



# Formative research to inform adolescent programming in Cambodia

Engagement for health, nutrition and sustainable development

Full report – October 2018

## Foreword

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Cambodia has proportionally one of the largest adolescent populations in the region. With one in five Cambodians aged between 10-19 years, this young generation can significantly influence the country's future political, economic, social and technological development. Adolescents, particularly female adolescents, contribute substantially to household food security and economic stability. They can also act as agents of change within their families and wider communities.

Adolescents, particularly those from vulnerable families, are often at cross-roads between completing their school education and finding early employment opportunities to support their families, and may also be subject to early marriage and motherhood. In a time characterised by rapid development of physical and mental health, young people require dedicated attention in order to reach their full potential. Ensuring their nutritional needs are met are critical to this process. Malnutrition remains a concern in Cambodia with stunting at 32% and double burden on the rise. While data on the adolescent nutritional status is limited, underweight, obesity and micronutrient deficiencies are not uncommon in this group. Undernutrition is of particular concern for girls aged 15-19 years. While a number of national policies and strategies address maternal and child health and nutrition, focus is generally placed on the first 1000 days with the adolescent years often being overlooked.

There is no one size fits all approach when addressing the nutritional needs and requirements of adolescents. To gain a better understanding on how to reach and engage Cambodia's youth, a group often neglected by nutritional interventions, WFP embarked on a formative qualitative research study on adolescents that was conducted by Anthrologica. This study was made possible thanks to the vital support from the National Nutrition Programme and extensive collaboration of our partners, in particular Helen Keller International and Plan International who helped to facilitate the research. By eliciting the perspectives, needs and suggestions of adolescents, particularly adolescent girls, and their communities during the study, we hope that nutritional interventions for adolescents can be more adequately designed. Nutrition, in combination with other interventions, will ensure that young individuals will lead healthy and productive lives.

The development of a number of key new policies and strategies such as the Cambodia SDGs, the National Strategic Development Plan, the Rectangular Strategy and the National Strategy for Food Security and Nutrition which are due to be implemented from 2019 presents an invaluable window of opportunity to raise the visibility of adolescents as a priority group and having them and their nutritional needs explicitly addressed.

To ensure a prosperous future for Cambodians, young people must be supported to transition smoothly from childhood to adulthood. It is important that the Government and key stakeholders including development partners, the United Nations, private sector, civil society and local communities work together to ensure no one is left behind and help achieve the SDG targets by 2030.



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This report documents formative research conducted in Cambodia 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

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### 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 their 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 Cambodia, 43% of the population is aged 19 years or younger and half of those are aged between 10 and 19 years (CDHS, 2014). There are limited data on the nutritional status of Cambodian adolescents, yet the prevalence of malnutrition is known to be high in other vulnerable groups and is a leading underlying cause of maternal and child mortality. Based on the nutritional situation of these other groups, the nutritional status of adolescents, and particularly adolescent girls, is likely of great concern. In Cambodia, 32% of children under five years are stunted, with gender disparities evident in rates of malnutrition (CDHS, 2014; Greffeuille et al., 2016). Amongst women of reproductive age (15-49 years), 14% are underweight and 44% are anaemic (Chaparro et al., 2014; CDHS, 2014). Amongst girls aged 15-19 years, however, 27.5% are underweight and 49.4% are anaemic (CDHS, 2014). There has also been a significant increase in the prevalence of overweight women in Cambodia (CDHS, 2014). In 2014, the rural plateau and mountainous region of Northeastern Cambodia (including Ratanak Kiri and Mondul Kiri Provinces) reported the highest rate of childbearing among girls aged 15-19 years in the country at 33.8%. In contrast, urban Phnom Penh had the lowest rate (5.9%) of childbearing in the 15-19 year age group, and in Prey Veng, the rate was 10.9% (CDHS, 2014).

There is no policy or strategy to address 'adolescent' health in Cambodia, however, the government has demonstrated interest in improving the health and nutrition of women, children and youth. Several policies, strategies and action plans that are relevant to the health and nutritional status of adolescents are in place, including the National Strategic Health Plan (NSHP), the National Nutrition Strategy (NNS), the National Policy on Youth Development (NPYD), the National Strategy for Food Security and Nutrition (NSFSN), the National Population Policy (NPP), and the National Action Plan for the Zero Hunger Challenge in Cambodia (NAP/ZHC).

### 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, Kenya and Uganda. 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 October 2016 and December 2017. A country landscape analysis of adolescent programming recorded 18 stakeholders working with the 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 adolescent girls and their communities. Data was collected in three provinces: Ratanak Kiri, Prey Veng and Phnom Penh. In Ratanak Kiri, data was collected in Ta



Veng and Andoung Meas districts (rural, multiple ethnic minorities); in Pre Veng, in Kampong Trabek district (rural, Khmer); and in Phnom Penh, in Chbar Ampoy and Chroy Changva districts (urban, Khmer). A total of 280 participants were included in the study, and 130 data collection activities were undertaken, including focus group discussions, key informant interviews, technology surveys and participatory workshops with adolescent girls using a range of creative methodologies to document their voices (photowalks, graffiti walls, drawings). Although workshop activities focused on adolescent girls, interviews, discussions and surveys included topics of relevance to both male and female adolescents. Informed consent and assent was given prior to participation, and the study was granted ethical clearance by the Ministry of Health, National Ethics Committee for Health Research of Cambodia. The full analysis of qualitative data used thematic analysis developed specifically for analysing data generated through applied research. Evidence-based recommendations were designed to improve the design of nutrition-specific and nutrition-sensitive interventions for adolescents, and highlight opportunities for adolescent engagement regarding nutrition in Cambodia.

## **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 Cambodia, 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, and markers of adulthood can be observed in individuals considerably younger than 18 years old, the legal age of majority in Cambodia. Adolescents across research sites referenced puberty, marriage, parenthood, independence, labour and responsibilities as markers of growing up.

In Ratanak Kiri, 'adolescence' was described as a foreign concept, and there was no word for 'adolescence' or 'adolescents' in local languages. In general, a 'child' was described as an individual who was single and dependent on his or her family for survival, and an 'adult' was an individual who was married and taking care of his or her own family. Linguistically, there was a clear distinction between what it meant to be a 'physically 'fully-grown' adult and what it meant to be a 'mature' adult. Adolescent girls who were married and/or had started a family could be 'mature' without being 'fully-grown'. There was disagreement amongst community members as to whether puberty could be classified as a separate stage between childhood and adulthood; in general, puberty was primarily seen as a biological marker that indicated when transition from childhood to adulthood could occur.

Girls who participated in the workshops in Ratanak Kiri did not describe themselves on the basis of puberty, but rather on the basis of how well they were able to care for family members, both younger children and adults. In so doing, they clearly demarcated a space for themselves between childhood and adulthood. Girls frequently described themselves as being 'closer' to adults than to children due to their ability to 'think' like adults; forego 'playing' for household duties including cleaning, cooking, or farm work; take care of younger children in ways that an adult would; and to be respectful of their elders.

Unlike participants in Ratanak Kiri, those in Phnom Penh and Prey Veng articulated concepts of adolescence associated with 'youth' and being a 'teenager'. Mothers in both Phnom Penh and Prey Veng frequently referenced biological changes associated with puberty (e.g. menstruation) as a marker of adolescence in girls. They also cited 'adolescence' as a time for increased mental ability, responsibility, and, in the case of girls rather than boys, increased 'thoughtfulness' and empathy towards their mothers. A key difference between mothers in Ratanak Kiri and those engaged in Phnom Penh and Prey Veng was the latter's belief that their daughters were 'becoming women' at a younger age than they had, due to the earlier onset of puberty amongst girls today. Mothers in both Phnom Penh and Prey Veng suggested that earlier puberty was due, at least in part, to the improved nutritional status of their daughters, particularly in comparison to the poor diets of the mothers during the Khmer Rouge regime when many had experienced delayed menstruation.

Although most younger adolescent girls in Ratanak Kiri described themselves as being 'closer' to adults, the majority in Phnom Penh, identified themselves as children, or as being firmly located between childhood and adulthood. Whilst girls' definitions of what adolescence meant in terms of increased household assistance were similar in Phnom

Penh and Ratanak Kiri (see drawing above), girls in Phnom Penh also described their additional responsibility to study and go to school. Older girls described themselves as possessing a greater mental capacity than children and younger adolescents (due to having completed higher grades at school), but saw themselves as distinct from adults because they were still in school and as such were expected to focus on their education rather than thinking about marriage and children. For the younger girls in Phnom Penh who still saw themselves as 'children', one of the driving factors behind this classification was the belief that older girls knew more about and were more concerned with 'beautifying' themselves by dressing nicely, styling their hair and applying makeup (see drawing below). Older girls in Phnom Penh asserted their ability to prepare more complicated food, and '*take charge of the household*' in the absence of their mothers. Assuming control of household affairs involved shopping or sourcing/harvesting ingredients, preparing meals, cleaning and organising the house, and taking care of siblings.

In Prey Veng, girls distinguished themselves from children (who '*do not know how to cook*') by their claimed ability to cook rice and prepare other dishes requiring multiple ingredients. Unlike girls in Phnom Penh, they did not acknowledge going to school as one of the responsibilities associated with their age. Younger girls defined themselves in contrast to adults who had to earn money '*in the factories*', whilst older girls who did not see themselves as adults nonetheless described themselves as having many of the responsibilities of adults, including the ability to earn money by making rice wine and working in garment factories. Workshop participants were engaged in both of these occupations.

It is worth noting that the conceptual juxtaposition of markers of adolescence could impede effective and efficient programme implementation. Some adolescents excluded themselves from services aimed at their age group as they self-identified as adults (given that they were already married, had a child or were engaged in the labour market), despite being 10-19 years old.

## **Food and nutrition**

### Rice and side dishes

Rice is the most important agricultural commodity in Cambodia and the staple of the national diet. The concept of a meal is synonymous with eating rice, and rice is consumed at every meal prepared in the household. It was notable that when asked to list their daily food intake, participants frequently failed to mention rice due to their perception of it as a constant and guaranteed staple. Preparation of rice is the responsibility of women and girls, and adolescent girls across all research sites knew how to cook it. Often, more rice is prepared than could be consumed. Typically, it is cooked and stored in a large pot and every family member, young or old, male or female, is allowed to take as much as they care to eat.

In Cambodia, a nutritious meal is seen to be a meal with 'balanced' flavors that in addition to rice involves both wet (e.g. soup) and dry (e.g. fried or grilled meat) food categories. Participants described preparing multiple dishes referred to as 'side dishes' (including fish and vegetables) to accompany the rice. The more side dishes consumed during a meal, the more 'well-off' or food secure a family is perceived to be. In Phnom Penh, community members often reported having one side dish for breakfast, and two side dishes at lunch and the evening meal. In Prey Veng, they reported having one side dish for lunch, and one for the evening meal, whilst in Ratanak Kiri, they were more likely to report having one side dish per day, usually at lunch as this was seen to be the primary meal. During the dry season in Ratanak Kiri, it was more common for rice to be the only food stuff consumed at one or more meals each day, often with the addition of chili and/or salt for seasoning. As one caregiver in Prey Veng concluded, '*everyone has rice. For the side dish, it is not guaranteed*'.

The Fill the Nutrient Gap analysis (WFP, 2017) concluded that given the level of rice consumption per capita in Cambodia it is difficult for many women and girls to meet their nutrient needs, as their rice consumption is associated with insufficient consumption of other foods that are important sources of micronutrients. This level of rice consumption could potentially contribute to a further rise in overweight and obesity in the future, particularly as consumption of foods high in sugar and fat increase, and people adopt more sedentary lifestyles.

### Food sources

Cambodian women and girls play a central role in ensuring household food security. In all research sites, women were responsible for harvesting, purchasing and preparing most of the food required by their families, although access to nutritional food sources differed substantially between rural and urban populations.

Sourcing food that was more diverse than 'just rice' had economic and time implications, and varied by province. The typical diet was more limited in Ratanak Kiri than the other two provinces. Caregivers in Ratanak Kiri suggested that they 'almost always' had sufficient rice (and rice wine) for family consumption because of their household rice fields,

but the availability of all other food stuffs was highly dependent on the time of year and the family's current financial situation (e.g. whether or not they could afford to purchase vegetables to supplement their homegrown produce). Food in Ratanak Kiri was primarily sourced from subsistence agriculture although some items were also foraged from forests. River fish was considered the most significant source of protein, and the consumption of meat (buffalo, beef, pork) was almost entirely dependent upon the 'spiritual distribution' of food following an animal sacrifice. Community members suggested that for those who did not hold 'strong beliefs' it was permissible to slaughter a smaller animal, such as a chicken, for household consumption or to sell at market, although this happened infrequently. It was noted that people with 'very strong beliefs' *'wouldn't dare kill the animals'*.

In Prey Veng, many communities had established fishponds or larger fish farms with assistance from local NGOs to provide families with a source of fresh fish throughout the year. Participants commented, however, that the construction of dams in Vietnam had restricted water flow and fish migration to the Mekong River, resulting in depleted local fish stocks. Community leaders concluded that the consumption of fish had reduced in recent years because the catch was often insufficient to feed a family. Fruits, vegetables and occasionally meat, were commonly sourced from mobile food vendors or local markets.

In Phnom Penh, foodstuffs other than fruits and herbs grown at home were typically purchased from mobile sellers, particularly during the dry season (e.g. dried fish, fresh fish, tomatoes, onions etc.). Although markets in Phnom Penh were comparatively accessible to women and girls (due to their proximity and the availability of transport), women preferred to buy their food from a selection of 'trusted' mobile sellers. This was seen to be more convenient and required fewer resources (in terms of time expenditure and out-of-pocket costs) than going to market. Participants in both Phnom Penh and Prey Veng also emphasised that they did not purchase vegetables from larger markets as they could not be trusted and were 'full of chemicals'. This idea was echoed by adolescent girls who had been taught by their mothers and grandmothers to avoid such food sources (although it is likely that many mobile vendors sourced the food they sell from these markets). Caregivers also associated 'bad' or 'unhealthy' food with markets where imported foods (e.g. from Vietnam) were sold. Although caregivers found it difficult to explain why they did not trust 'foreign' food, the general assumption was that if people in the food's country of origin did not want to eat it, but instead had vendors transport their products to sell in Cambodia, then it must be 'bad' food.

#### Food preparation and consumption

In Ratanak Kiri, the multiple and time-consuming responsibilities associated with food production were seen to dominate the daily routine of women and girls. They often listed 'cooking rice' as one of their more difficult daily chores, due in part to the large quantities of rice that had to be prepared for each family meal, and the physical requirements of collecting water and firewood to cook it. Cooking was often described by adolescent school girls in Ratanak Kiri as a solitary experience, as many had to prepare a meal for themselves after school whilst their families were working on the farms. In contrast, adolescent girls in Phnom Penh and Prey Veng articulated more positive experiences of cooking. They had a wider selection of recipes in their repertoires and were more knowledgeable about selecting and using multiple ingredients, due to increased access to and affordability of a wider selection of foods. Being able to produce a range of flavorful side dishes was viewed as a sign of girls' increased maturity and growing ability to help their mothers and grandmothers with dinner preparations.

Participants across all fieldsites were emphatic that apportioning or rationing food within the household was not practised. As one community leader stressed *'everyone can eat until they are full. Everyone is free to eat as much as they want...We are not Khmer Rouge'*. In their workshops, many adolescents confirmed that food was always available and equitably distributed, and as one 15 year old participant in Prey Veng concluded, *'I have never had nothing to eat. I eat until I'm full'*. Because side dishes were less plentiful than rice, however, whether a family ate together or separately impacted who had access to the sour soups or 'dry' meats served alongside rice. In Phnom Penh and Prey Veng where it was more common for girls to help their mothers or grandmothers prepare the meal and where the evening meal was eaten together as a family, girls had equal access to the side dishes they helped prepare. Girls in Ratanak Kiri who had to prepare their own meals or had food left for them might not have the same access to side dishes as other family members. In Ratanak Kiri, it was common for family members to serve themselves from a communal food dish at different times in the evening depending on when they finished their day's labour.

In Phnom Penh and Prey Veng, children and adolescents with 'pocket money' were likely to have access to multiple food sources beyond what was prepared at home. Those attending school could choose from numerous food vendors who set up their food stations and snack shops outside the gates of primary and secondary schools. Girls in Phnom Penh also had access to 'mobile restaurants', vendors with small portable grills attached to their motorbikes on which they produced a variety of foods from waffles to grilled meat. They also frequented shops that sold shrimp and rice crackers, sodas and energy drinks, bags of chips, and assorted meat products that were designed to appeal specifically to children and adolescents (e.g. brightly colored meatballs dyed pink, blue and green).



## Factors affecting adolescent nutrition

Three interrelated themes were found to influence adolescents' access to adequate and healthy food: land cultivation; education and employment; and sexual and reproductive health.

### Land and agriculture

In Ratanak Kiri, the land available for family farm activities has been reduced due to logging, plantation monocultures (e.g. palm oil) and government appropriations for conservation (e.g. Virachey National Park). This has resulted in changes to the traditional shifting cultivation practices, shorter rotational periods for crops and depleted soil nutrients. Weeding family farmland remained the responsibility of women and girls, and participants confirmed that despite their intensive labour, crop yields were less and the varieties of food grown more limited than in the past. Reduced forest cover and upriver dam projects were also associated with reduced access to animal and fish resources from foraging activities. In Prey Veng, mechanisation for crop harvests, including rice, had reduced 'heavy' agricultural workloads particularly for women and older girls. Instead, animal husbandry consumed a large proportion of their daily routine. It contributed to the economic stability of households and provided more income to purchase food.

