the nutritional status of adolescents in your community? Adolescent girls in your community? What kind of information would you like to have?

Q9 – Delivery platforms and communication channels

- How do you receive information? Share with others?
- How do adolescents receive information? What are the best methods of communicating with adolescents?
- How do you communicate with adolescents in your community? Or with your own son/daughter? How do leaders in this community communicate with adolescents?
- What are the existing mechanisms/delivery platforms for the government and/or NGOs to communicate with adolescents and/or provide programming to adolescents in your community?
- Who are the intended beneficiaries of these delivery platforms/communication channels? (Probe: school-aged children between the ages of 10-15, etc.)

- Are there any gaps in the coverage of adolescents in your community using these channels? (e.g. not reaching out-of-school children?) What groups do you think are being excluded? Do you have any suggestions for how these groups can be better included?
- How much (if at all) do these mechanisms/channels of information influence adolescent decisions/practice?
- Are there any delivery platforms/communication channels you think should be/can be utilised in your country in order to better reach adolescents? (Probe: Internet, cell phone, community based strategies such as local groups or sports clubs, etc.) Are there any foreseeable challenges in using these methods?

Q10 – Conclusion

- Given our discussions, what do you feel has been the most important ‘take away’ for addressing adolescent nutrition needs, in particular the needs of adolescent girls, in your community?
- Do you have any documents you would like to share?
- Is there anything else you would like to discuss? Do you have any questions for us?
- Thank you and close

6 – Technology survey

Target number of interviewees (per community): 20 (10 girls/young women, 10 boys/young men)
Target age group: Adolescents and youth aged 10-25 yrs

Demographic information

Gender: *Male, Female* [Circle]

Age:

Marital status: *Married, Single, Divorced, Widowed* [Circle]

Children: *Yes, No* [Circle]

Number of children:

Age of children:

Gender of children:

Family setting/home life (i.e. number and type of persons in household):

General income range/How do you make a living:

Ethnicity:

Occupation:

Years of education:

Religion:

Location/Village Name:

Q1 – Radio

- Do you listen to the radio? *Yes, No* [If no, ask follow-up on ‘why’ then skip to Question 2]
If No – Why not?
- How do you listen (e.g. alone, with parents, with friends)?
- Where do you listen (e.g. at home, on the bus)?
- How often? *Less than once a week, Once a week, Every day* [Circle]
- What radio station(s) do you listen to most often?
- What type of radio programme do you like the most?
Why?
- What types of radio programme do you like the least?
Why?
- When do you usually listen to the radio (e.g. day, time)?
- On average, how many hours per day/week do you listen to the radio?

Q2 - Television

- Do you watch television? *Yes, No* [If no, ask follow-up on ‘why’ then skip to Question 3]
If No – Why not?
- How do you watch television (e.g. alone, with parents, with friends)?
- Where do you watch television (e.g. at home, at an Internet café, other social setting)?
- How often? *Less than once a week, Once a week, Every day* [Circle]
- What television channel(s) do you watch most often?
- What type of TV programme do you like the most?
Why?
- What type of TV programme do you like the least?
Why?
- When do you usually watch TV (e.g. day, time)?
- On average, how many hours per day/week do you watch television?
- What about television advertisements – are there any commercials that you particularly like?
Why?

Q3 - Internet

- Do you connect / use the Internet? *Yes, No* [If no, ask follow-up on 'why' then skip to Question 4]
If No – Why not?
- How do you connect to the Internet (via computer, phone, Internet café, school)?
- How often? *Less than once a week, Once a week, Every day* [Circle]
- For what purpose do you use the Internet?
- Which websites do you like to visit?
Why?
- When do you usually use the Internet (e.g. day, time)?
- Where do you usually use the Internet (e.g. location)?
- Do you use the computer alone or with others?
- On average, how many hours per day do you use the Internet?
- Is your internet usage supervised by your parents or others? *Yes, No* [Circle]