### Education and employment

Historically, the national education system has been severely under-resourced. The Ministry of Education, Youth and Sports has taken steps to improve the situation, although more remains to be done. Most Cambodian schools operate two half-day schedules, with one set of students attending classes in the mornings, and another set attending classes in the afternoon, from Monday to Saturday. Education in Cambodia is free from Grades 1-9, although students need to mobilise substantial resources, both financial and logistical, to cover out-of-pocket expenses associated with buying school uniforms, shoes, books, pencils and papers, travelling to and from school (either by bicycle or public transport), and funding extra tuition to supplement the normal class schedule and help them prepare for exams. For many households, these costs are burdensome. In the participant workshops, girls frequently discussed having to drop out of school due to their family's lack of resources. Many highlighted the pressure they felt to leave school to seek employment to help support their family financially.

Families with limited resources often had to choose which child to send school and it was reported that they were more likely to support a son's education. There was a perception that boys with an advanced education were more likely to secure higher-paying jobs. Sons were expected to follow their own pursuits, whilst girls were more commonly regarded as being 'tied' to their household. In Phnom Penh, families living in poverty or with significant debt, knew that their daughters were likely to find low-skilled work in one of the many garment factories, and it was acknowledged by community leaders and caregivers in the capital that parents frequently pressured their daughters to leave school to help generate income.

Participants in Prey Veng confirmed that girls from poorer families would typically leave school around Grade 7 or 8 (usually 12-15 years old) to work in factories in Phnom Penh or other provinces. NGO staff, community leaders and caregivers suggested that whilst this meant they contributed to their family's economic resources, a motivating factor was avoidance of the increasing financial commitment for schooling, with every successive grade costing more because of the need to pay for more 'extra' classes. Many girls also reported that a key driver of leaving school was peer conformity and their desire to follow their friends who had already migrated for factory work. In discussing why boys in their community left school, respondents in Prey Veng frequently attributed it to gambling or drug abuse rather than to an impetus to find paid employment.

Cambodian labour law states that the minimum age for wage employment of children is 15 years old. Children aged 12 to 14 years may legally engage in 'permissible' work that lasts less than 12 hours per week, whilst 15 to 17 year olds are entitled to engage in economic work for up to 48 hours a week. Those aged 18 and older may engage in 'full-time' employment (48 hours or more per week) (ILO 2013). The ILO reported that in 2012, there were approximately 13,000 'economically active' children aged 5-17 in Phnom Penh, and up to 23,000 in Prey Veng (ILO 2013). Disaggregating this data by sex, the ratio of male to female 'child' workers in Prey Veng is roughly one-to-one, whereas in Phnom Penh there are two girls to every boy, most likely due to the large numbers of women who are employed by the garment industry. This has implications for the nutritional status of girls and women, as factory work typically involves long hours and reduced daily access to nutritious food sources. 'Mass faintings' of garment workers have been reported in Cambodian factories over the last decade. These events have been attributed to a confluence of factors including malnutrition, heat exhaustion, long work hours and psychosomatic disorders (GIZ Cambodia, 2016; Eisenbruch, 2017).

In Ratanak Kiri, most 10 to 14 year old girls in the workshops were positive about school and cited wanting to learn to read as a motivating factor for attendance. Despite this, their need to help their families on the farm surpassed their

desire for further education. Some girls described school as providing a 'welcome break' from their heavy chores, yet school attendance frequently led to a sense of guilt that they were taking scarce resources away from the household, most importantly their own labour on the farm. Girls explained that because they were expected to marry, have children and work on the farm as their own mothers and grandmothers had done, pursuing an education could feel like an indulgent and selfish pursuit. For girls from ethnic communities in Ratanak Kiri, where communal life and rituals bind one family to another, pursuing a personal educational goal could be an isolating experience. They received limited help with their homework from illiterate family members, and were reluctant to come home from school to an empty house when their family and neighbours were working at the farm. In this situation, girls described having to take care of themselves, including preparing their own food, with little or no adult supervision. Even if they had been left food, they still had to eat alone (as discussed above) and for many, this emphasised their isolation.

### Maternal health and food taboos

Caregivers confirmed that their daughters often missed school when menstruation began due to embarrassment and lack of knowledge about '*how to take care of the bleeding*'. Workshop participants in Ratanak Kiri made it clear that if a girl left school, she was in effect indicating to potential husbands that she was ready to get married. National-level respondents confirmed that Cambodian youth have very low levels of knowledge regarding sexual and reproductive health, a topic not openly (or easily) discussed. According to the most recent Cambodian Demographic Health Survey, knowledge of at least one method of contraception among all women aged 15 to 19 years old was only 4.6%. Further, 95.4% of sexually active 15 to 19 year olds reported that they did not practise any form of family planning. The national rate of pregnancy in 15 to 19 year olds is 12% (CDHS, 2014).

Multiple food taboos were identified by participants from the indigenous ethnic minorities in Ratanak Kiri, many of which related specifically to pregnant and lactating women. These taboos were often enforced by strong social norms, and non-adherence risked consequences not only for the mother and her child but for the whole community. Food taboos governing the later months of a woman's pregnancy revolved around the notion of trying to ease her delivery by preventing mother and child from 'sticking' together during labour. Therefore, any food that was viewed as closely connected to something else (e.g. a coconut to its husk, or a turtle to its shell) was to be avoided. The physical appearance of a child was also thought to be associated with the consumption of certain foods. It was thought, for example, that eating eggs might lead to an unattractively round or obese child. This led many women to avoid such food. Food restrictions were reinforced by the desire to bear smaller babies, as it was known that a larger baby could contribute to a difficult labour. These findings are in line with the recent anthropological study in Ratanak Kiri commissioned by Plan International (Breogán Consulting, 2017).

Food taboos that determined women's eating patterns after delivery focused on what lactating mothers should eat to avoid adversely affecting her child through breastmilk. Older caregivers frequently explained that they breastfed a child until their next child was born, whereas adolescent girls were more aware of recent health messages that children should be breastfed 'for at least six months' at which point complementary food sources could be introduced. Many girls and young mothers interpreted this as meaning that they could stop breastfeeding their children at six months.

It was notable that some of the most-practised food taboos in Ratanak Kiri restricted the consumption of food stuffs that otherwise provided valuable sources of protein (e.g. eggs, fish) and vitamins (e.g. fruit, vegetables). It was also considered to be more important for first-time mothers to strictly observe food taboos than it was for women who had had multiple children. This may have contributed to the difficulties many mothers reported in relation to their first pregnancy and delivery, particularly in the case of adolescent pregnancy.

In Phnom Penh and Prey Veng, dietary restrictions for pregnant women revolved around avoiding spicy food or food with a high salt content. Mothers in Phnom Penh were frequently instructed by 'elders' to avoid fermented fish, fish sauce, chili and 'raw' vegetables. As in Ratanak Kiri, breastfeeding was common, and in Phnom Penh and Prey Veng food taboos in the postpartum period also focused on lactating mothers. In both provinces, however, community members remarked that younger generations' observance of food taboos had significantly declined. Adolescent girls, particularly those who were 15 years and older, were aware of some of the dietary restrictions placed upon pregnant and lactating women, but were not sure of the purpose of avoiding certain foods. Several respondents commented that it was only the 'elders' who would try to enforce restrictions upon postpartum women. In Cambodia, the antenatal care attendance rate is 95% (CDHS, 2014), and younger women confirmed that they were more likely to follow the advice that health workers had provided to them.

## 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 us, fit around our lifestyles'* – Adolescent girls 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 lifestyle of adolescents and must recognise their competing priorities.

*'Use our groups, don't group us'* – Girls stressed the importance of creating opportunities where they could meet with peers. In line with their different experiences, however, they highlighted that those in- and out-of-school girls had different social groups, as did girls who were already married and had children, compared with those who did not.

*'Show us real experiences'* – Adolescent participants across all research sites emphasised their desire to have activities for young people facilitated by youth leaders who were close to them in age and socio-economic status, and who had shared similar experiences and challenges growing up. This was particularly important with regards to sexual and reproductive health, as girls stressed they would not discuss such issues with their families or elders.

*'Provide trusted online information'* – Girls across all research sites were unable or unwilling to discuss sensitive topics with their families, particularly related to sexual and reproductive health. They preferred to consult with their peers and use social media platforms such as Facebook. They often questioned the validity of information online and suggested that trusted and secure online sources of information should be developed and promoted.

*'Include the people around us'* – Because of the important gatekeeper roles that caregivers play in their lives (particularly mothers and grandmothers), adolescent girls emphasised that initiatives directed at their engagement (with the exception of sexual and reproductive health initiatives) should also involve their families.

*'Ask us, include us'* – Adolescents stressed they wanted to be engaged in a participatory manner and involved in key decision-making processes so that their voices were heard and their opinions recognised.

*'Speak our language'* – Adolescents stressed that they were not a uniform group and that boys and girls, older and younger adolescents and those from different communities should be engaged in the most appropriate way. Girls in Ratanak Kiri, for example, stressed the importance of using their local languages so they felt comfortable and could fully participate.

*'Make it entertaining'* – Adolescent girls reported that they want to be engaged in a fun manner. They recommended the use of music, different media and sports activities as positive hooks to engage them.

*'With food, we need energy now...'* – Adolescents reported that having energy was a priority to ensure that they could complete their daily workload. They often associated this with being able to consume as much rice as they wanted/needed. Adolescents with access to (and the ability to pay for) energy drinks also highlighted them as an important source of energy.

## Recommendations

### Strengthen the visibility of adolescents

- Nearly 20% of the population in Cambodia are aged between 10 and 19 years, yet they are largely invisible in policy. Adolescent health and nutrition is a large-scale challenge, and as a sub-population with unique nutritional and other needs, adolescents are at risk of being left behind. Focused advocacy efforts are needed to encourage key actors to commit to interventions for this group. The development of the new National Strategy for Food Security and Nutrition (NSFSN) which is due to be implemented in 2019-2023 presents a valuable opportunity to raise the visibility of adolescents as a priority group to be explicitly included in key national policy.
- 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, the complex root or underlying causes of their nutrition practices, and potential solutions to improve their food-related behaviours. At national and sub-national levels, competencies must be developed to analyse, interpret and apply both qualitative and quantitative data.
- At the national level, adolescence is defined differently across sectors and ministries, and as a result the needs of adolescents are at risk of becoming diluted or falling through the cracks. This reduces the visibility of adolescents, hampers the identification of adolescent-specific problems, and limits the development of appropriate strategies



and programmes designed to meet their needs. Similarly, the definition of adolescence at the national level is not consistent with definitions used at the community level. Interventions must be sensitive to variables including age, gender, socio-economic status, life experiences / stages, livelihoods and ethnicity. Regardless of the terminology used, effective engagement should target groups as defined and understood at the community level.

#### Influencing adolescent nutrition

- When taking adolescents as the central unit of analysis, it becomes clear that this group is uniquely affected in Cambodia. 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 (e.g. education and employment, and sexual and reproductive health).
- 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 during non-school hours. 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. container gardens) may be particularly relevant and appealing for adolescents residing in urban and peri-urban localities.

#### 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 use of local languages; and showcasing real experiences. They emphasised the importance of privacy, and trust. They wanted interventions to develop their skills for the future, and for interventions 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 and grandmothers; peers; teachers (for those in-school); and community leaders. Although participants confirmed that whilst adolescent girls may seek advice and counsel from influential figures in their lives, they have a high level of autonomy and decision-making power. Still, securing the buy-in and support of key influencers is vital in both generating demand and facilitating utilisation of programmes and services.
- Adolescents can be agents of change for family members and their 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 their younger siblings and 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 adolescent 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 and reproductive health; economic empowerment and livelihood support; education; social protection; and leadership related to youth participation. Overall, however, programmes were not implemented at scale and coverage was limited. Only a few programmes were designed

with adolescents as the primary beneficiaries, but multiple programmes accidentally included adolescents (such as health interventions for pregnant women, and livelihood support programmes for farmers).

- Various platforms engaged adolescents at the community level. For those in formal education, particularly younger adolescents, school was identified as a positive and trusted platform for engagement, although it was noted to be a selective platform given that not all adolescents (particularly older adolescents) attended. Only girls who had recently given birth discussed health facilities as places that provided health- and nutrition-related advice.
- 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. Girls in urban areas were more likely to use social media and watch television. These girls reported using platforms such as Facebook to chat with each other. Girls' internet usage was not closely monitored by their caregivers. Radio was accessible for adolescents in all areas, although it was not widely used. Television was the preferred mode of entertainment in urban and, increasingly, in rural areas.

#### Entry points for strategic partnerships

- Policy and programming entry points need to be strengthened and expanded. Currently, programming is selective and localised. Further investment in both nutrition-specific and nutrition-sensitive adolescent programming is needed if the most vulnerable girls are to be reached.
- Actors already engaging adolescents in other sectors should be encouraged to incorporate nutrition-sensitive and nutrition-specific activities in their work, and those who have developed adolescent-specific communication methodologies should be identified as potential avenues for linking policy and action.
- Similarly, actors who are already active in nutrition, food and agricultural sectors should be encouraged to expand their policies and interventions to better reach adolescents.
- Many adolescents are included in activities that are orientated towards adults. In acknowledging this, programmes should be aware of the special needs of adolescents of different ages and encouraged to modify their services appropriately. 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.
- Coordination between government, partners and programme implementers should be improved to support an enabling environment for adolescent engagement. Commitment to channels that can reach the most marginalised and vulnerable adolescents is needed. Adolescent programming must be creative and use approaches that target particular groups of adolescents (e.g. out-of-school adolescents and mature minors) in ways they prefer and are receptive to. Investment in these channels should be prioritised in mainstreaming nutrition-sensitive and nutrition-specific activities.
- 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 to serve as an effective entry point to develop strategic partnerships with the private sector.

## Summary of key policy and programme implications

Theme	Key considerations
<b>Rice and side dishes</b>	<ul style="list-style-type: none"> <li>Rice is the most important agricultural commodity in Cambodia and the staple of the national diet. Fortifying rice could be a good way of improving access to nutritious diets, and more should be done to explore the opportunities to fortify rice and other staple foods nationally.</li> <li>Knowledge of healthy food does not directly translate to healthy food practices, so investment should be made to ensure adolescents and their families have access to affordable and nutritious foods and assume healthy diets and consumption patterns. There is a universal desire for side dishes to accompany rice, but financial constraints, seasonal availability, land issues and food taboos often limit what is purchased, available, prepared and eaten. Adolescents and their caregivers must be better informed about the most affordable healthy foods available to them in addition to fortified rice.</li> </ul>
<b>Food sources</b>	<ul style="list-style-type: none"> <li>Make diverse, healthy, natural and affordable foods available and attractive to adolescents and their families, particularly in times of scarcity. Promoting healthier foods in small shops and food carts (particularly those located close to schools and workplaces) would increase their availability to adolescents, who should be encouraged to choose healthier food over other options.</li> <li>Snacks and convenient ('on-the-go') foods are particularly appealing to this age-group, and so cheap, safe and healthy ready-made food should be made widely available. Ongoing initiatives to fortify snack foods should also be supported.</li> </ul>
<b>Food preparation and consumption</b>	<ul style="list-style-type: none"> <li>Because adolescent girls 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.</li> <li>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 (future value). Interventions that focus on food and meal preparation may be helpful, particularly if available technologies can make cooking less arduous and time consuming for women and girls (particularly in North East provinces). Interventions to improve storage and processing capacity will also help reduce time spent on food preparation.</li> </ul>
<b>Land and agriculture</b>	<ul style="list-style-type: none"> <li>Poverty is widespread, particularly in the North East provinces of Cambodia, and is exacerbated by the reduction of land available for family farming due to logging, plantation monocultures and conservation zones. Policies invoking the activation of social safety nets and food assistance may help mitigate the impact of shorter crop rotations and reduced opportunities to fish and forage.</li> <li>New seed varieties and agricultural technologies may also be beneficial in reducing the work burden that falls on women and girls responsible for cultivating family crops.</li> </ul>
<b>Education and employment</b>	<ul style="list-style-type: none"> <li>Structural weaknesses in the school system need to be overcome if schools are to be an effective delivery platform. Social protection programmes that aim to keep children in school, such as the education scholarship programme, are important initiatives. Despite the potential value of school as a platform for sustained engagement, however, 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.</li> <li>Income-generating activities are often prioritised by adolescent girls over school attendance, due to pressures to contribute to household economy and food security (e.g. agricultural labour, garment factory work). These activities require a high level of energy expenditure and may be exploitative. Adolescents and their families need strong incentives to continue formal education for this age group and to limit the household responsibilities of girls so that they can spend more time on their studies. Safe income-generation opportunities should be made available, but designed around keeping adolescent girls in school.</li> </ul>
<b>Maternal health and food taboos</b>	<ul style="list-style-type: none"> <li>Reducing adolescent pregnancy 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. This is particularly important for the North East provinces which report the highest rates of adolescent pregnancy in Cambodia.</li> <li>Awareness must be raised around good nutrition during pregnancy and the risks associated with food taboos followed by pregnant and lactating women. In parallel, initiatives should improve antenatal care, delivery practices and postnatal care, particularly amongst rural populations with restricted access to health centres (such as in the North East provinces). Delivery with skilled attendance and exclusive and continued breastfeeding should be actively promoted.</li> <li>In areas other than the North East provinces, women and girls described good access to and agreement with maternal and child health advice provided at health facilities. This is in marked contrast to the reluctance adolescent girls displayed in discussing sensitive sexual and reproductive health issues with health workers or family members. The focus on maternal and child health advice needs to shift to include more information on sexual and reproductive health. Technology and social media should be explored as trusted platforms to convey sexual and reproductive health issues to adolescent girls who may be able to access it privately and in confidence.</li> </ul>



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## Acronyms and abbreviations

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ADB	Asian Development Bank
ANC	Antenatal care
BMI	Body mass index
CARD	Council for Agriculture & Rural Development
CARE	(International NGO)
CDHS	Cambodian Demographic Health Survey
CIA	Central Intelligence Agency
CNCC	Cambodia National Council for Children
CPP	Cambodia's Provincial Plan
CSO	Civil Society Organisation
DVD	Digital video disc
FGD	Focus group discussion
GADM	Global administrative areas
HCW	Healthcare worker
HIV/AIDS	Human Immunodeficiency virus/Aquired immune deficiency syndrome
HKI	Helen Keller International
ICC	International Cooperation Cambodia
ID	Identification
ILO	International Labour Organisation
I/NGO	International/Non-governmental organisation
IT/ICT	Information technology/Information, communication technology
ITU	International Telecommunication Union
KII	Key informant interview
KYA	Khmer Youth Association
MCH	Maternal & child health
MoAFF	Ministry of Agriculture, Forestry and Fisheries
MoEYS	Ministry of Education, Youth and Sports
MoH	Ministry of Health
MoWA	Ministry of Women's Affairs
MPTC	Ministry of Posts and Telecommunications
NAP/ZHC	National Action Plan for the Zero Hunger Challenge 2016-2025
NCD	Non-communicable disease
NECHR	National Ethics Committee for Health Research (within the Cambodian Ministry of Health)
NIS	National Institute of Statistics
NNS	National Nutrition Strategy 2009-2015

NPP	National Population Policy 2016-2030
NPYD	National Policy on Youth Development 2011
NSHP	National Strategic Health Plan 2008-2015
NSPFSN	National Strategic Plan for Food Security and Nutrition 2014-2018
OD	Operational district
ODOV	Organisation for the Development of Our Villages
PHD	Provincial Health Department
PNC	Postnatal care
PPP	Purchasing power parity (i.e. international dollar)
PSOD	Phnom Srey Organization for Development
SD	Standard deviation (statistical terminology)
SD	Secure digital (IT terminology)
SIM	Subscriber identity module
SRH	Sexual & reproductive health
STD	Sexually transmitted disease
SUN	Scaling Up Nutrition
TBA	Traditional birth attendant
TV	Television
U5	Under 5 (children)
UN	United Nations
UN(CRC)	United Nations Convention on the Rights of the Child
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
US	United States
USD	United States Dollar
VHSG	Village Health Support Group
WHO	World Health Organization
WFP	World Food Programme





## Introduction

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### 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 Cambodia, 43% of the population is aged 19 years or younger and half of those are aged between 10 and 19 years (CDHS, 2014). There are limited data on the nutritional status of Cambodian adolescents, yet the prevalence of malnutrition is known to be high in other vulnerable groups and is a leading underlying cause of maternal and child mortality. Based on the nutritional situation of these other groups, the nutritional status of adolescents, and particularly adolescent girls, is likely of great concern. In Cambodia, 32% of children under five years are stunted, with gender disparities evident in rates of malnutrition (CDHS, 2014; Greffeuille et al., 2016). Amongst women of reproductive age (15-49 years), 14% are underweight and 44% are anaemic (Chaparro et al., 2014; CDHS, 2014). Amongst girls aged 15-19 years, however, 27.5% are underweight and 49.4% are anaemic (CDHS, 2014). There has also been a significant increase in the prevalence of overweight women in Cambodia (CDHS, 2014). In 2014, the rural plateau and mountainous region of Northeastern Cambodia (including Ratanak Kiri and Mondul Kiri Provinces) reported the highest rate of childbearing among girls aged 15-19 years in the country at 33.8%. In contrast, urban Phnom Penh had the lowest rate (5.9%) of childbearing in the 15-19 year age group, and in Prey Veng, the rate was 10.9% (CDHS, 2014).

There is no policy or strategy to address 'adolescent' health in Cambodia, however the government has demonstrated interest in improving the health and nutrition of women, children and youth. Several policies, strategies and action plans that are relevant to the health and nutritional status of adolescents are in place, including the National Strategic Health Plan (NSHP), the National Nutrition Strategy (NNS), the National Policy on Youth Development (NPYD), the National Strategy for Food Security and Nutrition (NSFSN), the National Population Policy (NPP), and the National Action Plan for the Zero Hunger Challenge in Cambodia (NAP/ZHC).

### 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 countries included in the study were Guatemala, Kenya and Uganda. 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 produced 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 Cambodia. Prior to its finalisation, WFP was invited to provide feedback which 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 and the contextual details of the study sites in Ratanak Kiri, Phnom Penh and Prey Veng. The research findings are then presented in five chapters. Chapter 1 focuses on defining and experiencing adolescents including definitions at the national level and also community-level markers. Chapter 2 addresses maternal health and food taboos and Chapter 3 focuses on education and employment. Chapter 4 explores issues of food and nutrition in detail including plant and animal knowledge among adolescent girls; food classification and the preparation of 'side dishes'; food sources, preferences and consumption; pregnancy and postpartum dietary restrictions; and the impact of food insecurity in the recent historical past. Chapter 5 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 overview

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 the Ministry of Health (MoH) National Ethics Committee for Health Research (NECHR) of Cambodia (study number 045NECHR) and supported by the WFP Country Office in Phnom Penh, Cambodia.

The research focused on three provinces in Cambodia: Ratanak Kiri, Prey Veng and Phnom Penh (see Annex 1 for a map of Cambodia). Specific field sites were agreed in collaboration with WFP-Cambodia and research partners, Plan International and Helen Keller International. The formative research phase of the study was conducted from April-June 2017, including 22 days intensive in-country fieldwork from 9-31 March 2017 (see Annex 2 for a detailed description of the study methodology and Annex 3 for the fieldwork schedule).

Data collection sites were purposively selected to include both urban and rural locations with both majority and minority ethnic groups. A purposive sample of key informants was selected for key informant interviews, focus group discussions, adolescent workshops and technology surveys including: national-level governmental and INGO stakeholders, provincial-level programme implementers, community leaders, community members (10-25 years old), caregivers, and adolescent girls (10-19 years old) (see Annex 4 for the topic guide and research tools). Prior to commencing each data collection activity, informed consent was obtained. Particular attention was given to the consent procedure at the start of each adolescent workshop. All research participants, including the adolescent participants, gave informed consent by signing the consent form (see Annex 5).

A total of 280 participants were enrolled across the three provinces, and 130 data collection activities undertaken: 17 in-depth interviews were conducted with 28 participants; 12 FGDs were conducted with 74 participants; six workshops were conducted with 48 adolescent girls aged 10-14 year old; six workshops were conducted with 41 adolescent girls aged 15-19 years old; and 89 technology surveys were completed with community members aged 10-25 years old (see Table 1 below).

Table 1 – Data collection activities

		Ratanak Kiri		Phnom Penh		Prey Veng		Total	
		Number of activities	Number of participants	Number of activities	Number of participants	Number of activities	Number of participants	Number of activities	Number of participants
Interview	National-level stakeholders	–	–	7	12	–	–	7	12
	Provincial-level programme implementers (Govt & I/NGO)	4	5	3	7	3	4	10	16
FGD	Community leaders	2	13	2	4	2	9	6	26
	Caregivers	2	14	2	14	2	20	6	48
Workshop	Adolescent (10-14-years-old)	2	16	2	16	2	16	6	48
	Adolescent (15-19-years-old)	2	13	2	15	2	13	6	41
Survey	Community members (10-25-years-old)	27	27	31	31	31	31	89	89
Total		39	88	49	99	42	93	130	280

## Research sites – Ratanak Kiri, Phnom Penh and Prey Veng

The research was conducted in three provinces in Cambodia: Ratanak Kiri, Prey Veng and Phnom Penh. It is important to present the context of each province as background to the research findings. The average age of workshop participants in each location was 14 years, a pivotal period of middle adolescence in the lives of young Cambodian women that was described by research participants as being a period of transition with increasing familial roles and responsibilities that related directly to a girl's (planned or anticipated) future. The 'typical day-in-the-life' narratives that are presented below have been built from the workshop participants' self-reported activities and experiences. They therefore represent a composite character rather than any one individual, and reinforce the many similarities the girls from each location described in their daily lives.<sup>1</sup>

### Ratanak Kiri



Plue Toch village, Ratanak Kiri, drawn by 10-14 year old workshop participant.

From left to right, the drawing depicts: A young girl standing next to a lotus flower under the sun; a girl reading a book near her home; two young girls walking to school holding hands; a mother picking mangos from a tree near her home; a father rowing his boat to the family farm; the school flag pole near the community primary school.

#### Narrative 1 – A day in the life of an adolescent girl in Ratanak Kiri: end of cassava harvest, dry season

*I wake up between four and five in the morning and will fetch water from the river to wash the dishes from last evening's meal. There is a water well in the village, but it is further away than the river and carrying the heavy buckets is difficult so I prefer to collect water from the river which is nearer. After that, I brush the floor of the house and then go to school. I don't usually eat breakfast before school, only sometimes if there is any rice left over from the previous night's meal and then I will make it into porridge [rice and water]. I leave for school at 6am [school starts at 7am]. I meet two or three other girls at the river and we row a boat across [about 1km wide stretch of water]. This way our families are not left without enough boats to go to the farms whilst we are at school. There is a paid ferry we can use to get to school, but we don't have enough money.*

*After arriving at school, we normally do language and maths classes, but we also clean the classroom and work in the teacher's garden [the school garden]. I am 14 years old and this is the third year of school that I have attended. I find the classes very difficult and I don't have time to catch up with all the homework in the afternoons or evenings. School finishes around 11am and on my way back to the river, I normally go through the village. There are often men sitting around drinking at that time, particularly when they have finished the harvest. I row back and go home. At this time of year, there is nobody at home because my family is still at the farm. I sometimes feel bad that they are working hard at the farm whilst I am at school. There are several girls my age who dropped out of school at Grade 6 [the last*

<sup>1</sup> For further details of the use of composite characters in qualitative research see Narayan (2012) and Angrosino (1998).



year of primary school] to get married. When I go to school in the morning, those girls who dropped out of school now go with their husbands and children to work on the farm.

Sometimes one of my older sisters might have prepared a meal and left it for me, but when they are busy with the harvest they usually don't have time, so I make myself lunch of rice and chili. Because it is the dry season at the moment, there are not many vegetables, unless you have money to buy them from the mobile seller who goes to the village. Lunch is usually the largest meal that I eat in a day. When I've finished, I might go to the farm to help my family with the harvest, or if I stay at home I have my duties there including looking after and feeding my younger brothers and sisters.

Sometimes, when I go to the fields, we decide to stay at the farm overnight and then I miss school the next day. It just depends on how much we have to do to finish the harvest. Normally we finish on the farm at five or six in the evening and then have dinner which I help to prepare. It is usually what is left over from lunch with a simple soup like kokor [a thick soup of mixed vegetables and lemongrass paste], or maybe fermented fish [small cheap fish, often preserved in a jar with a lot of salt]. If we can find them near the house we may add cassava leaves or another green vegetable, but not usually. For our meals, the food is served equally amongst all the family members and we eat together. There are lots of animals in the village like pigs, chickens, ducks and some buffalo, but we only eat meat occasionally. The animals are usually sold or sometimes used in rituals.

After dinner, I will go to collect water again and help water the plants near the house or do laundry. I sometimes help feeding the animals and gather and chop the firewood. I may take a bath in the river, and usually go to bed about 8pm. I am tired by then and have been too busy to do my homework.

Ratanak Kiri is in northeast Cambodia and borders with both Laos and Vietnam. The province is sparsely populated. Of the 24 provinces in Cambodia, it ranked 19 in terms of population size (NIS 2013).<sup>2</sup> The majority are indigenous ethnic minorities. Sources vary as to the exact number of ethnic groups currently residing in the province (from seven to 20 groups), but International Cooperation Cambodia (ICC) documents at least seven distinct language families with multiple associated dialects (ICC 2011), and this can be taken as a good proxy for ethnic diversity in the region. The inhabitants of Ratanak Kiri identified themselves from other ethnic minorities on the basis of language, and made a clear distinction between themselves and 'the Khmers' who comprise over 97% of the total population in Cambodia (CIA Factbook 2016). Because of the mountainous landscape in Ratanak Kiri, the ethnic minorities who reside there are often referred to collectively as 'highlanders' or 'hill tribes'.

The majority of households in Ratanak Kiri do not have electricity. According to the most recent (2013) census, the most common source of light in the province was battery powered, and wood fuel was the most common source of energy for cooking (NIS 2013). Latrines were not common at the household level and open defecation was not uncommon. The majority of families collected water from the multiple streams, springs or ponds around their communities (NIS 2013). Travel to the region was complicated by poor road systems, and an infrastructure devastated by successive conflicts from the 1960s to the 1990s.<sup>3</sup> Educational and health indicators also remain poor, with Ratanak Kiri reporting some of the highest rates of school drop-out, neonatal mortality, under-five mortality, stunting and poor nutritional status among women in the province (see Table 2 at the end of the chapter for additional details).

Subsistence shifting agriculture (rotating cultivated plots of land to allow time for nutrients in the soil to replenish) is the primary livelihood of ethnic minorities in the region, with the cultivation and weeding of large cash crops such as rice, cassava and cashew nuts largely considered to be the work of women and girls. Family farms are usually located far from the village centre and families would spend days or even weeks at a time (particularly during harvest season) living at their farms, rather than living in the village.

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<sup>2</sup> As of 2014, there are 25 provinces in Cambodia due to the creation of Tboung Khmum, which was divided from Kampong Cham. The next national population census is set to take place in 2019. This report cites the most recently available national statistics (as of 2017).

<sup>3</sup> Due to the high value placed on the agrarian lifestyle of most of the region's inhabitants, the Khmer Rouge built their headquarters in the province during the 1960s. The region was also devastated by US aerial bombing campaigns during the Vietnam War.

Whilst this is necessary for their crops, it further limits access to information, electricity or clean water sources more likely to be available in the village.

Early marriage is very common amongst indigenous ethnic minorities in Cambodia. Reliable statistics are scant, particularly because the majority of these marriages are not provided with the 'official certificate' that the local authority typically issues prior to a wedding ceremony. All research participant groups (governmental representatives, community leaders, caregivers and adolescent girls) across all the field sites in Ratanak Kiri, acknowledged the prevalence of early marriage. Community-level interlocutors considered it normal practice for girls to be married and have children (although not necessarily in that order) soon after starting puberty. The sexual partners of adolescent girls tend to be a few years older (e.g. a 15 year old girl marrying a 17 year old boy). The decision to get married was attributed to the wishes of the young couple themselves. In general caregivers had a relaxed attitude towards early marriage. Some reported that although their personal perception may be that a young couple was not yet sufficiently mature, it would be unlikely that they would deny or prevent the marriage. If a girl became pregnant, however, she would certainly marry as having children out of wedlock is not socially acceptable in Cambodia (as discussed further below).

An anthropological study recently commissioned by Plan International focusing on the Brao, Kreung and Jarai ethnic groups in Ratanak Kiri, discussed a common practice in which adolescents were able to spend time together in a separate room of the house, with girls allowed to make (or receive) house visits around the age of 13, and boys around the age of 15 (Breogán 2017). The report concluded, *'After a period of time, she [the adolescent girl] will be in a position to select a suitor and marry. Parents are also able to monitor who comes and goes, and if they notice a particular suitor returning frequently, they may try to make arrangements for marriage. If the young woman becomes pregnant during this period then she will be asked who the father is and she will select the man she liked best. He will then be expected to marry her and care for the child'* (Breogán, 2017). This correlates with the findings of the current research, and as NGO staff in Ratanak Kiri confirmed, *'They [parents] know that their child is old enough to get married if someone is interested in them. Then the child and that someone can get married. After getting married, the new couple can start working on their farms. The cycle keeps going'*. Adolescent girls in Ratanak Kiri appeared to have a relatively high level of agency in deciding when to first engage in sexual activity, but very little choice after becoming pregnant in terms of marriage. Given the lack of knowledge about and access to contraception, falling pregnant was seen to be a key driver of early marriage (discussed further below).

Animist beliefs amongst the indigenous ethnic groups in Ratanak Kiri are divergent from the Buddhist religion practiced by the majority of Cambodian Khmers. This can be a source of ethnic tension and derision. Throughout Cambodia, not just in Ratanak Kiri, 'spirit houses' stand at the entrance to a property. These shrines are small replicas of a house or pagoda built upon a pedestal where offerings (e.g. food, incense) are made in order to appease the land spirits inhabiting the land on which the property is built. The variations in animist practice that are common in Ratanak Kiri can, in general, be classified by the numerous types of spirits associated with different environments (house, tree, water, farm, village, mountain spirits etc.); the degree to which these spirits can and do cause problems for the living, such as bringing sickness (Baird 2008); and the methods by which they can be appeased, through animal sacrifice for example.

Although such animism has its origins in Brahmanism, for the most part it is not considered antithetical to Buddhism, except for animal sacrifice which contradicts one of the central tenants of Buddhism, the sacredness of all life. Animal sacrifices in Ratanak Kiri are frequent and performed for a variety of reasons: as part of mourning during a funeral; to request rain; to proclaim a newly built house inhabitable; when planting, harvesting, or crop storage has been complete; to heal a sickness; to ease a difficult childbirth. A complicated pregnancy or longer illness may require a 'larger' sacrifice involving a buffalo, cow or potentially multiple animals, although agricultural related sacrifices are usually considered 'smaller' ceremonies involving pigs.