Q4 – Mobile phone

- Do you have access to a mobile phone for your use (stress that this can be a co-used phone)? *Yes, No*
[If no, skip to Question 5]
- How often is this phone charged/functional? *Not at all, Less than once week, Once week, Every day*
[Circle]
- Is this phone capable of sending and receiving phone calls? *Yes, No* [Circle]
- Does the phone currently have credit and able to make a call? *Yes, No* [Circle]
- Do you make or receive calls? *Yes, No* [Circle]
- Who do you frequently call or receive calls from?
- Is this phone capable of sending and receiving text messages? *Yes, No* [Circle]
- Can you read text messages from the phone? *Yes, No* [Circle]
- Do you make or receive text messages? *Yes, No* [Circle]
- Who do you frequently text or receive texts from?
- How is the network reception in your area? *No reception, Not very good, Good, Excellent* [Circle]
- Can you make or receive a phone call using this phone from inside your home? *Yes, No* [Circle]
- Is there another location where cell reception is good/better than within your home? Where?
- What phone company provides service for this phone?
- Do you use the phone to connect to the Internet? *Yes, No* [Circle]

Q5. Social networks – mobile phone

- Do you know of anyone who has a mobile phone? *Yes, No* [If no, skip to Question 6]
- Could you list the persons who you are closest to (up to 5) who have a mobile phone and tell me how you are related to them [husband, mother-in-law, friend, etc.]?
- Under what circumstance would you go to these persons to borrow their phone (e.g. If your phone was out of order...?)

First name/initials*	Relationship	Borrow phone?			
a _____	_____	f Never	Emergency	Occasionally	Anytime
b _____	_____	g Never	Emergency	Occasionally	Anytime
c _____	_____	h Never	Emergency	Occasionally	Anytime
d _____	_____	i Never	Emergency	Occasionally	Anytime
e _____	_____	j Never	Emergency	Occasionally	Anytime

Please describe the relationship ties between persons listed above. Note: The grid will only be filled completely if interviewee listed 5 names. [VC = very close; C = close; NVC = not very close/strangers]

	Relationship 5b	Relationship 5c	Relationship 5d	Relationship 5e
Relationship 5a				
	Relationship 5b			
		Relationship 5c		
			Relationship 5d	

Q6 – Social media

- a. Do you use social media? *Yes, No* [If no, skip to Question 8]
- b. What sites / platforms do you use?
- c. Which ones do you like to use the most? [List up to 3]
 - Site / Platform 1:**
 - Site/ Platform 2:**
 - Site / Platform 3:**
- d. Which platform do most of your peers/friends use?

Why do you like this platform?
 Why do you like this platform?
 Why do you like this platform?

-----[Taking each site or platform in turn: **Platform 1**]-----

- e. How often do use that site / platform? *Less than once week, Once week, Every day* [Circle]
- f. How do you connect to that site / platform (e.g. by phone / laptop / shared computer etc.)?
- g. What do you use that site / platform for (e.g. chat, get news, share photos, etc.)?
- h. Who do you communicate with on this site / platform?
- i. What type of posts do you like?
- j. Approximately how many connections do you have on that site / platform?
- k. Do you trust that site / platform?
- l. Have you ever experienced difficulties (e.g. misinformation, cyber bullying, etc.) through that site?
- m. Who (if anyone) supervises your online interactions?

-----[Taking each site or platform in turn: **Platform 2**]-----

- e. How often do use that site / platform? *Less than once week, Once week, Every day* [Circle]
- f. How do you connect to that site / platform (e.g. by phone / laptop / shared computer etc.)?
- g. What do you use that site / platform for (e.g. chat, get news, share photos, etc.)?
- h. Who do you communicate with on this site / platform?
- i. What type of posts do you like?
- j. Approximately how many connections do you have on that site / platform?
- k. Do you trust that site / platform?
- l. Have you ever experienced difficulties (e.g. misinformation, cyber bullying, etc.) through that site?
- m. Who (if anyone) supervises your online interactions?

-----[Taking each site or platform in turn: **Platform 3**]-----

- e. How often do use that site / platform? *Less than once week, Once week, Every day* [Circle]
- f. How do you connect to that site / platform (e.g. by phone / laptop / shared computer etc.)?
- g. What do you use that site / platform for (e.g. chat, get news, share photos, etc.)?
- h. Who do you communicate with on this site / platform?
- i. What type of posts do you like?
- j. Approximately how many connections do you have on that site / platform?
- k. Do you trust that site / platform?
- l. Have you ever experienced difficulties (e.g. misinformation, cyber bullying, etc.) through that site?
- m. Who (if anyone) supervises your online interactions?