Buffalo sacrifice (head)  
17 years old, Pleu Toch, Ratanakiri



Kitchen  
18 years old, Pleu Toch, Ratanakiri



Buffalo sacrifice (body)  
17 years old, Pleu Toch, Ratanakiri



Illegal logging  
15 years old, Ta Noug, Ratanakiri



Men drinking alcohol  
17 years old, Ta Noug, Ratanakiri



Drinking water  
17 years old, Ta Noug, Ratanakiri

Buffalo sacrifices (the largest form of animal sacrifice) are performed only when a family receives special permission (or direction) from their ancestors. These ritual occasions involve the whole community and are accompanied by feasting and drinking jar wine (discussed below). In the case of a sacrifice requiring a large animal such as a buffalo, the ritual may last an entire day. The buffalo would be tethered to the ceremonial pole the night before, during which the community would drink and prepare for the ceremony. The animal would then be killed at sunrise after which the spirits would be invited to feast with the community. Whilst every member of the community would be invited to attend the animal sacrifice and are eligible to take part in the feast, stakeholders concluded that, in practice, guests and adult males tended to be given preference over women and children. This finding is supported by other recent research in Ratanak Kiri (Breogán 2017).

During the research in Ta Veng district, the family of one workshop participant had held a buffalo sacrifice a few days previously in order to heal the long illness experienced by her father. After the sacrifice ceremony and ritual distribution and eating of the meat, the family erected the buffalo's horns on a short pole in front of their house to indicate that a sacrifice ceremony had recently been performed in order to appease the spirits. The remainder of the body of the animal (bones, hide, etc.) was placed on a more elaborate and taller pole structure at the back of the house with pieces of the animal pointing in the four cardinal directions, but where only family and close neighbours could view it. Buffalo sacrifice at the household level may also occur annually in order to offer general appeasement to the spirits so as to not cause misfortune for the year ahead. The financial expenditure for such a sacrifice is substantial, and many families have difficulty raising sufficient funds, so a sacrifice is not necessarily performed each year. The

communal sharing of meat following any sacrifice ceremony serves an important function in reaffirming community bonds and redistributing wealth.

Jar wine, brewed from rice in ceramic jars, is a crucial component of rituals and drinking is obligatory for all members of the community, including older children (adolescents). Consumption of alcohol is routine in village life, particularly following harvests, and inebriation was discussed by workshop participants in Ratanak Kiri as a social norm. For example, loud boisterous men who had been drinking all day were considered an annoying, and potentially violent, aspect of daily life that adolescent girls would have to negotiate. According to the recent study by Breogán (2017), which explored this phenomena in more detail in the same districts focused on during the current research, alcohol and violence were strongly linked in ethnic minority communities, and alcohol was considered the primary motivator for violence (both verbal and physical) against women and children.

Community members also discussed increasing levels of drug abuse in Ratanak Kiri due to the small-scale logging trade. Adolescent boys and young men were likely to engage in this cash work and, according to community leaders, were provided with methamphetamines by the log traders in order to raise their productivity levels (also confirmed by Breogán, 2017). Adolescent girls recognised the presence of 'illegal logging' in their villages, but it was not reported to the authorities as it was considered a community issue, and not one for 'outsiders' to be involved in. This concept of 'insiders' versus 'outsiders' was characteristic of communities in Ratanak Kiri. Many community members in Ratanak Kiri emphasised that they should not share too many details of their lives with 'outside' Khmers or foreigners (e.g. Vietnamese, Laotian) as they believed such people had a negative impression of the hill tribes and 'looked down' on their traditional beliefs and practices.

## Phnom Penh



Koh Dac village, Phnom Penh, drawn by a 10-14 year old workshop participant.

From left to right, the drawing depicts: A vegetable garden near home; a girl walking to the health centre; a girl standing near her home behind the fenced of the family garden; two girls holding hands near a car.

### Narrative 2 – A day in the life of an adolescent girl in Phnom Penh: outskirts of the city, garment factory district

*I wake up between five and six in the morning. It's my job to wash the dishes from the night before and then I help my mother cook rice for our dried fish porridge. If breakfast is not ready before I need to leave for school at 6.30am, I always promise my mother that I will buy rice and grilled meat for breakfast at one of the food vendors just outside the gates of my school. But actually, I am more likely to buy instant noodles, shrimp crackers and a Red Bull [energy drink], that is my favourite drink because I like the way it tastes. My mother often gives me pocket money to buy a snack at school if I get hungry. I usually take my bicycle to school, although sometimes a neighbour or one of my older brothers or sisters gives me a ride on their motorbike.*



*School starts at 7am. This is the seventh year of school that I have attended. I enjoy school and talking to my friends during break, but I don't always do well in all the subjects. If I can pass the exam this year, then next year my mother has agreed to pay for the extra classes I need to catch up with all the lessons properly.*

*School finishes about 11am and on my way home I pass several food vendors, so if I want a snack and have any money left, then I will buy something. On my way home I go past the yards of all our neighbours. The houses are very close to each other and I see them sitting there, playing cards and gambling. Sometimes they use our yard as their gambling spot. I think gambling is a waste of time and money, but what can I do?*

*When I get home, my mother will have prepared lunch for me, usually rice with grilled or dried fish and a fried egg. After lunch, my mother will go back to work, and I will look after my younger brother and sisters and sometimes my nieces and nephews too. I also have chores that I need to do. I will do the washing and hang the clothes on the fence to dry, and then I will water the container garden. There isn't enough land to have a proper garden, so we have a smaller container garden [herbs and vegetables grown in clay pots]. We collect rainwater from the roof for watering the plants, although we don't collect much water during the dry season, but we also have a pipe that connects to the river. The water is not very clean, but the pipe brings it straight into the yard and we have to boil the water before we can drink it. I don't know how much it costs, but I have heard my parents say it is too expensive.*

*I usually have time in the afternoon to do my homework. I try to do it if I can because I want to be a good student, but I know several other people who have dropped out of school at Grade 9 because school is expensive and they need to work to earn money for their families. My brother dropped out then to go work in Phnom Penh. Many of the women who live here are employed in the factories. There is a certain area in Phnom Penh where many of the factories are, and it is close enough to my house that if I go to work there, I will still be able to live at home and come back every evening. I think I might go to work there to help my family with money. I always worry that my family doesn't have enough money and I want to be able to contribute and help my parents. But I also want to stay in school.*

*We have dinner at about 7pm. Everyone eats as much as they want, and there are usually leftovers that we will have for lunch the next day. My mother does not trust the vegetables that are sold in the large market because she thinks they are full of 'chemicals' or imported from another country. She prefers to buy the ingredients from the mobile food sellers who she knows and trusts. My mother's best friend is a mobile vendor. I don't really go to the shops to buy the groceries, but I usually help my mother prepare dinner, cooking the rice and helping to make the side dishes like green papaya sour soup or pork with ginger. I can make a few simple dishes on my own, like fried eggs, stir-fried tomatoes and kokor soup. Some days after dinner I might have a small snack, maybe some longan fruit or mango which is my favourite. I'm allowed to go out and play with my friends or watch television with my family, and then I go to bed at about 10pm.*

Phnom Penh, in south-central Cambodia, lies at the junction of the Mekong and Tonlé Sap rivers. It is the capital city and a densely populated urban centre and has the second largest population of the country's 24 provinces (NIS 2013). Approximately 12% of the national population lives in Phnom Penh (NIS 2013), and as an economic and industrial hub, it attracts internal migrants from throughout Cambodia. The majority of the population in Phnom Penh is ethnic Khmer with Khmer being the dominant language, although there are significant Chinese, Vietnamese, Thai and other minority populations and it is not uncommon to hear English and French spoken, particularly by older people, due to the French colonisation of Cambodia until 1953. Buddhism is the dominant religion and pagodas, some of which are highly elaborate, are numerous throughout the city and province.

The research in Phnom Penh was conducted in two contrasting fieldsites. Koh Dach, which in Khmer means 'Isolated Island', is an island located in northern Phnom Penh province. The island can only be reached by the daily ferry although there is a paved road running around the circumference of the island. There are three villages on the island clustered close together and which share a primary school and pagoda. One of the dominant economic activities on the island is silk weaving and the large looms are easily visible under many houses. The skill of weaving and working the loom is passed down from mother to daughter, and girls will be expected to start weaving in early adolescence, so are likely to be able to complete silk scarves unsupervised by the time they are 14 or 15 years old. Women from the island are also employed in the garment factories in Phnom Penh. Due to the extensive travel time from the island (by ferry and then through the congested roads of the city), many single young women live in dormitories near the factories rather than commute each day. The children of these garment factory workers are often raised by their



Weaving  
17 years old, Koh Dach, Phnom Penh



The river  
16 years old, Koh Dach, Phnom Penh



Watering garden  
19 years old, Champus K'ek, Phnom Penh



Nephew and uncle on motorbike  
15 years old, Koh Dach, Phnom Penh



Playing cards (gambling)  
19 years old, Champus K'ek, Phnom Penh



Statue of Buddha  
16 years old, Koh Dach, Phnom Penh

grandmothers on the island, and are visited by their mothers at the weekend. This scenario gave rise to the frequently repeated phrase, *'Grandmothers can become mothers again'*.

The second fieldsite, Champus K'ek village is located in southeast Phnom Penh and is connected to the city centre via a large bridge with several lanes for road traffic. As in Koh Dach, one of the main sources of employment for young women in the village are the garment factories. Due to the proximity of the village to Veng Srend Boulevard with its high concentration of garment factories, these factory workers tend to commute each day and continue to live at home. The road system in the area is very good despite the high congestion levels, and 'tuk-tuks', motorbikes and cars (both taxis and private cars) are all easily accessible modes of transport. Gambling and drug abuse in the village are issues of constant concern to community leaders and caregivers.

Both villages have good electricity and water systems. Water is piped to individual households from the Mekong River and although it provides a good supply, must be boiled before drinking. Despite the proximity of the river to both villages, fishing for either income or for family consumption is not common and many caregivers concluded that although there are not many fish due to previous years of overfishing, the fish that are left are 'polluted' due to industrial chemicals being deposited in the river. Instead, caregivers preferred to purchase their fish from trusted mobile sellers whom, they believed, source their products from fish farms. Farming activities are either small-scale commercial farms (producing products such as mangos or coriander), or small plots of land or 'container' gardens used primarily to produce food for household consumption. These are separated using chain link fences. Domesticated animals such as



chickens, ducks and cows are common and both villages supported a range of small businesses (such as tailors, motorbike repair shops etc.).

The rate of primary school attendance is 82.7% for girls and 82.3% for boys, although secondary school attendance decreases to 49.9% for girls and 57.9% for boys. Early marriage was not considered common practice in the province, and leaving school was associated with pursuing economic livelihoods, rather than a precursor to marriage, as in Ratanak Kiri. Child health indicators and women's nutritional status in this densely populated province are, on average, much better than rest of Cambodia (see Table 2), although pockets of inequity remain which report the highest concentration of poor health indicators. Municipal-level respondents confirmed that the populations in Phnom Penh who required the most assistance were migrant families (who had settled in the province from other areas); garment factory workers and their families; workers in the 'entertainment' industry (a term deliberately employed to avoid stigmatising sex workers); and those involved in gambling and the drug trade. Governmental respondents suggested that people in the lowest socio-economic quintile engaged in the latter activities. As a representative from the Municipal Department of Women's Affairs asserted, 'Just because they live in an urban area, it doesn't mean they are rich.'

## Prey Veng

### *Narrative 3 – A day in the life of an adolescent girl in Prey Veng: three months after the rice harvest, dry season*

*I get up between 4.30 and 5.30 in the morning. Before breakfast, I will walk the cows outside, feed the pigs, geese and chickens and clean out the animal houses. Sometimes I also need to weed our family garden which is on a small plot of land near the house. For breakfast we usually have porridge with either a fried or boiled egg. I usually make my own breakfast because I live with my grandparents. My parents both work in Phnom Penh. My mother works in one of the big garment factories, and my father works in construction. They send money back to my grandmother, but they only come home once or twice a month.*

*I leave for school at about 6.30am on my bicycle. This is the seventh year of school that I have attended and I am now 14 years old. I don't like school very much. Last year I didn't pass the final exam, and I don't think I am going to pass it this year. I really need extra classes, but they are expensive. The fees can cost 30,000 to 50,000 Riels per month [approximately USD 8-12]. I have heard that you can bribe the teacher to give you a passing grade on the exam. I don't know if that is true, but my grandfather has already said that he will not pay to bribe a teacher. Anyway, extra classes are usually held in the afternoon from 1-5pm which is the time that I need to help my grandmother. When I leave school I will probably stay in Prey Veng to earn money and help my grandmother. All my older brothers and sisters have already dropped out of school and have moved to other provinces for work. Only very rarely, when my grandparents are late with the rice harvest, am I allowed to miss school to help them, although my family now hires a man with a machine to harvest the rice so now there is less work for my grandparents than before.*

*School finishes at 11am. By the time I get home my grandmother will have started to prepare our lunch and I help her get it ready. Usually its rice, fermented fish and morning glory soup. There is a pond near our house where my grandparents can catch fresh fish in the river, but the traps didn't catch anything this morning. After lunch, I'll wash the dishes, clean the house, water the family garden and if we need firewood will help to gather and chop it. There is a water pump very near our house too, so my grandmother is the one who usually collects water in the morning. We need to boil it before we can drink it. Most afternoons I spend learning how to make rice wine to sell in the village, although we could also sell it in Phnom Penh. Our neighbour is showing me. They have several large pots and the pipes that you need for the fermenting process. We give the rice that is left over from making the wine to the pigs. We sell our animals at the market.*

*Although we have the rice farm, most families here also have a small family garden near their house. Sometimes our garden has enough vegetables to sell them to our neighbours, but usually we just eat what we grow. If my grandmother needs something extra, than we will buy it from our neighbours. She does not go to the big market for vegetables because she is wary of them and thinks they are full of chemicals. For dinner we eat rice with grilled or fermented fish, and maybe sour soup with fish and a fried egg. It really depends on what is growing in the garden at that time, and what we feel like making. After dinner, I usually go to sleep at 8pm or 9pm.*



*Ampil village, Prey Veng, drawn by a 10-14 year old workshop participant.  
 From the left to right the drawing depicts: a cow standing near a fish farm; a girl with a watering can next to her family's garden;  
 the family house with a pipe running from the roof to collect rain water in a clay jar.*

Prey Veng is in southern Cambodia on the east bank of the Mekong River and borders with southern tip of Vietnam. It is a densely populated agricultural zone and of the 24 provinces in the country, has the third largest population (NIS 2013). The majority are ethnic Khmers and Khmer is the main language. Buddhism is the dominant religion and pagodas are numerous throughout the countryside.

Due to its proximity with the Mekong and because of the river's frequent silt-depositing floods, the plains of Prey Veng are well suited for rice as a cash crop and the majority of land is dedicated to rice fields. The topography of the land is flat and there is a moderate road system that makes travel easier. People live close to their rice fields and for most families, travel to and from their farms is relatively quick. The cultivation and weeding of large cash crops are considered 'jobs for men' because of the 'heavy' physical work involved, although there is increased automation in the area. In contrast to Ratanak Kiri, the work of women and girls in Prey Veng is associated with animal husbandry because, as one community member concluded, 'The animals stay close to home and do not require the heavy lifting of harvesting'. Access to electricity, latrines and piped water sources varies considerably according to the socio-economic status of Prey Veng households.

Although educational indicators are largely similar to Phnom Penh, health indicators for the province remain poor with high rates of neonatal mortality, under-five mortality and stunting nearly aligned to those in Ratanak Kiri. The nutritional status among women in the province, however, is much better than in Ratanak Kiri (see Table 2).

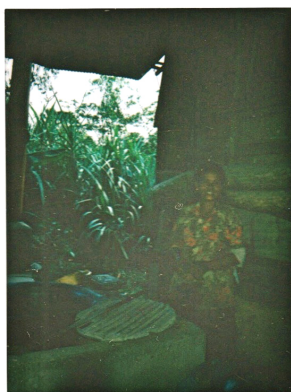
It was frequently reported that as soon as the youth of Prey Veng (male and female) finish or drop-out of school, they leave the province in search of non-agricultural based economic activities, and between the ages of 15 and 35 years, the majority move to Phnom Penh to work on construction sites or in the garment factories. Many have children who remain in Prey Veng to be raised by their grandmothers, and the workers send money back to their families. Whilst Phnom Penh is a dominant pull-factor for the out-migration of youth from Prey Veng, the province's large agricultural base acts as a pull-factor for migrants from other areas and statistics indicate that more Cambodians move to Prey Veng than move away (NIS 2013).

Making and selling rice wine are common economic activities for women and girls, particularly during the dry season when they are not required to be tending the farm, although wine does not have the ritualistic significance it has in Ratanak Kiri.<sup>4</sup> Although drunkenness and alcohol-related violence may be present to a certain degree, issues of gambling and resulting familial debt were raised by community participants as the most problematic socio-economic issues in Prey Veng.

Community members reported that adolescent marriages did occur in Prey Veng, but as in Phnom Penh, they were 'uncommon' and usually only because of unplanned pregnancy. In cases of teenage pregnancy, it was considered socially acceptable for the expectant girl to marry before she delivers, but community leaders stated that they would not legitimise the marriage and would withhold the marriage certificate of anyone under the age of 18. The accepted position was for girls to wait until their early 20s before getting married, when they had left school (either leaving early or finishing their studies) and had been employed for a few years. Mothers were particularly emphatic that they wanted their daughters to delay marriage, '*Until both their bodies and minds are strong*' (discussed further below). Adolescent girls who did not have children, both those in and out of school, all reported wanting to wait until they had 'a good job' or were able to 'make a living' before getting married. Further, in projecting what their futures may hold, bearing children was not a forgone conclusion and as one pragmatic 17 year old participant in Koh Dach explained, '*If we can afford to raise the child, we will have a child. If not, we won't.*' Caregivers in both Prey Veng and Phnom Penh suggested that girls waited to get married because they knew how to 'behave appropriately' by asking permission from their elders and waiting an appropriate length of time to secure the consent of both families. The implication was that girls had 'behaved appropriately' by not engaging in premarital sex, and the waiting period proved that the marriage was not being made in haste because of pregnancy. This was quite different from the situation reported in Ratanak Kiri, where, as described above, the sexual behavior of adolescents (boys and girls) was readily acknowledged, and pregnancy was a socially acceptable reason for marriage.