Q7 – Social networks – social media

- a. Could you list the persons who you are closest to on social media and tell me how you are related to them [husband, mother-in-law, friend, etc.]?
- b. What social media platform do you connect with them on?

First name/initials*	Relationship	Social media?
a _____	_____	f _____
b _____	_____	g _____
c _____	_____	h _____
d _____	_____	i _____
e _____	_____	j _____

Please describe the relationship ties between persons listed above. Note: The grid will only be filled completely if interviewee listed 5 names. [VC = very close; C = close; NVC = not very close/strangers]

	Relationship 7b	Relationship 7c	Relationship 7d	Relationship 7e
Relationship 7a				
	Relationship 7b			
		Relationship 7c		
			Relationship 7d	

Q8. Other communication channels

- a. Do you use any communication channels that are not online / accessible via technology? (e.g. youth clubs, sports, etc.)? *Yes, No* [Circle]
- b. What channels do you use? [List up to 5]
 - 1.
 - 2.
 - 3.
 - 4.
 - 5.
- c. What channel do you use most often?
- d. How often do use this channel? *Less than once week, Once week, Every day* [Circle]
- e. Which channels communication channels do you prefer?
 - Why?

**Only record first name or initials. Names will not be used in data analysis or the final report.*

7 – Adolescent workshop: 10-14 years old

[Age and gender segregated groups. Activities can be modified based on the type of delivery platform].

Target adolescent girl (aged 10-14 yrs) group size: 8-10

Target adolescent boy (aged 10-14 yrs) group size: 8-10

Time estimation: 2.5 hours

Introduction (10mins)

- Thank participants for taking part.
- Explanation of study: specific, visual, simplified and contextually relevant.
- Clearly present information about the purpose of the session and how information generated will be used.
- Introduce confidentiality, anonymity, no right or wrong answer, free to stop interview/withdraw participation at any time with no negative consequences.
- Setting ground rules/ group contract to discuss the importance of confidentiality and ensure participants keep each other's opinions and experiences confidential.

A day in the life of...timeline (20-30mins)

- Purpose of the activity/objectives (a day during the week? on the weekend?)
- Distribution of paper and drawing materials/drawing horizontal timeline
- Questions to prompt timeline:
 - When do you wake up? Go to sleep?
 - When eat? Where? What?
 - Experiences/sources of food
 - What is good food? What is bad food? What makes food easy for you to get to? What makes it or hard for to get to?
 - Any time spent doing other 'typical activities' (food preparation, etc.)
 - What kind of household, agricultural or work responsibilities do you have and where?
 - What time do you spend at school or studying? If not in school, what normal activity during day?
 - Any time spent caring for children/receiving care from others?
- Discussion of drawings/timelines (Have the group reflect on each others timelines...)
- Discussion: Day to day decision making exercise. Which decisions adolescents can make themselves and which they cannot? And why? *Probe food choices*

From childhood to adolescence to adulthood (30mins)

- Provide a vignette about adolescent nutrition / adolescence to inspire the participants to talk about their own lives...
- Distribution of paper and drawing materials/drawing childhood, adolescence and adulthood
 - Thoughts about being an 'adolescent'...what does this mean to you? To your family/community?
 - How do you know when someone is a child? Draw.
 - How do you know when someone becomes an adult? (prompt: physical, social, cultural, psych markers, etc.) Draw.
 - Where do you see yourselves? In one of these categories? Is there an in-between? If so, can you draw the in-between?
- Discussion: Where does your family/community see you as (child, adolescent, adult, etc)? Government? Why? Do you agree with this assessment? Why or why not?
- Discussion: What barriers/challenges do you face as an adolescent (e.g. work, education, etc.)?
- Discussion: Aspirations. Who do adolescents look up to and where do they envision themselves in a couple of years / when they are adults?
 - Draw where you will be having dinner in 10 years? What will you eat and with whom?

FOOD/REFRESHMENT BREAK (10mins)

Social network mapping and communications channels (50-60mins)

Objective: to find out where adolescents go to gather information on topics important to them: who do they communicate, where, why and how often?