Well  
15 years old, Prey Somroeung, Prey Veng



Rice wine making  
18 years old, Prey Somroeung, Prey Veng



Rice mill  
15 years old, Prey Somroeung, Prey Veng

<sup>4</sup> Rice wine is produced by fermenting grains of rice until the starch in the rice converts into sugar, resulting in an alcoholic liquid. The fermentation process is very rapid and can take as little as 24 hours.

Table 2 – Health and education characteristics by province, Cambodia

Province <sup>5</sup>	Total population and population density (per km <sup>2</sup> ) <sup>6</sup>	Annual Growth Rate <sup>7</sup>		Primary school attendance <sup>8</sup>		Secondary school attendance		% of 15-19 year olds who have had a live birth	Average age at first marriage (women) (years)	Early childhood mortality (%) <sup>9</sup>		Under-5 nutritional status (% below -2 SD) <sup>10</sup>		Women's nutritional status (15-49 yrs) (%) <sup>11</sup>	
		2008	2013	M (%)	F (%)	M (%)	F (%)			Neonatal mortality	U5 mortality <sup>12</sup>	Stunting	Under-weight	Under 145cm <sup>13</sup>	BMI <18.5 <sup>14</sup>
Banteay Meanchey	729,569 / 109	1.56	1.47	78.5	82.1	46.6	43.0	16.5	n/a	2.0	3.2	28.6	17.0	4.0	10.7
Kampong Cham <sup>15</sup>	1,757,223 / 1	0.43	0.90	80.6	88.3	35.1	46.7	13.1	n/a	2.5	4.8	33.5	25.7	8.8	10.2
Kampong Chhnang	523,202 / 179	1.22	2.05	85.5	83.8	46.7	49.9	6.3	n/a	2.7	5.5	42.8	35.6	6.8	18.0
Kampong Speu	755,465 / 108	1.79	1.05	80.8	84.5	41.4	30.6	2.0	n/a	1.9	3.1	40.5	29.4	7.3	20.9
Kampong Thom	690,414 / 50	1.03	1.79	80.9	82.0	36.8	43.6	4.1	n/a	2.9	6.0	36.4	27.7	2.3	12.5
Kandal	1,115,965 / 343	1.62	0.45	77.4	81.0	40.8	37.9	8.8	22	1.7	4.0	28.1	26.2	4.4	17.9
Kratie	344,195 / 31	1.93	1.51	74.8	77.6	29.7	38.0	14.5	n/a	3.0	8.0	38.4	25.1	4.7	15.8
Phnom Penh	1,688,044 / 2,468	2.83	2.34	82.3	82.7	57.9	49.9	3.8	22	1.3	2.3	17.9	12.9	3.2	14.0
Prey Veng	1,156,739 / 237	0.01	3.99	87.1	79.6	50.8	51.5	6.7	n/a	3.3	7.5	32.7	22.2	4.3	12.5
Pursat	435,596 / 34	0.69	1.85	81.4	80.5	24.4	33.5	3.8	n/a	1.4	3.6	38.8	31.6	5.6	13.1
Siem Reap	922,982 / 90	2.52	0.58	78.8	82.7	34.6	34.9	4.8	n/a	1.7	5.6	35.9	26.2	5.4	11.6
Svay Rieng	578,380 / 195	0.09	3.61	87.0	88.5	58.0	47.3	6.5	n/a	2.0	6.3	32.8	20.8	5.7	13.1
Takeo	923,373 / 259	0.66	1.78	83.6	86.4	58.1	66.8	2.5	n/a	1.6	3.1	30.7	22.7	4.2	13.9

<sup>5</sup> Data current as of 2013-14 (NIS 2013; CDHS 2014). Provincial names are colour coded according to the four 'natural' regions of Cambodia as referenced in governmental literature. The regions are: Plateau & Mountain: Purple (n=6); Tonle Sap: Blue (n=8); Coastal: Orange (n=4); Plains: Green (n=6).

<sup>6</sup> Population density is per square kilometer, per province (NIS 2013). The province with the lowest population density is Mondul Kiri (5) and the highest population density is Phnom Penh (2,468).

<sup>7</sup> Data current as of 2013 (NIS 2013). Annual growth rates are compared for the 1998-2008 period (i.e. '2008') and for the 2008-2013 period (i.e. '2013'). Among the natural regions of Cambodia – Plateau and Mountain, Plains, Coastal and Tonle Sap – average annual population growth increased in all regions except Tonle Sap.

<sup>8</sup> Educational statistics indicate participation in primary school for children aged 6-12-years-old and secondary school for children aged 13-18-years-old (net attendance ratio)(CDHS 2014).

<sup>9</sup> Calculated as number of deaths per 1,000 live births over the course of a 10 year period (CDHS 2014).

<sup>10</sup> Stunting is measured by comparing height-for-age. Underweight is measured by comparing weight-for-age. Each of the indices presented above are -2 standard deviation (SD) units from the median of WHO child growth standards (as adopted in 2006) (CDHS 2014).

<sup>11</sup> Nation-wide, nearly 6% of adolescent girls in Cambodia aged 15-19-years-old are under 145cm, and 27.5% have a body mass index (BMI) of <18.5 (CDHS 2014).

<sup>12</sup> Nation-wide, early childhood mortality for children born to mothers whose age at birth was less than 20 years (<20) is 2.0% (CDHS 2014).

<sup>13</sup> 'The height of a woman is associated with past socioeconomic status and nutrition during childhood and adolescence. A woman's height is used to predict the risk of difficulty in delivery because small stature is often associated with small pelvis size and the potential for obstructed labor. The cutoff point for the height at which mothers can be considered at risk varies between populations but normally falls between 140 and 150 centimeters' (CDHS 2014).

<sup>14</sup> A body mass index (BMI) of 18.5 or lower indicates thinness or acute undernutrition (CDHS 2014).

<sup>15</sup> In 2014, Kampong Cham was divided into two provinces: Kampong Cham and Tboung Khmum. At the time of writing, the most recent NIS and CDHS data did not reflect the addition of this 'new' province.

Province	Total population and population density (per km <sup>2</sup> )	Annual Growth Rate		Primary school attendance		Secondary school attendance		% of 15-19 year olds who have had a live birth	Average age at first marriage (women) (years)	Early childhood mortality (%)		Under-5 nutritional status (% below -2 SD)		Women's nutritional status (15-49 yrs) (%)	
		2008	2013	M (%)	F (%)	M (%)	F (%)			Neonatal mortality	U5 mortality	Stunting	Under-weight	Under 145cm	BMI <18.5
Otdar Meanchey	231,390 / 38	8.64	4.39	81.3	78.8	29.8	32.6	11.0	n/a	1.7	4.1	36.3	26.4	3.4	12.8
Battambang <sup>16</sup>	1,121,019 / 96	2.28	1.79	86.7	84.2	40.5	52.8	3.1	n/a	1.2	3.7	24.9	18.2	3.8	11.9
Pailin <sup>16</sup>	65,795 / 82	11.24	-1.38	86.7	84.2	40.5	52.8	3.1	n/a	1.2	3.7	24.9	18.2	3.8	11.9
Kampot <sup>17</sup>	611,557 / 125	1.03	0.86	85.0	86.9	47.4	54.8	7.3	n/a	2.0	4.4	25.2	21.1	4.4	17.0
Kep <sup>17</sup>	38,701 / 115	2.21	1.58	85.0	86.9	47.4	54.8	7.3	n/a	2.0	4.4	25.2	21.1	4.4	17.0
Preah Sihanouk <sup>18</sup>	250,180 / 129	2.54	2.44	83.6	82.2	45.4	43.4	7.5	n/a	2.0	4.2	33.4	22.0	4.5	15.6
Koh Kong <sup>18</sup>	122,263 / 12	0.12	0.80	83.6	82.2	45.4	43.4	7.5	n/a	2.0	4.2	33.4	22.0	4.5	15.6
Preah Vihear <sup>19</sup>	235,370 / 17	3.61	6.37	72.6	78.5	21.2	27.1	12.1	n/a	2.5	7.9	44.3	30.7	8.0	16.4
Stung Treng <sup>19</sup>	122,791 / 11	3.20	1.90	72.6	78.5	21.2	27.1	12.1	n/a	2.5	7.9	44.3	30.7	8.0	16.4
Mondul Kiri <sup>20</sup>	72,680 / 5	6.34	3.47	67.1	75.0	23.6	20.2	23.2	19	3.6	8.0	39.8	26.2	16.8	10.4
Ratanak Kiri <sup>20</sup>	183,699 / 17	4.67	3.99	67.1	75.0	23.6	20.2	23.2	19	3.6	8.0	39.8	26.2	16.8	10.4
<b>Cambodia</b>	<b>14,676,591 / 82</b>	<b>1.54</b>	<b>1.83</b>	<b>81.4</b>	<b>83.4</b>	<b>42.4</b>	<b>44.3</b>	<b>7.3</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>32.4</b>	<b>23.9</b>	<b>5.4</b>	<b>14.0</b>

<sup>16</sup> For CDHS (2014), data from Battambang and Pailin Provinces are reported together.

<sup>17</sup> For CDHS (2014), data from Kampot and Kep Provinces are reported together.

<sup>18</sup> For CDHS (2014), data from Preah Sihanouk and Koh Kong Provinces are reported together.

<sup>19</sup> For CDHS (2014), data from Preah Vihear and Stung Treng Provinces are reported together.

<sup>20</sup> For CDHS (2014), data from Mondul Kiri and Ratanak Kiri Provinces are reported together.







## 1. Defining and experiencing adolescence

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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).



*'This is me in the middle'.*  
Drawing by a 12 year old girl,  
Champus K'ek, Phnom Penh

In Cambodia, there was not one standardised definition or age range for adolescence applied across laws and policies, and 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.

Age was rarely used to indicate different life stages at the community level and markers of adulthood could be observed in individuals considerably younger than 18 years old, the legal age of majority in Cambodia. Adolescents across research sites referenced puberty, marriage, parenthood, independence, labour and responsibilities as markers of growing up. 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 the 10-19 age group. For example, Cambodian adolescents are expected to assume gender-specific household tasks at an early age, and by 14-17 years old, many 'children' will have assumed 'adult' responsibilities including supporting the family business or farm, and will be married. Based on this analysis, scholars have argued that 'adolescence' is a relatively new (Western) cultural concept that has been imported to Southeast Asia (Zha and Detzner 2005) and as one government stakeholder who participated in this research noted, *'Adolescents... this is a word international NGOs like to use'*.

### Linguistic definitions

In Khmer, the dominant language in Cambodia and the lingua franca used for most of the research interactions in Phnom Penh and Prey Veng, there are two ways to translate the concept of adolescence: *'yuk vas vey'* and *'kmeng chom tong'* (both transliterations from Khmer to English). *'Yuk vas vey'* can be translated as 'youth' and, in both governmental literature and colloquially amongst ethnic Khmers, is a term specifically related to people aged between 15 and 30 years old. It is perceived to be a neutral term with no apparent (negative or positive) connotations, but it is also a more elevated word choice and may not be widely understood by Khmer speakers without a formal education. *'Kmeng chom tong'* can be translated as 'teenager', and although it has no formal definition such as 'youth', is generally perceived to describe a smaller age group of people under 20 years. *'Kmeng chom tong'* is widely understood by Khmer speakers regardless of education level, but can be perceived to have negative connotations associated with difficulties of managing and raising children ('teens') in this age group.

In Ratanak Kiri, the languages used during the research were *Pouv*, *Ka Chak*, *Jarai*, and *Tom Poun*. None of these languages have a word for 'adolescence' and there is no direct translation that is mutually intelligible across the various ethnic groups. Although efforts were taken to explain the age group in a neutral manner, interlocutors may have been influenced in their responses by the terminology used by the research team (this is noted in the limitations section of the methodology in Annex 2).

## Legislative definitions

Cambodia has one of the youngest populations in Southeast Asia: one in three people are under the age of 20, and 36% of the population are aged 10-30 years old (UN in Cambodia, 2009). These individuals are generally defined as 'young people' or 'youth' in both government and non-governmental policy and in development programming (UN in Cambodia 2009). The National Policy on Youth Development provides an expansive definition of youth as '*People of both sexes aged between 15 and 30 years and with Khmer nationality regardless of their marital status*' (MoEYS 2011).

The Kingdom of Cambodia ratified the United Nations Convention on the Rights of the Child (CRC) without reservation on 15 October 1992 (UN Treaty Collection, 2017). According to the CRC, a 'child' is any person below the age of 18 '*Unless the laws of a particular country set the legal age for adulthood younger*' (UN Treaty Collection 2017). In Cambodia, there are several competing definitions of a 'child' as adopted in marriage, penal and labour legislation, and customary law further complicates the interpretation of a child as any person below the age of 18. For example, the Law on Marriage and Family states that the minimum age for marriage for girls is 18 years and for boys is 20 years, yet girls are allowed to be married earlier if they are pregnant and/or if their parents provide permission. The Penal Code of Cambodia lists the minimum age for sexual consent to be 15 years old, but states that the age at which criminal liability begins is 18 years although sanctions can be imposed upon 'minors' over the age of 14 if circumstances warrant. Labour Law states that the minimum age for wage employment is 15 years old, however 'light work' is permitted for children as young as 12 years old, as long as the work does not harm their health, mental development or education (CNCC 2007).

## Government definitions

Against this legislative backdrop, the definitions of adolescence used by government bodies were found to vary between ministries and between national, provincial and commune levels. In part, this was due to different mission statements, programming concerns and donor relations of each ministry. Provincial Health Departments (PHDs), for example, have a long history of both government- and donor-funded programmes targeting children under the age of five years, therefore their experience with adolescents or 'older children' is quite limited. The Nutrition Unit of the PHD in Prey Veng defined adolescents as individuals that had '*not reached puberty yet*', but this was exceptional compared with other stakeholders' definitions, and may be explained by their focus on younger children.

Departments of Women's Affairs across Cambodia have 'girls and women' as an explicit focus of their strategy and used a definition of adolescence that was more closely aligned to international definitions, albeit with an explicit programmatic focus on women as mothers rather than girls as potential mothers. Departments of Agriculture were orientated towards children who were old enough to work in the agricultural sector (as per Cambodian labour law), and aligned adolescence to an older group of children who had entered the workforce.

It was notable that Departments of Health had the most divergent definition of adolescence amongst all the ministries polled. Representatives from the Departments of Health suggested that the nutrition of older children (i.e. 10-19 year olds) was less important than focusing on the health needs of younger children (i.e. children under five, and those who fell within the 'first 1,000 days' window of opportunity). Many representatives from Departments of Health suggested that healthy children would grow into healthy adolescents and adults, so argued that children should be given priority within the limited budgets allotted to nutrition activities. As one stakeholder concluded,

Table 3 – National- and provincial-level government representative definitions of adolescence

Source	Terminology	Age range	Basis of definition
Ministry of Women's Affairs	Adolescent	10-24 years	<i>'It depends on each programme. For example, an NGO programme will say 10-24 years old. Our ministry doesn't have a definition like that'.</i>
Ministry of Social Affairs, Veterans and Youth Rehabilitation	Youth	18-35 years	<i>'Children are defined as under 18, but for adolescence, I don't think there is a definition for that... We just focus on children and adults. We don't classify adolescence'.</i>
	Adolescent	17+ years	
	Child	Under 18 years	
Ministry of Agriculture, Forestry and Fisheries	Adolescent	15-18 years	<i>'Children, or adolescents as the international NGOs like to use this word, are the focus of much of our policies'.</i>
	Child	Under 18 years	
Provincial Health Department, Ratanak Kiri	Adolescent	13+ years; 15-20 years	<i>'From the national policy on children, it is from 13 up... but I think maybe there is an age range for the adolescent... and it is between 15 and 18 or 20'.</i>
	Child	Under 13 years	
Municipal Health Department, Maternal and Child Health Unit, Phnom Penh	Adolescent	7-10 years	<i>'Nowadays, we are only focusing on children under 5, and they are not considered to be adolescent. Because we haven't done anything within this [adolescent] age range, we are not sure what age range is for that group, maybe around 7-10 years'.</i>
	Child	Under 5 years	
Municipal Department of Education, Youth and Sport, Phnom Penh	Higher secondary school	15-17 years	<i>'There is no age range for adolescents, we just divide in-school students into the three education levels'.</i>
	Lower secondary school	12-14 years	
	Primary school	6-11 years	
Municipal Department of Women's Affairs, Phnom Penh	Adolescent/Menstruation	13-18 years; 12-18 years; When menstruation begins	<i>'When we used to work with ILO, their definition was 13 to 18. Children is those who are under 18, but within that, adolescent is also included in that age group. So adolescence is from 13, 14, 15, 16... something'.</i>
	Child	Under 18	<i>'But now girls have their period at twelve, so they are included in adolescence too'.</i>
Provincial Department of Health, Nutrition Unit, Prey Veng	Puberty	15+ years	<i>'I think adolescents do not reach puberty yet. So it should be 10 years old or something until 13 or 14 years old'.</i>
	Adolescent/Older children	10-14 years	
Provincial Department of Agriculture, Prey Veng	Youth	18+ years	<i>'I think adolescence is from 10 to 18 years old. I think more than 18 years old are youths. Below 10 years old, they are definitely children'.</i>
	Adolescent	10-18 years	
	Child	Under 10 years	
Provincial Department of Women's Affairs, Women Education and Health Unit, Prey Veng	Adult/Puberty	16+ years	<i>'Well, 12 years old to 16 years old is adolescence. Because after puberty, they become adults already and they are able to get married when they reach 16 or 18 years old'.</i>
	Adolescent	12-16 years	
	Child	Under 12 years	

*We are only focusing on children under five. We know if children are in good health, then adolescents are in good health. It is important to focus more on children under five years old... The Ministry of Health focuses only on children under five. When they are healthy, then the rest of the population will be too. Everything starts from birth. Adolescents have already started school, so we don't see any problems with them.*

Despite the varied definitions forwarded by governmental representatives, there was a general trend towards assuming a flexible definition of adolescence which could be adapted according to donor requirements and standards. Stakeholders preferred to use a binary classification of childhood and adulthood, with adolescence included in childhood, rather than delineating adolescence as a separate, third category. It was also common for stakeholders to preface discussions on adolescence with statements such as *'We haven't done anything with this age range'* or *'We have never investigated their problems'*. In the absence of a clear national strategy on adolescence or adolescents, government interlocutors often applied their own frame of reference. Table 3 above provides a representative selection of national- and provincial-level government responses when asked to define *'adolescence'*.

### **Defining adolescence in Ratanak Kiri**

As outlined above, the multiple ethnic groups in Ratanak Kiri do not have a term for adolescence in their local lexicons. Perhaps it is not surprising therefore, that NGOs and CSOs working in the area described adolescence to ethnic communities in Ta Veng and Andoung Meas as a *'foreign concept'*. NGO and CSO stakeholders concluded that *'In the community, they don't divide age ranges like that'* and suggested that *'Ethnic minorities use the term puberty to refer to this age group'*.

Community members in Ratanak Kiri clearly articulated their understandings of puberty, a term which was more easily translated into local languages, and was therefore used as a proxy for adolescence (see Table 4 below). There was disagreement amongst community members as to whether puberty could be classified as a separate stage between childhood and adulthood. In general, a *'child'* was described as an individual who was single and dependent on their family for survival, and an *'adult'* was an individual who was married and taking care of their own family. Puberty was therefore seen as a biological marker that indicated when transition from childhood to adulthood could occur. For girls, menarche was a clear sign of this transition, with the full realisation of adult rights in the community bestowed upon those who fulfilled



*'This is me [center] thinking'*. Drawing by a 12 year old girl, Ta Noug, Ratanak Kiri  
To the left of the participant's drawing is her younger sibling, identifiable as a *'child'* due to the amulet around his neck that is customarily worn by infants and toddlers as a *'protection string'* to ward against illness and/or malicious spirits. Her younger sibling has his arms outstretched towards the girl indicating she needs to help care for him. On the right, is the girls' mother, also with her arm outstretched towards the girl, indicating the assistance she needs with household chores.

Table 4 – Local NGO and community-level definitions of puberty and adolescence in Ratanak Kiri

Source	Terminology	Age range	Basis of definition
Khmer Youth Association, Ratanak Kiri	Adult	24+ years	<i>'They are adult because they have children and they are married because in our target areas, people get married early...it is between 15 and 24 that are the youths...adolescents are from 10 to 15. Another age range is 15 to 24, so I think it is the same. So, from 10 to 24'.</i>
	Youth	15-24 years	
	Adolescent	10-15 years; 10-24 years	
Phnom Srey Organization for Development, Ratanak Kiri	Youth	10-24 years	<i>'Adolescence is when they reach puberty at age 15 or 16, then it is possible for them to get married. After getting married, they usually have children right away'.</i>
	Adolescent	15+ years	
Plan International, Ratanak Kiri	Youth	10-24 years	<i>'From 10 to 14, we have small groups of children for our programming but sometimes it is a bit hard. They look very young, very small, but when we ask how old are you, they will say 12 or 13... In general, the adolescents think they are mature already after they get married, that they are no longer children. From their perceptions, they think they are mature because they have a family and spouse'.</i>
	Adolescent	10-19 years	
	Child	Under 14 years	
Community Leaders, Ta Veng Lev Commune, Ratanak Kiri	Adult	15+ years	Respondent 1: <i>'A mature person is 15 and up. Because they mostly get married by that time, they are considered to be mature people'.</i> Respondent 2: <i>'I agree that [adolescence] is 12 to 15 years... they are at the growing stage, and they can help around [chores]'.</i>
	Puberty	12-15 years	
	Child	0-6 years	
Caregivers, Ta Veng Lev Commune, Pleu Toch Community, Ratanak Kiri	Adult	Someone who is married/Someone who has gone through puberty	<i>'There is no word for adolescence here... We just observe children becoming adults through their diet. After they eat enough, they will grow'.</i>
	Puberty	15-18 years (?)	
	Child	Someone who is single/dependent upon family	
Community Leaders, Ta Lav Commune, Ratanak Kiri	Adult	Someone who is married/Someone who has gone through puberty	<i>'In this community, there is no definition of adolescence...when they [children] grow up and want to get married, then they are mature'.</i> <i>'When a person reach 13, then she or he can get married. It is according to the tradition. That person does not have to be fully-grown [to get married]. We [the villagers] believe that 13 is old enough, or possibly 14'.</i>
	Puberty	10-17 years	
	Child	Someone who is single/dependent upon family	
Caregivers, Ta Lav Commune, Ta NOUNG Community, Ratanak Kiri	Adult	Someone who has gone through puberty	<i>'An adolescent [girl] is different from a child and an adult because they have periods, their breasts are growing, they are full of energy'.</i> <i>'From our own tradition, there is no age range for adolescence. When the children reach puberty, then they become adult. So, there is no stage between childhood and adulthood'.</i>
	Puberty	10-18 years (?)	
	Child	Someone who has not gone through puberty	

the promise of what menarche represents – the ability to start their own families. Biological indicators of puberty were often disassociated from physical stature, and community members recognised that although girls had reached puberty (and may be capable of having children), their bodies were still growing (*‘They are at the growing stage’*). Linguistically, a distinction was made between what it meant to be a ‘mature’ adult and a physically ‘fully-grown’ adult, so adolescent girls who had married and/or started a family could simultaneously be ‘mature’ without being ‘fully-grown’.

Mothers in Ratanak Kiri did not articulate an age range for the start of puberty amongst their daughters. In general, attributing a specific number to denote a person’s age was challenging and most mothers did not know their age or that of their children. This can be partly attributed to the high levels of illiteracy amongst women in the province (no caregiver who participated in the research in Ratanak Kiri reported any level of schooling), but was also due to the fact that age was not a useful concept in their lived experience. Rather, *‘children are children’* until they enter puberty, and after that are free to explore their sexuality and marry if they wish to do so. Cambodian laws such as the Law on Marriage and Family which state children cannot marry until the age of 18 therefore have little applicability in Ta Veng and Andoung Meas. As one NGO stakeholder explained,

*‘They [children] start to be in relationships when they reach puberty. After getting married, they become adults. They just know that they are children until they ‘know how to love’ or before puberty... After puberty, they are to make their own decisions and select their own partners. After getting married, they become grown people’.*



*‘This is me respecting my grandmother’.* Drawing by an 11 year old girl, Ta Veng, Ratanak Kiri

The statement, *‘know how to love’* was a commonly used euphemism that could refer to both knowing about sex and being sexually active. With the onset of puberty, sexual exploration is normalised for ethnic communities in Ta Veng and Andoung Meas, for both girls and boys. This contributes to a permissive attitude regarding sexual activity between adolescents, and the commonality of early marriage, particularly if an adolescent girl becomes pregnant.

In contrast, girls aged 10 to 14 years old who participated in the workshops in Ratanak Kiri did not describe themselves on the basis of puberty, but rather on the basis of how they were able to care for family members, both younger children and adults. In so doing, they clearly demarcated a space for themselves between childhood and adulthood. Girls would frequently describe themselves as being ‘closer’ to adults than to children due to their ability to ‘think’ like adults; forego ‘playing’ for household duties including cleaning, cooking, or farm work; take care of younger children in ways that an adult would; and to be respectful of their elders in ways that adults would. In assuming behaviour they recognised as being adult, the girls incorporated psycho-social traits and a newly articulated sense of duty towards their families. The following exchange between 10 to 14 year old girls who participated in the workshop in Ta Noug, Ratanak Kiri, was illustrative.

- Respondent 1:** *I think when we are older [than a child], we don’t play around as much. We would be helping our mothers with housework. We are old enough to help our fathers and mothers with some light or heavy tasks.*
- Respondent 2:** *I can help mother with cooking, taking care of younger siblings, making food... growing cassava with my parents.*
- Respondent 3:** *I am bigger than my younger sibling. I know that I am because I can cook rice, do housework like laundry, then go to school, and when I return home from school I help with chores.*



For 15 to 19 year old girls who participated in workshops in Ratanak Kiri, a *'fully grown'* adult was someone much older than themselves (e.g. 30 or 40 years old). They considered themselves as being in the *'puberty period'*, similar to their mothers' characterisation of adolescence, but as with the 10 to 14 year old age group, would most often describe their stage of life as one in which they had the ability to think more critically and to help their families with daily chores. In contrast to the younger group, however, they asserted that they were able to make important decisions for themselves such as to leave school or get married. The older girls explained that whilst they would consult their parents, important life decisions were ultimately their own. This point was emphasised by the fact that amongst the 15 to 19 year old workshop participants in Ratanak Kiri (n=13), four had already left school, and one 17 year old had got married the previous year and had a five-month old child.

### Defining adolescence in Phnom Penh and Prey Veng

In contrast to community members in Ratanak Kiri who shared no collective understanding of the concept *'adolescence'* beyond the biological changes that occur during puberty, interlocutors in Phnom Penh and Prey Veng did articulate concepts of adolescence and, as outlined above, frequently delineated two different stages between childhood and adulthood: adolescent or teenager (*kmeng chom tong*) and youth (*yuk vas vey*) (see Tables 5 and 6 below). It was common for caregivers to further divide these phases into *'younger'* and *'older'* adolescence. As in Ratanak Kiri, mothers in both Phnom Penh and Prey Veng frequently referenced biological changes associated with puberty (e.g. menstruation) as a marker of adolescence in girls. They were equally likely, however, to cite *'adolescence'* as a time for increased mental ability, responsibility, and, in the case of girls only, increased *'thoughtfulness'* or empathy towards their mothers.

A key difference between mothers in Ratanak Kiri and those engaged in Phnom Penh and Prey Veng was the latter's belief that their daughters were *'becoming women'* at a younger age than they had due to the early onset of puberty. Mothers in both Phnom Penh and Prey Veng suggested that earlier puberty was due, at least in part, to the improved nutritional status of their daughters, particularly in comparison to the poor diets they had during the Khmer Rouge regime when many had experienced delayed menstruation (discussed further below). They also suggested that the earlier onset of puberty was caused by *'chemicals'* in meat and vegetables. The notion that their daughters were entering puberty earlier was concerning to many mothers who felt that the increased attention their daughters' bodies would receive from boys and men may put them at risk, particularly if they were not yet sufficiently mature to know how best to deflect unwanted male attention. Many mothers described making their daughters aware that they needed to be *'shy'* (i.e. cautious) around boys and men who showed them attention. The level of parental concern in Phnom Penh and Prey Veng for the increased attention their daughters were likely to receive during adolescence was in sharp contrast to prevailing caregiver attitudes in Ratanak Kiri where teenage sexual relations and early marriage were common.



*'I am closer to a child. Adolescents know how to beautify [make-up] themselves'. 13 years old, Koh Dach, Phnom Penh.*

Although all adolescent girls in Cambodia have a range of daily, age-specific activities they must undertake to assist their families (as depicted in the narratives presented in the previous chapter), it was notable that mothers in Phnom Penh were willing to assign only *'light'* tasks to their daughters, of all ages, to enable them to dedicate more time to their schoolwork. A caregiver in Champus K'ek, Phnom Penh, commented, *'They [the girls] don't do as much around the house. They just need to concentrate on their studies'*. A community leader from the same commune concluded, *'After school, they can help with some chores. But if [they] don't want to help that's also fine as long as they study hard'*. This was not the case in Prey Veng, where mothers were more aligned to those in Ratanak Kiri in describing the increased responsibilities their adolescent daughters had to contribute to the household.



Table 5 – Community leader and caregiver definitions of adolescence in Phnom Penh

Source	Terminology	Age range	Basis of definition
Village Chief, Koh Dach Commune, Phnom Penh	Adolescent	12-17 years	<i>'Those who are under 12 years old are children... Those who are older, there are changes in term of their attitudes and behaviors and their bodies start to change and they can be shy'.</i>
	Child	Under 12 years	
Caregivers, Koh Dach Commune, Koh Dach Community, Phnom Penh	Adolescent/Menstruation	12-14 years	Respondent 1: <i>'When they have their periods, they are becoming fully grown women. This is the time after childhood'.</i> Respondent 2: <i>'My daughter was only 14 years old [when menstruation began]. Kids nowadays have a lot of nutrition. During my generation, there was not a lot of nutrition...Girls nowadays have their first periods at 12 years old'.</i>
	Child	Under 12 years	
Community Leaders, Prekthmey Commune, Phnom Penh	Youth	15-20 years; 18-35 years	<i>'People here don't think much about this [adolescence]. They just know that the children are still under their supervision and guidance'.</i>
	Adolescent	10-15 years; 12-15 years	
Caregivers, Prekthmey Commune, Champus K'ek Community, Phnom Penh	Fully grown	17-18 years	<i>'Adolescence is when they reach puberty...18 or 17 is a grown person already'.</i>
	Adolescent/Puberty	14-16 years	

Table 6 – Community leader and caregiver definitions of adolescence in Prey Veng

Source	Terminology	Age range	Basis of definition
Community Leaders, Prasat Commune, Prey Veng	Adult	17+ years	<i>'Adolescents don't play around as much. They are more careful and hard working. They know how to feed themselves, unlike children... People don't understand adolescence. They think they receive an education from school, so they just leave this group alone'.</i>
	Adolescent	14-17 years	
Caregivers, Prasat Commune, Ampil and Poun Wat Communities, Prey Veng	Adult/Fully grown	15+ years	<i>'15 and older are fully grown already... In the past, girls did not reach puberty this young. Now some reach puberty when they are only 14 years old. They have their periods earlier than before. They are women already'.</i>
	Adolescent/Puberty	11-14 years	
Community Leaders, Prey Poun Commune, Prey Veng	Adult	18 + years	<i>'Adolescents are more helpful around the house. They can do their own tasks. Children cannot help much around the house'.</i>
	Adolescent	12-16 years	
	Child	Under 10 years	
Caregivers, Prey Poun Commune, Trapaing Krasang Community, Prey Veng	Adult/Fully grown	17+ years	<i>'The children don't listen to their parents, but the adolescents do... Girls cook rice, boil water, and even make some side dishes... They know to wash their own clothes, and to make sure they are clean. They know how to be shy [cautious] around people'.</i>

Of the 10-14 year old girls who participated in workshops in Phnom Penh (n=16), most were likely to identify themselves either as children (62.5%, n=10) or as being firmly located between childhood and adulthood. Again, this was in contrast to the same age group in Ratanak Kiri who described themselves as being 'closer' to adults. Whilst their definitions of what adolescence constituted in terms of increased household assistance were similar to those of younger adolescents in Ratanak Kiri, girls in Phnom Penh also described their additional responsibility to study and go to school. For the girls who still saw themselves as children, one of the driving factors behind this classification was the belief that older girls (i.e. adolescents) knew more about and were more concerned with '*beautifying*' themselves by dressing nicely, styling their hair and applying makeup.

All 10 to 14 year old girls in Prey Veng classified themselves as being either an adolescent or an adult (i.e. not a child). Children were often described as '*not knowing how to cook*', whereas all of the girls who participated in the workshops in this province confirmed that they cooked rice and prepared others dishes requiring multiple ingredients. Like their caregivers, younger adolescent girls in Prey Veng did not acknowledge going to school as one of the responsibilities associated with their age, but defined themselves in contrast to adults who had to earn money '*in the factory*' (i.e. adults are people involved in paid employment). In evaluating this sentiment, expressed by numerous girls in both research locations in Prey Veng, it is important to note that most workshop participants were being raised by their grandparent(s) as one or both of their parents had migrated to another province for work.

The 15 to 19 year old girls who participated in workshops in Phnom Penh (n=15) voiced similar definitions of adolescence to their younger counterparts in terms of both school and familial responsibilities and all but one identified herself as an adolescent, including a 19 year old girl who had left school at Grade 9 and was the mother of a two year old child. Older girls described themselves as possessing a higher mental capacity than children and younger adolescents (due to having completed more grades at school), but as being distinct from adults because they were still in school and as such were not yet required to think about marriage and children, but instead to focus on their education. Similarly, 15 to 19 year old girls in Prey Veng defined themselves as adolescents, distinct from children and younger girls because they were more mature, had the expertise to prepare more complicated food, and could '*take charge of the household*' in the absence of their mothers. Assuming control of household affairs involved shopping or harvesting ingredients, preparing meals, cleaning and organising the house, and taking care of their siblings. Girls in this age group also asserted that they had greater awareness of their bodies and knew how to act and dress appropriately so as '*to not embarrass themselves*'. Multiple examples were given to illustrate this behaviour including the need to not show as much skin or wear short skirts as they would have done when they were younger. Although these girls did not see themselves as adults, they did define themselves as having all of the responsibilities of adults including the ability to earn money by making rice wine and engaging in garment factory work (both occupations engaged in by workshop participants, discussed further below).