Materials needed:

- Big sheets of paper (A1)
- A4 papers
- Coloured pens and pencils

Instructions:

- *Step 1:* Ask participants to draw an image of themselves in the middle of a large A1 paper. They can use coloured pens and papers. Ask them to draw a circle around the image they drew.
- *Step 2:* Ask the participants to draw four more circles (See Image 1). Ask the participants to draw or free list the people they spend time with on a separate piece of A4 paper.
- *Step 3:* Ask the participants to categorize the people they free listed on the big A1 paper - those they “spend much time with most” in the circle directly around them and those with “whom they spend less time” further away from their own image.
- *Step 4:* Ask the participants to draw or list per person that they drew on the A1 paper “how they communicate” – i.e. per phone, online on social networks, in person – and “where they meet typically” – i.e. in the sport club, at school, at home, in church, study groups, cultural ceremonies etc.
- *Step 5:* Ask the participants to put a star (*) next to the people they ask for advice or places (**) where they look for information / go to learn. Which relationships are positive (enabling) and which ones may be more challenging (e.g. teachers)?
- *Step 6:* Discussion on preferred communication methods and information resources:
 - Where do you look for information on topics important to you? (probe: conversations with friends, websites, television series, radio, parents, teachers?)
 - Whose opinion do you trust? (probe: teacher, friends, older sister, radio presenter?) And how do you prefer to communicate with this person / how do you access this source?
 - Are there certain topics that you can't discuss with people you trust? (probe: what do you do if you can't go to these people for advice?)
 - Are there specific groups / platforms that you access / go to, to learn about topics important to you (probe: Meetings with friends? Specific classes / teachers?)
 - Do you also look on social media / websites for advice? (if yes – please continue with the below questions – if not, please proceed to step 7)
 - What sites / platforms do you use? Which ones do you like to use most and why? Which platforms do most of your peers' use?
 - How do you connect to that site / platform (e.g. by phone / laptop / shared computer etc.)? What do you use that site / platform for (e.g. to chat, get news, share photos, find friends etc.)?
 - What type of posts do you like and why?
 - Do you trust that site / platform? Have you ever experienced any difficulties (e.g. misinformation, cyber bullying etc.) through that site / platform?
 - Who supervises your online interactions?

- *Step 7:* Thank the participants for their work and tell them what you will do with the gathered data (i.e. write a report for WFP on preferred communication mechanisms for the design of their future nutrition programmes; make sure to state that it will be treated confidential, anonymous etc.)

Conclusion (10-20mins)

- Questions and discussion
 - Eliciting ideas about priority areas for adolescents in their village? (education, sexual health, gender-based violence, child marriage, etc.)
 - Story of most significant challenge (elicit narrative)
 - Thoughts about adolescent nutrition
 - Barriers to adequate nutrition
- Suggestions/recommendations for communication channels to reach adolescents
- Any other points to add...
- Thank you and close

8 – Adolescent workshop: 15-19 years old

[Age and gender segregated groups. Activities will be modified based on the type of delivery platform].

Target adolescent girl (aged 15-19) group size: 8-10

Target adolescent boy (aged 15-19) group size: 8-10

Time estimation: 4 hours

Introduction (10mins)

- Thank participants for taking part.
- Explanation of study: specific, visual, simplified and contextually relevant.
- Clearly present information about the purpose of the session and how information generated will be used.
- Introduce confidentiality, anonymity, no right or wrong answer, free to stop interview/withdraw participation at any time with no negative consequences.
- Setting ground rules/ group contract to discuss the importance of confidentiality and ensure participants keep each other's opinions and experiences confidential.

A day in the life of...timeline (30mins)

- Purpose of the activity/objectives (a day during the week? on the weekend?)
- Distribution of paper and drawing materials/drawing horizontal timeline. Alternately, can use one large roll of paper that everyone writes on.
- Questions to prompt timeline:
 - When do you wake up? Go to sleep?
 - When eat? Where? What?
 - Experiences/sources of food
 - What is good food? What is bad food? What makes food easy for you to get to? What makes it or hard for to get to?
 - Any time spent doing other 'typical activities' (food preparation, etc.)
 - What kind of household, agricultural or work responsibilities do you have and where?
 - What time do you spend at school or studying? If not in school, what normal activity during day?
 - Any time spent caring for children/receiving care from others?
- Discussion of drawings/timelines (Have the group reflect on each others timelines...)
- Discussion: Day to day decision making exercise. Which decisions adolescents can make for themselves regarding daily activities and which they cannot? And why? *Probe food choices*
- Discussion: Thoughts about being an 'adolescent'...what does this mean to you? To your family/community?
- Where does your family/community see you as (child, adolescent, adult, etc)? Government? Why? Do you agree with this assessment? Why or why not?
- What barriers/challenges do you face as an adolescent (e.g. work, education, etc.)? What are the barriers/challenges as related to food and nutrition?
- Discussion: Aspirations. Who do adolescents look up to and where do they envision themselves in a couple of years / when they are adults?
- [Time dependent] Distribute individual large pieces of paper. Select one activity from the timeline (e.g. dinner time) and ask participants what this scene will be like in 10 years time (e.g. draw where you will be having dinner in 10 years? What will you eat and with whom?)

Social network mapping and communications channels (30mins)

[See above for additional details].

[Use of photography will be assessed by the investigator on a case-by-case basis depending on its appropriateness & feasibility]

Graffiti wall/Photo elicitation explanation (30 minutes)

Distribute materials – pencils, paint, large sheets of paper and polaroid cameras, if relevant

- Agree the objectives of use of the graffiti wall and/or photography to “tell a story”
- Generation of questions (from adolescents) to guide according to objectives
- If relevant, discuss safety, authority and responsibility of using a camera
- If relevant, discuss acceptable ways to approach others to take their picture
- Question/answer session

Selection and discussion of 2 themes (modified depending on adolescent responses to above)

- Example theme 1: ‘Good Food, Bad Food’ (e.g. trip to the market, food preferences)
- Example theme 2: ‘Food for Girls’ (e.g. food consumption behaviour)
- Example theme 3: ‘Communication channels’ (e.g. meeting spaces, village activities, technology hubs)

Graffiti wall activity/guided “photo walk” through community (90mins)

FOOD/REFRESHMENT BREAK (10mins)

Elicitation (60 mins)

[If relevant, number Polaroid photos on table; code and organise per participant SHOWeD method].²⁹

Steps in Elicitation	
Step	Description
1	Ask participants to write a 1-2 word caption/give a title to their images on the wall or the photos (write on the white space at bottom of Polaroid image).
2	Ask participants to select 1-3 images or photos they feel are most significant.
3	Ask participants to describe what is in that image or photo and where it was taken, and a rationale for why this was included in the data set. Participants present some of their images or photos to the group, ask questions of each other, and discuss the photographs as a whole. Discussion should be audio recorded. <ul style="list-style-type: none"> - What do you See here? - What’s really Happening here? - How does this relate to Our lives? - Why does this situation exist? - What can we Do about it?
4	As a group, identify the themes of the activity based on collection of images on the wall.

Conclusion (10-20mins)

- Questions and discussion
 - Eliciting ideas about priority areas for adolescents in their village? (education, sexual health, gender-based violence, child marriage, etc.)
 - Story of most significant challenge (elicit narrative)
 - Thoughts about adolescent nutrition
 - Barriers to adequate nutrition
- Suggestions/recommendations for communication channels to reach adolescents
- Any other points to add...
- Thank you and close

²⁹<http://www.mapc.org/sites/default/files/Photovoice%20Facilitators%20Guide%20with%20Resources.pdf>

Annex 6 – Consent forms

Informed consent (18+ years) National, regional, district-level stakeholders

Formative Research for Adolescent Nutrition Programming in Uganda

Background to the study

The education, health, social and economic needs of adolescent girls are increasingly recognized as areas that deserve focused attention and resources. There is however, a lack of evidence to guide the development of strategic nutritional messages and interventions for this specific target groups. The Global Goal ‘Zero Hunger’ established a critical window of action and unique opportunity for the World Food Programme (WFP) to play a leadership role and highlight the different entry points to better address the needs of this important target group and achieve long-term impact at scale.

Objective of the study

Gaining an understanding of how to effectively reach adolescents is an essential starting point for assessing how nutrition specific and nutrition sensitive interventions can be delivered and best related to other components of the ‘adolescence equation’ including, for example, reproductive health care and livelihood skills. The objective of this study is to learn from INGO stakeholders, the private sector, relevant government ministries (e.g. Ministry of Health, Ministry of Education), adolescents and their caregivers about adolescent nutrition needs in Uganda and how we can better communicate with this age group to improve their nutritional status and help them to lead healthier lives.