In line with this, community members in Prey Veng added an additional component of responsibility for older adolescents and youth in terms of income-generating activities to support their families. According to one community leader in Ampil, '*When they [adolescents] can earn some money, they would help their parents. They are thoughtful*'. This sentiment was most often associated with adolescent girls who engaged in local economic practices or migrated for employment. Birth order was significant in determining which girls were likely to migrate to another province for work (the first born), and those who were more likely to engage in local money-earning practices where they could also assist their parents and/or look after grandparents (the last born).



## 2. Maternal health and food taboos

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National-level respondents indicated that Cambodian youth have very low levels of knowledge regarding sexual and reproductive health (SRH), a topic not widely (or easily) discussed (*'They never talk about this openly in the community'*). According to Cambodian Demographic Health Survey (CDHS) data from 2014, knowledge of at least one method of contraception among 'all women' of reproductive age (15-49 years) was 99% (CDHS 2014). Amongst women aged 15-19 years old this figure dropped significantly to 5%. Further, 95% of sexually active 15-19 year olds reported that they did not practice any form of family planning, either modern contraception (e.g. pill) or traditional methods (e.g. rhythm method) (CDHS 2014).

In 2013, BBC Media Action conducted formative research with Cambodian youth on sexual and reproductive health issues for 'Love9', a series using thematically focused episodes on SRH (e.g. abortion, HIV, etc.) to help youth better understand and talk about sensitive sexual health topics. They concluded that parents were influential in the lives of adolescents when making important life decisions unless the topic was about sex. Then youth friends and peers became the most influential in terms of providing knowledge or support regarding SRH. As a stakeholder from BBC Media Action explained,

*They [youth] said no way would they go to their parents to talk about love issues, only the friends and peers would they go and talk to about these things. Even in the case of abortion they would go to their friends. They said, that only in severe cases when they nearly die, when it is the last choice or last option they have, would they go to their parents for support.*

Adolescent participants across all research sites confirmed this as being an accurate representation, and a recent report from Ratanak Kiri also concluded that young boys *'Do not receive any explicit instruction in safe sex or any other aspect of human sexuality outside from what they learn through videos and their friends'* (Breogán 2017).

Provincial-level health officials in Ratanak Kiri frequently referenced the lack of data (*'even basic data'*) on adolescents in their area (*'because we have been working on other issues in the past, and no NGO assisted on this'*). In particular, they were keen to source further data on adolescent knowledge, attitudes and practices regarding SRH, accurate early marriage and early pregnancy statistics, and information on nutritional status. Similarly, municipal- and provincial-level governmental departments in Phnom Penh and Prey Veng confirmed that they had scant data available on the knowledge and behaviours of adolescents in their provinces. It was a commonly reported that *'Everything we do is all for children under five years old'*.

Contrary to the reports of community members which highlighted barriers to accessing health services (discussed in detail below), governmental officials frequently suggested that women could access maternal and child health (MCH) services such as antenatal care (ANC), skilled birth assistance and postnatal care (PNC) should they wish. One respondent from the Health Department in Phnom Penh explained, *'From my experiences, there are not many problems with pregnant women. They usually have their check-ups, even more than the recommended appointments'*. A representative from the Department of Women's Affairs in Prey Veng confirmed, *'Even the poor can have access to health services because they have the ID Poor card. In each community, the village chief can issue the card for them, so they get the services for free'*.<sup>21</sup> When probed further, a variety of reasons for these assumptions emerged including: the presumed increase in MCH knowledge and demand for care due to over 20 years of governmental and NGO communication; the availability of ambulances in most provinces; the affordability of health services (e.g. poor women could receive the ID Poor card to access free services); transparent and standardised fee structures for those not

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<sup>21</sup> 'ID Poor' cards are part of the Cambodian government's efforts to reduce poverty and support socioeconomic development. Families and individuals who are accepted into the ID Poor Programme are added to a 'List of Poor Households' and issued a card to access free or reduced cost services (e.g. health services). NGOs can also access government held lists to direct their programming and/or provide additional support to Cambodians living in poverty. See Royal Government of Cambodia (2011) for additional information.



possessing an ID Poor card (patients are issued a receipt for services); the improved availability and capacity of healthcare workers in public health facilities; standard working hours from 7am to 11am, Monday to Friday, with health facility staff on call for emergencies; the increased coverage of public health facilities offering a greater range of services; and improved healthcare worker attitudes.

CDHS data supports these observations. Key health indicators in all but the most rural and hard-to-reach provinces in Cambodia (such as Ratanak Kiri), have steadily improved since comprehensive health surveys started to measure national health statistics. Between the first comprehensive CDHS survey conducted in 2005 and the most recent survey in 2014, maternal mortality in Cambodia declined sharply from 472 deaths to 170 deaths per 100,000 live births. Between the 2010 and 2014 surveys, infant mortality declined from 45 to 28 deaths per 1,000 live births, and under-five mortality from 54 to 35 deaths per 1,000 live births (CDHS, 2014). Pockets of inequity persist, however, and the percentage of children classified at birth to be 'smaller than average' on the basis of size and weight remains elevated in Ratanak Kiri (at 25%) compared to other provinces (the next closest province being Siem Reap at 17%) (CDHS 2014).

### **Maternal health, food taboos and childbirth in Ratanak Kiri**

In the research sites in Ratanak Kiri, Ta Veng district has one health centre and one health post, and Andoung Meas has three health centres and one health post. Maternal and adolescent attitudes towards seeking care at a health facility were largely determined by the accessibility of these services (e.g. time, distance) and the attitudes of healthcare workers (including the ability to converse in their ethnic languages). For adolescents, the attitudes and behaviours of health centre staff was particularly important in overcoming barriers to discussing sensitive reproductive health issues. As a NGO stakeholder from Ratanak Kiri explained, '*Youth are very reluctant to seek reproductive health services, unlike other health services. The medical staff have to consider this so that youth can come and seek the services.*'

In Cambodia, Plan International focuses on engaging vulnerable and hard-to-reach youth, and in Ratanak Kiri centred their programming in the districts of Ta Veng and Andoung Meas due to the low levels of adolescent knowledge about SRH issues; the limited capacity of health centres to respond to youth needs; and the lack of effective programming tackling SRH. They concluded that whilst early marriage could not be stopped, adolescent boys and girls could be better educated in terms of family planning so that girls were empowered to delay pregnancy and practice birth spacing. A representative from Plan International concluded,

*It [early marriage] is a norm, the culture. If we try to raise their awareness, like for example that early marriage is banned and its consequences...it will not go well. What we want to stop is early pregnancy. So, they still get married, but need to do birth spacing to prevent pregnancy until she reaches 21 years old... This is our project.*

According to stakeholders from the Khmer Youth Association (KYA) who work with Plan International to provide community-based reproductive health training in both districts, adolescents asserted that they did not go to health centres because the medical staff are '*not friendly*', '*not trustworthy*', and have limited working hours. For adolescent girls and women who are pregnant in Ratanak Kiri, there were several challenges that had the potential to negatively impact the health of both mother and child. The lack of a good road network across the province made travel to the region's few health centres time consuming and expensive. The rainy season exacerbated this as roads became impassible, whilst in the dry season travelling was difficult due to the dust and heat. Time spent travelling to a health centre also resulted in indirect and lost-opportunity costs, particularly in terms of farm work during harvest. On reaching a health centre, women reported they often faced with long waiting times and health staff who did not speak their language. Many respondents confirmed, '*The language barrier is very significant*'.

Caregivers in Ratanak Kiri recognised the value of biomedical ('*modern*') medicine and did not see it as conflicting with their traditional beliefs. For many, however, the challenges involved in travelling to a



health centre were frequently too great to overcome. Among women aged 15 to 49 years old who had a live birth in Ratanak Kiri, 24% reported receiving no antenatal care for their most recent birth (CDHS 2014). This statistic was supported by anecdotal reports from mothers who participated in the research in Ratanak Kiri and who confirmed that they visited health centres infrequently during pregnancy (*'maybe just one visit'*). If multipara or grand multipara women perceived their pregnancy to be proceeding normally, they were much less likely to dedicate resources to attend a health centre for ANC.

While the efficacy of modern medicine was not questioned, mothers in Ratanak Kiri continued to seek traditional care and performed ceremonies to appease the spirits. Traditional birth attendants (TBAs) have a long history as frontline care providers (during pregnancy and childbirth) among the ethnic groups in Ratanak Kiri, although this practice was discouraged by the government in favour of professional midwifery. The few professional midwives that were deployed in Ratanak Kiri were usually based at district centres, again requiring mothers to outlay significant time and costs to have a skilled birth. It was not surprising, therefore, that 48% of births in Ratanak Kiri were recorded as being home births, primarily with the assistance of a TBA (CDHS 2014).

If a mother experienced a difficult labour, her family would make a calculated decision as to whether the health centre could help and/or whether the spirits needed to be appeased to ease her delivery. If labour was at night, or at a time when the roads were considered particularly difficult to traverse, then appeasement of the spirits would often be prioritised over health centre attendance. An animal sacrifice of chickens or pigs, paired with vigilant prayers to the spirits would be performed. As reported elsewhere (see Baird 2008), the spirits in Ratanak Kiri were seen as trouble-makers at best, and at worst, as evil and malicious. The animal sacrifice and prayers were not made in order to request their power to help a mother through delivery, rather they were made to encourage the spirits to stop hurting the mother and causing chaos. The death of a mother was perceived to be a tragedy that can erode the bonds between families, and it was thought that spirits may use the opportunity that labour offers to display their displeasure. Because of this, communities in Ratanak Kiri would often try to appease the spirits whilst also seeking biomedical care if this was a feasible option.

After delivery, traditional practices, such as 'heating' or 'roasting' mother and child continue to be practiced. The mother would drink hot liquids and lie on a bed above a small fire in order to help return to her body the 'heat' that was lost during childbirth. This practice was only described to the research team in Ratanak Kiri (not Phnom Penh or Prey Veng), but was considered a common practice amongst both the 'highland' people of Ratanak Kiri, and rural 'lowlanders' in other provinces (Breogán 2017) and is found, with variation, across other locations in Southeast Asia (see for example Johnson and Bedford (2014) for an analysis of 'sitting fire' in Timor-Leste).



Children playing on slide  
18 years old, Pleu Toch, Ratanakiri



Mother caring for child  
17 years old, Koh Dach, Phnom Penh



Child hanging clothes  
17 years old, Pleu Toch, Ratanakiri

## Maternal health, food taboos and childbirth in Phnom Penh and Prey Veng

The health-seeking behavior of women and girls in Phnom Penh and Prey Veng is in marked contrast to that described above for Ratanak Kiri. Whilst knowledge of SRH issues was equally low amongst adolescents in these provinces, their willingness and ability to seek medical care from a health centre was substantially higher. In addition, young women who married in their early 20s and did not cite pregnancy as the driver for marriage (the majority of cases in Phnom Penh and Prey Veng), appeared to have a higher level of SRH knowledge and more regular contact with health staff who advised them on family planning methods until they were ready to conceive. This finding is supported by CDHS data which indicates that whilst knowledge of any contraceptive method amongst all women aged 15-19 years is only 5%, it rises to 29% for married women aged 15-19 years, and to 48% for married women aged 20-24 years (CDHS 2014). Underlying these figures may be a tendency for healthcare workers to be more likely to provide family planning advice to married women (i.e. to those for whom sexual activity is sanctioned) than to unmarried women, and/or that married women feel more confident seeking family planning advice than sexually active unmarried youth. This issue warrants further research with adolescent and young women in Cambodia.

Overall, caregivers in Phnom Penh and Prey Veng conveyed a positive impression of public health services, describing facilities as capable, convenient, affordable and well-stocked with medicines and equipment. If a health centre could not treat a patient's illness, many respondents suggested that the patient would then be transported to a larger hospital by ambulance. They displayed a high level of confidence in public facilities suggesting that they preferred to seek care at a public rather than private facility because *'It is guaranteed that you will be cured'; 'They use the right medicines'; 'They have the right equipment'; 'It's convenient'; and 'It's cheaper'*. As one community leader from Prey Veng concluded, *'Truthfully, in the past, our public health system was not good. When poor people come to get the services, they [health workers] did not care much. But now it has changed a bit. They care more than before'*.

Whilst some community members described occasionally presenting at private clinics, depending on their condition, the cost of the clinic, and the distance to the facility (e.g. if the private clinic was located closer than a public health facility), accessing MCH services was almost always through public health facilities. Mothers reported that the standard cost of receiving MCH care at a public health facility in Phnom Penh was 3,000 Riel (USD 0.75), and in Prey Veng was 2,000 Riel (USD 0.50). The key barriers to care identified by mothers in both locations included the time it took to travel to public health facilities, the lengthy waiting times and the necessity to purchase food from vendors near the hospital rather than preparing their own meals at home. In Prey Veng, however, where the road network was better, caregivers confirmed that distance and travel costs could usually be overcome, particularly when a woman was in labour and needed skilled medical assistance.

According to the 2014 CDHS, only 2% of women aged 15 to 49 years who had a live birth in Phnom Penh reported receiving no antenatal care for their most recent birth. The majority of reported births (65%) occurred at a public-sector health facility, primarily with the assistance of a midwife (51%) or doctor (34%) (CDHS 2014). Among women aged 15-49 years who had a live birth in Prey Veng, only 1% reported receiving no antenatal care for their most recent birth, and again, the majority of reported births (69%) occurred at a public-sector health facility with the assistance of a midwife (93%).

Caregivers in both locations acknowledged that they had witnessed a shift in MCH care during their lifetimes, from the traditional home births they had experienced with their oldest children, to facility-based deliveries for their youngest children. Statements such as *'Only in my generation did women give birth at home'* and *'There is no traditional birth attendant here anymore'* were common amongst the older women who participated in the research. Community leaders and caregivers in Prey Veng acknowledged the presence of traditional healers and local medicines in 'other' provinces including Kampot, Kampong Thom and *'the far away mountainous areas'*, however, the use of such medicine was primarily associated with skin ailments or stomach/intestinal problems, and not for pregnancy or childbirth.

The following two narratives from adolescent girls who participated in the workshops, highlight differences in motherhood they experienced in Ratanak Kiri and Phnom Penh.

Narrative 4 – Adolescent motherhood in Ratanak Kiri

*After Grade 3, I dropped out of school to help my family at their farm full-time because I saw that my parents were struggling with doing the work themselves. I became pregnant in early 2016 and married the father of my child, two years my senior, in April 2016 when I was 16 years old. I only remember going to the health centre in Ta Veng District once when I was pregnant, and the trip took the entire day. I delivered a girl at home with the assistance of a TBA in October 2016, and now spend most of my day taking care of a five month old child who is always sick. I have had to deal with my baby's near constant bouts of stomach ailments and diarrhoea. I am breastfeeding and will continue to do so exclusively until next month, when my baby girl is six months old. I receive occasional assistance from my young niece in helping me to take care of my child, but for the most part I have had to stay home and not go to the farm. I look after my sick baby on my own. Because of her, I am unable to participate in many village activities.*

17 year old mother, Ta Noug, Ratanak Kiri

Narrative 5 – Adolescent motherhood in Phnom Penh

*I dropped out of school when I failed the end of year exam at the end of Grade 9 and couldn't afford the extra classes that I needed to stay in school. I became pregnant in 2014 when I was 16 years old and got married in 2015 when I was 17. As soon as I knew I was pregnant, I started to go to the nearby health centre once a month to receive a regular checkup and iron supplements. I delivered at the health centre with the assistance of a professional midwife and later took my son to the health centre for his vaccinations and to receive some supplements. My little boy is healthy and has recently celebrated his second birthday. I work as a housewife and farmer. My parents and siblings really help me in taking care of my son. My parents own a small plot of land where they can grow herbs, mainly coriander, to sell at the market. When I'm not taking care of my son, I help my parents with their farming activities.*

19 year old mother, Champus K'ek, Phnom Penh





### 3. Education and employment

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The Ministry of Education, Youth and Sports in Cambodia has taken steps in recent years to improve the national educational system which historically has been underfunded and severely understaffed (Ross 1990; Kim and Rouse 2011). At the time of the research, a full school day curriculum (as opposed to the current half day student curriculum) was being pilot tested in three schools in Siem Reap Province. The MoEYS planned to review the pilot in the last quarter of 2017 in order to assess its implementation and challenges encountered, and to discuss next steps for potential scale-up. With the passing of the Education Strategic Plan (2014-2018) several salary reforms have also been enacted to include all teachers receiving their salary through a central banking system, and an increase in the basic salary of primary school teachers to at least USD 200 per month. In addition, UNFPA has been supporting the Ministry of Education, Youth and Sports in the development of the Life Skills Education Programme – Youth and Sexual and Reproductive Health (LSE – YSRH), which was initially piloted in nine provinces in 2013 and has since been expanded nationwide.

Currently, most Cambodian schools operate two half-day schedules, with one set of students attending classes in the mornings, and another set in the afternoon, Monday to Saturday. Education in Cambodia is free from Grades 1-9, although out-of-pocket expenses involved in buying school uniforms, shoes, books, pencils and papers, and costs associated with travelling to schools (either by bicycle or public transport) can be a burden, particularly for low-income families. Students are also encouraged (but not required) to take 'extra' classes to supplement the normal class schedule and help them prepare for exams, but again this extra tuition can be costly (as outlined in narratives 1, 2 and 3 above). Caregivers therefore made the distinction between free 'public classes', and paid 'extra classes'. The situation for many families became even more challenging when students graduated from primary to secondary school as expenses associated with school attendance increase as a student progresses. Community members suggested that taking 'extra classes' were a necessity for children in the upper grades to pass their exams, and failure to do so often contributed to a child dropping out of school if they had been held back a grade.