Interview/Focus Groups/Adolescent Workshops

For this purpose, Primary Investigator (PI) would like to talk to you about matters relating to adolescent nutrition. Informal interviews, focus group discussions and/or adolescent workshops will last for approximately one hour to one hour and a half. Your participation in this research is voluntary. You have the right to withdraw from the discussion at any time without reason and without penalty. There is no cost associated with your participation. We believe there is no risk to you although it is noted that there may be aspects of your participation in this research that involve risks which are currently unforeseeable.

We will ensure that your information, opinions and experiences are kept confidential and will only be used for the purpose of the study outlined. We will not use your name. You may ask any questions related to the study and we will answer these questions to your satisfaction.

With your permission, we may make an audio recording of our discussions for our records. This will be destroyed at the end of the study. With your permission, we may also take a photograph of you. These will be used for the purpose of the current study and may be included in academic publications and other material for WFP and Anthrologica. If your photograph is published, you shall not be identified by name and the usual confidential process shall be followed.

In regard to collecting information for this study, we would greatly appreciate your help and therefore seek your consent and cooperation. If you have any questions or concerns about this study you can address them by contacting (Ms) Gloria Kusemererwa via email Gloria.Kusemererwa@wfp.org or Tel: 0312242432 If you have any concerns regarding your participation you may contact the ethics review committee at the School of Medicine, Makerere University by telephone +256 414533541 or email rresearch9@gmail.com.

INFORMED CONSENT

I have been informed in detail about the purpose and nature of this study.

I have received satisfactory answers to all my questions relating to this study.

I have decided that I will participate willingly and can withdraw at any time for any reason.

I give my informed consent to participate in this study and have my photograph taken as part of the study.

Name of Participant

Signature

Date

Name of Witness

Signature

Date

As a witness of this letter, I ensure that I have the above information has been accurately conveyed to the participant. I also ensure that they have decided to participate in this study freely and willingly.

Informed consent form (18+ years) community leaders, caregivers, influential persons

Formative Research for Adolescent Nutrition Programming in Uganda

WHY AM I BEING ASKED TO TAKE PART IN THIS RESEARCH? You are being asked to take part in a research study about adolescent nutrition in Uganda and to share your thoughts on the best methods that organisations like the World Food Programme can use to talk to adolescents about their nutrition needs. You are being asked to take part in this research study because you can provide important information on this topic. If you take part in this study, you will be one of several adults and several groups of adolescents also participating in this study.

WHO IS DOING THE STUDY? The person conducting this study is called the Primary Investigator (or PI) and, together with the assistance of a local Research Assistant, will be asking you questions. The local Research Assistant will help to translate your words for the PI so you may speak in whatever language you feel most comfortable.

WHAT IS THE PURPOSE OF THIS STUDY? By doing this study, we hope to learn about adolescent' nutritional needs and experiences and about how they prefer to receive communications from, or be contacted by, organisations like the World Food Programme with information.

WHERE IS THE STUDY GOING TO TAKE PLACE AND HOW LONG WILL IT LAST? The study will be take place in your community. You may be invited to attend a discussion group with other adults, led by the PI and the Research Assistant. Each of these sessions may take between 45 minutes to an hour. You may also be asked to participate in one interview session with the PI and the Research Assistant if needed. These interviews will last approximately 30 minutes to 1 and a half hours. The adolescents who volunteer may be invited to attend a discussion group or participate in group activities with other adolescents, led by the PI and the Research Assistant. Each of these sessions may take between 45 minutes to 4 and a half hours.

WHAT WILL I BE ASKED TO DO? You will be invited to participate in a group discussions or individual interview about issues to do with adolescents and their needs and preferences when it comes to food. You will also be asked to share your ideas about how organisations like the WFP can better communicate with the adolescents in your community.

If you take part in this study, you will be asked to participate in discussions with the PI and the Research Assistant. Adolescents may be asked to participate in activities with other adolescents of the same age. If you agree that you do not mind, I will record what we say during the discussion so that I can be certain about exactly what your ideas are and listen to them carefully again to make sure I have not missed anything. Your name will not be on the tape, and no one else will be able to figure out who you are after it is recorded. Only I will be able to have that information, no one else. Later, when the tapes are transcribed or results published, no one will be able to identify you. With your permission, we may also take photographs during the activities.

Your participation in this project is voluntary, this means that you do not have to participate in group discussions and you do not have to answer any of my questions. If you do want to participate now, but change your mind later on, then you will be excused from the study without penalty. You can ask me questions at any time if you have any concerns about this project.

WHAT THINGS MIGHT HAPPEN IF I PARTICIPATE? WHAT IF I CANNOT ANSWER THE QUESTIONS? No harm will come to you for participating in this research. We are interested in learning about your personal thoughts and experiences so you will be able to answer questions or participate in group activities based on these experiences. However, if you do not have a response to a question or do not wish to participate in an activity, you do not have to and no one will be mad at you for choosing not to answer/participate.

WILL SOMETHING GOOD HAPPEN IF I TAKE PART IN THIS STUDY? We cannot promise you that anything good will happen if you decide to take part in this study.

DO I HAVE TO TAKE PART IN THE STUDY? If you do not want to take part in the study, that is your decision. You should take part in this study only because you really want to volunteer.

IF I DON'T WANT TO TAKE PART IN THE STUDY, WHAT WILL HAPPEN? If you do not want to be in the study, nothing else will happen.

WILL I RECEIVE ANY REWARDS FOR TAKING PART IN THE STUDY? You will not receive any reward for taking part in this study; however, if you participate in group activities that produce photos, artwork, etc. you may be given a copy of your work and you may see your work reproduced for reports that will circulate in Uganda and internationally.

WHO WILL SEE THE INFORMATION I GIVE? Your information will be added to the information from other people taking part in the study so no one will know who you are.

CAN I CHANGE MY MIND AND QUIT? If you decide to take part in the study you still have the right to change your mind later. No one will think badly of you if you decide to quit.

WHAT IF I HAVE QUESTIONS? You can ask the research team any questions about this study at any time. If you think of other questions later, you can ask them by contacting (Ms) Gloria Kusemererwa via email Gloria.Kusemererwa@wfp.org or Tel: 0312242432 If you have any concerns regarding your participation you may contact the ethics review committee at the School of Medicine, Makerere University by telephone +256 414533541 or email rresearch9@gmail.com.

Consent to Participate - I understand what the person running this study is asking me to do. I have thought about this and agree to take part in this study.

_____ Name of Participant
_____ Name of Witness
_____/ _____ Signature Date
_____/ _____ Signature Date

As a witness of this letter, I ensure that the above information has been accurately conveyed to the participant. I also ensure that they have decided to participate in this study freely and willingly.

Use of Photography Consent Form

Formative Research for Adolescent Nutrition Programming in Uganda

Adult consent form

The purpose of this form is to give permission for us to take photographs and/or video of you and use these in national and international reports produced from this research.

I give permission to take photographs and / or video of me.

I grant full rights to use the images resulting from the photography and/or video, 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.

Name of participant	
Signature of participant	
Date	

Informed assent form, for participants under 18 years old

Formative Research for Adolescent Nutrition Programming in Uganda

WHY AM I BEING ASKED TO TAKE PART IN THIS RESEARCH? You are being asked to take part in a research study about adolescent nutrition in Uganda and to share your thoughts on the best methods that organisations like the World Food Programme can use to talk to you about your nutrition needs. You are being asked to take part in this research study because you are a person between the ages of 10 and 17 years-old and can provide important information on your personal thoughts and experiences. If you take part in this study, you will be one of several adolescents also participating in this study.

WHO IS DOING THE STUDY? The person conducting this study is called the Primary Investigator (or PI) and, together with the assistance of a local Research Assistant, will be asking you questions. The local Research Assistant will help to translate your words for the PI so you may speak in whatever language you feel most comfortable.

WHAT IS THE PURPOSE OF THIS STUDY? By doing this study, we hope to learn about your nutritional needs and experiences and about how you prefer to receive communications from, or be contacted by, organisations like the World Food Programme with information.

WHERE IS THE STUDY GOING TO TAKE PLACE AND HOW LONG WILL IT LAST? The study will be take place in your community. You may be invited to attend a discussion group or participate in group activities with other adolescents, led by the PI and the Research Assistant. Each of these sessions may take between 45 minutes to 4 and a-half hours. You may also be asked to participate in one interview session with the PI and the Research Assistant if needed. These interviews will last approximately 30 minutes to 1 hour.

WHAT WILL I BE ASKED TO DO? You will be invited to participate in a group discussions or individual interview about your daily experiences and practices with food, and to share ideas about your nutrition requirements. You will be asked to share your ideas about how organisations like WFP can better communicate with you.

If you take part in this study, you will be asked to participate in discussions with the PI and the Research Assistant, or to participate in activities with other adolescents of the same age. If you agree that you do not mind, I will record what we say during the discussion so that I can be certain about exactly what your ideas are and go back and listen to them carefully again to make sure I have not missed anything. Your name will not be on the tape, and no one else will be able to figure out who you are after it is recorded. Only I will be able to have that information, no one else. Later on, when the tapes are transcribed or results published, no one will be able to identify you. With your permission, we may also take photographs during group activities.

Your participation in this project is voluntary, this means that you do not have to participate in group discussions and you do not have to answer any of my questions. If you do want to participate now, but change your mind later on, then you will be excused from the study without penalty. No one will be mad at you for not participating or choosing not to complete the research. You can ask me questions at any time if you have any concerns about this project.

WHAT THINGS MIGHT HAPPEN IF I PARTICIPATE? WHAT IF I CANNOT ANSWER THE QUESTIONS? No harm will come to you for participating in this research. We are interested in learning about your personal thoughts and experiences so you will be able to answer questions or participate in group activities based on these experiences. However, if you do not have a response to a question or do not wish to participate in an activity, you do not have to and no one will be mad at you for choosing not to answer/participate.

WILL SOMETHING GOOD HAPPEN IF I TAKE PART IN THIS STUDY? We cannot promise you that anything good will happen if you decide to take part in this study.

DO I HAVE TO TAKE PART IN THE STUDY? You should talk with your parent/guardian, or anyone else that you trust about taking part in this study. If you do not want to take part in the study, that is your decision. You should take part in this study only because you really want to volunteer.

IF I DON'T WANT TO TAKE PART IN THE STUDY, WHAT WILL HAPPEN? If you do not want to be in the study, nothing else will happen.

WILL I RECEIVE ANY REWARDS FOR TAKING PART IN THE STUDY? You will not receive any reward for taking part in this study; however, if you participate in group activities that produce photos, artwork, etc. you may be given a copy of your work and you may see your work reproduced for reports that will circulate in Uganda and internationally.

WHO WILL SEE THE INFORMATION I GIVE? Your information will be added to the information from other people taking part in the study so no one will know who you are.

CAN I CHANGE MY MIND AND QUIT? If you decide to take part in the study you still have the right to change your mind later. No one will think badly of you if you decide to quit.

WHAT IF I HAVE QUESTIONS? You can ask the research team any questions about this study at any time. You can also talk with your parent/guardian or other adolescents and adults that you trust about this study. If you think of other questions later, you can ask them by contacting (Ms) Gloria Kusemererwa via email Gloria.Kusemererwa@wfp.org or Tel: 0312242432 If you have any concerns regarding your participation you may contact the ethics review committee at the School of Medicine, Makerere University by telephone +256 414533541 or email research9@gmail.com.

Assent to Participate - I understand what the person running this study is asking me to do. I have thought about this and agree to take part in this study.

_____ Name of Participant
_____ Name of Parent/Guardian
_____ Signature Date
_____ Signature Date

As a witness of this letter, I ensure that the above information has been accurately conveyed to the participant. I also ensure that they have decided to participate in this study freely and willingly.

Use of Photography Consent Form

Formative Research for Adolescent Nutrition Programming in Uganda

Under-18 consent form

The purpose of this form is to give permission for us to take photographs and/or videos of the adolescent in your care and to use these in national and international reports produced from this research. I give permission to take photographs and / or video of the adolescent in my care. I grant full rights to use the images resulting from the photography and/or video, 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.

Name of under-18 year old	
Name of parent / guardian	
Signature of parent / guardian	
Date	

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