The Ministry of Youth, Education and Sports in Cambodia classifies students who are six to 11 years old as 'primary' school aged children; 12 to 14 year olds as 'lower secondary' school aged children; and 15 to 17 year olds as 'higher secondary' school-aged children. Most Cambodian villages have a primary school, but less than 10% have a secondary school, so any student wanting to continue their education needs to mobilise resources to attend secondary school in a district centre.

The perceptions adolescents and caregivers had of their teachers was highly variable across the research sites and often based on personality. One teacher in Ratanak Kiri was described by his students as being 'like a second parent', whilst a teacher in Prey Veng was described as 'lazy' and susceptible to bribes to provide students with better test scores. Overall, the majority of mothers engaged in the research appeared dissatisfied with the quality of their children's education, criticising teachers for their lack of dedication and absenteeism during normal school hours.



In discussing their school routines, girls across the research sites described cleaning or taking care of their school buildings and tending the school (*'the teacher's'*) garden. It was notable that these chores were their first response, rather than discussing the subjects studied. Most students found it difficult to articulate aspects of classroom learning, although those who considered themselves 'fortunate' enough to take 'extra classes' could more readily describe what they were learning, and related these studies to their future career plans (girls mentioned become professional teachers, doctors and policewomen). Several girls discussed the need to drop out of school to pursue other family or employment activities (see below).

*Two girls reading books under a tree at school.*  
10-14 year old workshop, Pleu Toch, Ratanak Kiri



## Education and employment in Ratanak Kiri

Of the 29 adolescents who participated in workshops in Ratanak Kiri, one had never attended school and five had already left, which they attributed to various reasons (see Table 7 below). Caregivers also confirmed that their daughters often missed school when menstruation began due to embarrassment and lack of knowledge or practice about 'How to take care of the bleeding'.

Table 7 – Reasons adolescent girls in Ratanak Kiri provided for leaving school

Current age	Grade when left school	Reason for leaving school
11 years	Grade 2	<i>'Sometimes I could not catch up with the lessons'.</i>
17 years	Grade 5	<i>'Because it was hard...watching my family struggle. I can help with the farm works. My parents were working hard, and then I got married'.</i>
17 years	Grade 3	<i>'I saw my parents having a difficult time with farming'.</i>
18 years	Grade 9	<i>'I didn't have money to continue my studies at the provincial area'.</i>
18 years	Grade 9	<i>'No money'.</i>

Most community participants in Ratanak Kiri expressed either a favorable or neutral opinion about schooling. Girls aged 10 to 14 years old were more likely to be positive, often citing their love for books and wanting to learn how to read as a motivating factor for attendance. Among almost all workshop participants, however, the desire to help their families on the farm surpassed their desire to further their education. For some girls, going to school was something they valued, whilst for others it provided a welcome break from their 'heavy' chores, but school attendance was frequently accompanied by a sense of guilt that they were taking resources away from the family, most importantly their labour on the farm. In cases where girls were expected to marry, have children of their own and work on the farm as their own mothers and grandmothers had done, pursuing an education could feel like an indulgent and selfish pursuit. As a stakeholder from an NGO in Ratanak Kiri explained,

*There are schools, but if they don't understand the lessons, they don't see a point of going to school. A few years ago, when I was receiving training from an organisation to deliver education messages, the villagers said to me, 'There is no use for education, going to school. You have to eat. Not going to school, you still have to eat. We already have a King... We don't need to study to become a King'.*

For girls from ethnic communities in Ratanak Kiri where communal life and rituals bind one family to another, pursuing a personal educational goal can be an isolating experience. Girls discussed many factors that might influence them to leave school, including the lack of help with their homework that they received at home from illiterate family members, and the frequency of their peers leaving to get married and start families of their own. Perhaps the most isolating experience, however, was coming home from school to an empty house because their family and neighbours were at the farm, and having to take of themselves with little or no adult supervision. As one community leader in Pleu Toch confirmed,

*The farms are usually far [from homes], so when the children stay at home alone after school they have no food to eat. Their mothers are not at home, so they have nothing to eat. They can survive like this by their own means for a while, but when this keeps happening every day, they start to follow their parents [to the farms]. Then they might drop out of school permanently.*

Workshop participants made it clear that if a girl left school, she was in effect indicating to potential husbands that she was ready to get married. And once a child had left school, they were not expected to return.

Ratanak Kiri, with its low-income families dependent on the agricultural sector, consistently reports the lowest education levels in Cambodia. There is a 55% drop in attendance from primary to secondary school amongst girls (CDHS 2014), and the province has one of the lowest enrollment rates in both lower and

upper secondary schools (UNESCO 2008). The situation is slightly different for boys in Ratanak Kiri who often engage in logging activities and as such, a knowledge of Khmer is considered valuable for interactions outside their immediate ethnic group. Still, the education statistics are not encouraging, with a 44% drop in attendance from primary to secondary school for boys in the province (see Table 2 above).

### Education and employment in Phnom Penh

Among the 31 adolescent workshop participants in Phnom Penh, six had dropped out of school (see Table 8).

Table 8 – Reasons adolescent girls in Phnom Penh provided for leaving school

Current age	Grade when left school	Reason for leaving school
14 years	Grade 6	<i>'No money'.</i>
15 years	Grade 8	<i>'I could not catch with the lessons... I could not follow the lessons well'.</i>
15 years	Grade 6	<i>'Because I did not want to study'.</i>
15 years	Grade 6	<i>'My family is poor, so I had to drop out to help my family'.</i>
19 years	Grade 9	<i>'I failed the exam, and I cannot afford to stay in school'.</i>
19 years	Grade 9	<i>'I couldn't catch up with the lessons'.</i>

In discussing why adolescents left school early, provincial authorities and community leaders in Phnom Penh were clear that it was *'Because their families are poor'*, however caregivers were more likely to suggest it was because their children *'Could not catch [understand] the lessons'*.

In analysing the responses of caregivers and adolescents in the context of the external pressures faced, it is apparent that poverty influences the ability of a student to continue their studies in multiple ways. If students were considered particularly 'bright' and could 'catch' lessons quickly, then parents were more likely to invest in the extra classes needed to secure good grades and pass their final exams (meaning they could progress from one grade to the next more rapidly). Conversely, if students failed an exam, they would not progress to the next grade, and whilst they may be discouraged themselves, their parents may also not want to invest in the education of a child they thought did not have an aptitude for learning.

In Phnom Penh, as elsewhere, families living in poverty or with significant debt, knew that their daughters were likely to find low-skilled work in one of the many factories, and it was acknowledged by community leaders and caregivers in Phnom Penh that parents may pressure their daughters to leave school to help earn money for the household. As one community leader from Koh Dach suggested,

*If they cannot catch up with the lessons, their parents encourage them to find employment...Their parents even ask for more money from the children. They even take the children's salary two or three months in advance to make sure that the children cannot leave the workplace.*

In discussing their future opportunities, the perceptions of girls in Champus K'ek were striking, as most expected (sometimes cynically so) to work in a factory.

*Question: What do you want to do after school?*

*Respondents: [at the same time] Working!*

*Question: Ok, I will ask one by one about occupations. What do you want to do in the future?*

*Respondent 1: Factory worker.*

*Respondent 2: Such a bright future [sarcastically].*

*Respondent 3: Factory worker too.*

10-14 year old workshop, Champus K'ek, Phnom Penh

The calculation for boys may be slightly different, given the perception that a son who has a degree is more likely to find a higher paying job, and families who have to make a choice between which child to financially support, may be more likely to choose their sons. Further, daughters were viewed by many as more tied to the household, whereas male children were viewed as more likely to leave the family to follow their own pursuits. In a focus group discussion in Koh Dach, caregivers discussed the influence of gender on education.

*Respondent 1: Education for girls is not as important as for boys.*

*Respondent 2: Girls, after getting married might stay at home. But boys have to provide for their families, so it is important for them to stay in school.*

*Respondent 3: Well, I still think both girls and boys have equal opportunity. As long as they can catch up with the lessons, we should try our best to keep every one of them in school.*

Caregivers, Koh Dach, Phnom Penh

### Education and employment in Prey Veng

Among the 29 adolescent workshop participants in Prey Veng, four had dropped out of school (see Table 9).

Table 9 – Reasons adolescent girls in Prey Veng provided for leaving school

Current age	Grade when left school	Reason for leaving school
15 years	Grade 7	<i>'I did not have enough money to stay in school. My older siblings are all married, and no one was at home to help my mother'.</i>
16 years	Grade 7	<i>'Because I could not catch up with the lessons'.</i>
18 years	Grade 8	<i>'Because I didn't have enough money and I don't have any parents so I dropped out. I asked my grandfather if I can drop out of school, and he said that I could since I didn't have money to continue my study'.</i>
19 years	Grade 12	<i>'Because I failed Grade 12 exam'.</i>

All stakeholders in Prey Veng suggested that girls from poorer families would typically leave school around Grade 7 or 8 to work in factories in Phnom Penh or other provinces thereby contributing to the economic resources of their household. In addition, NGO staff, community leaders and caregivers all attributed girls going to work in the factories to the increasing financial commitment of schooling, with every successive grade costing more because of the need to pay for more 'extra' classes.

The other main driver identified by participants was the role of peer conformity, with girls wanting to follow their friends who had already migrated for factory work. In Prey Veng, identifying and enrolling 15 to 19 year old girls to participate in the workshops was challenging because of migration (see limitations discussed in the methodology in Annex 2). As the representative from an INGO concluded, *'In Prey Veng, most [school] dropouts are girls. After dropping out, they go to work in factories. The only reason is their family situation...I have observed more dropouts among girls than boys'.* In discussing the reason that boys left school in Prey Veng, respondents frequently attributed it to gambling or drug abuse rather than to a desire to work or find paid employment.

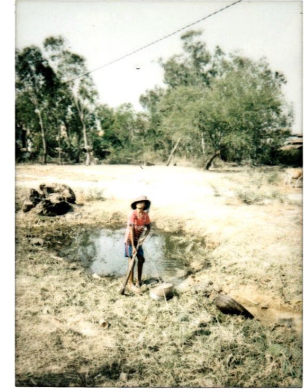
Caregivers in Prey Veng were critical of their children's teachers, suggested that they were not dedicated to their jobs and would *'give a lecture and then leave the room'*, with little or no direct engagement with the children, a didactic method of teaching that only the brightest students could follow. As in the other fieldsites, participants considered enrolling in extra classes to be mandatory if students were to pass their exams and advance to the next grade, but again associated costs, ranging from 10,000 Riel to 50,000 Riel per month (USD 2.50 to USD 12), were prohibitive for many.



Primary school  
16 years old, Prey Somroeng, Prey Veng



Snack shop outside school  
16 years old, Prey Somroeng, Prey Veng



A boy fishing  
18 years old, Prey Somroeng, Prey Veng

Caregivers described wanting and encouraging their daughters to stay in school, but that the pull of earning an income and living with their friends in another province was often very strong, particularly if a family was too poor to provide the finances required for their children to succeed in school.

### A note on garment factory employment

The national economy of Cambodia relies on the textile industry. Garment factories account for over 80% of exports and foreign trade (ILO 2014; GMAC 2015) and employment in the sector increased by 20% between 2004 and 2008 (ILO 2014). Cambodia is one of the top 20 producers of clothing items in the world, with the garment industry representing the fastest growing contributor to the gross national product (GDP). By December 2014, its total export value exceeded USD 5 billion (GMAC 2015). The textile industry continues to have one of the lowest minimum wages in the garment industry (approximately USD 100 per month), and as of 2009, women earned 12% less than men (ILO 2014). The vast majority of garment factory workers are young women (90% according to CARE 2016) aged around 20 years old (Human Rights Watch 2015). It is estimated that, in total, there are half a million Cambodian women employed in the garment industry (ILO 2016).

Cambodian Labour Law states that the minimum age for wage employment of children is 15 years old. Children aged 12 to 14 years may engage in 'permissible' work that lasts less than 12 hours per week, whilst 15 to 17 year olds are entitled to engage in economic work for up to 48 hours a week. Those aged 18 and older may engage in 'full-time' employment (48 hours or more per week) (ILO 2013). The ILO reported that in 2012, there were approximately 13,000 'economically active' children aged between five and 17 in Phnom Penh, and up to 23,000 in Prey Veng (ILO 2013). Disaggregating this data by sex, the ratio of male to female 'child workers' in Prey Veng is roughly equal, whereas in Phnom Penh there are two girls to every boy, most likely due to the large numbers of women who are employed by the garment industry.

For girls to gain employment in a garment factory, they must produce proof of age, typically their citizen or ID card, indicating that they are 18 years or older so that they can legally work more than 48 hours per week as often required in the industry. ID cards are not automatically issued when a person turns 18, and there is one opportunity per year (potentially more if it is an election year) to apply for the card. It is not uncommon, therefore, for 18 or 19 year olds not to have an official ID card if their birthday came after the annual renewal period. In such cases, youth can contact their local authority (e.g. village chief, commune council member) to write them a confirmation letter stating that they are 18 years old and eligible to work. Such letters are not difficult to forge, and community members reported that some local authorities could be bribed to produce confirmation letters for younger adolescents. Although it was suggested that this practice had decreased in recent years, community members in Prey Veng asserted that the factories in Phnom Penh continued to employ many of their younger adolescents who had migrated and secured employment on the basis of 'fake' papers. As one community leader in Ampil concluded, *'After they have their own ID card, they [adolescents] are not here anymore'*.







## 4. Food and nutrition

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In Cambodia, key nutritional indicators for women and children differ substantially between rural and urban populations: for example, 34% of children in rural areas are stunted, compared to 24% of children in urban areas. Table 10 (below) details the nation-wide percentage of children under five years (six to 59 months) who are classified as severely malnourished using three anthropometric indices of nutritional status (stunting, wasting, underweight), and women's nutritional status (15 to 49 years) by height, body mass index (BMI) and anemia (CDHS 2014).

Ratanak Kiri reports the highest percentages of children under-five who are stunted, underweight and anemic. The height of a woman is associated with past nutritional status (during gestation, infancy, childhood and adolescence) and is a predictor for the potential of obstructed labour and complications (due to their small pelvis size). Small maternal stature can also cause intrauterine growth restriction resulting in babies which are small for their gestational age thereby affecting children's future growth potential. Consequently, it is notable that Ratanak Kiri reports the greatest percentage (17%) of women in the country who are shorter than 145cm (CDHS 2014).

As described above, Cambodian women and girls play a central role in ensuring household food security. In all research sites, women were responsible for providing and preparing most of the food required by their families. Particularly in Ratanak Kiri, the multiple and time-consuming responsibilities associated with food production was seen to dominate the daily life of women and girls. In addition, the land available for family farm activities was reducing due to logging, plantation monocultures (e.g. palm oil) and government appropriations for conservation (e.g. Virachey National Park), resulting in shorter rotational periods for crops. The Environmental Investigation Agency (EIA) estimated that between December 2016 and February 2017 at least 300,000 cubic metres of timber was cut in Ratanak Kiri and smuggled to Vietnam despite a logging ban (EIA 2017). As a consequence, soil nutrients deplete at a faster rate, and it was reported that more labour was required to produce less crop yields. In Ratanak Kiri, weeding crops was the responsibility of women and girls, although in Prey Veng, mechanisation to harvest crops, including rice, had reduced the 'heavy' workloads of women in particular. There, animal husbandry assumed a large proportion of time for women and girls, and was another way in which they contribute to the economic stability of their household.

In Phnom Penh it was more common for women and girls to purchase food such as fresh fish from mobile vendors, or for children to use their 'pocket money' to buy snacks. Whilst this gave adolescent girls more time for other activities, such as school work, it also required households to have greater financial resources which in turn could impact girls leaving school early to engage in low-skilled work in garment factories and elsewhere.

The role that food plays in the daily lives of women and girls is instrumental in their attitude towards nutrition, identity construction, and gendered social norms regarding the production, purchasing, preparation and consuming of food. The components of the female diet (particularly in relation to their energy expenditure) also influence their health and development. The following sections therefore explore how food and nutrition are specifically related to the lives of adolescent girls and their families in Ratanak Kiri, Phnom Penh and Prey Veng.<sup>22</sup>

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<sup>22</sup> More broadly, there are several in-depth studies on the anthropology of food which are relevant background to the current study. For a global review, see Mintz and DuBois (2002); for a review of Southeast Asia that explores the essential role of food in structuring social and kin relations see Janowski and Kerlogue (2007); and for Cambodia specifically see, for example, Helmers (1997) on rice production, Ovesen et al. (1996) on the social organisation and power structure of rural agricultural economies, and Milne and Mahanty (2015) on contemporary forms of land use and development.

Table 10 – Nutritional status of children (under five) and women (15 to 49 years) by province

Province <sup>23</sup>	Under-five nutritional status (% below -2 SD) <sup>24</sup>				Women's nutritional status (15-49 yrs) <sup>25</sup>			
	Stunting (height-for-age) (%)	Wasting (weight-for-height) (%)	Underweight (weight-for-age) (%)	Anemia (6-59 months) (%) <sup>26</sup>	Under 145cm (%) <sup>27</sup>	BMI <18.5 (%) <sup>28</sup>	BMI > 25.0 (%) <sup>29</sup>	Anemia (%) <sup>30</sup>
Banteay Meanchey	28.6	7.8	17.0	39.7	4.0	10.7	26.4	30.5
Kampong Cham <sup>31</sup>	33.5	8.1	25.7	62.7	8.8	10.2	19.8	52.0
Kampong Chhnang	42.8	11.2	35.6	59.2	6.8	18.0	14.5	53.0
Kampong Speu	40.5	11.5	29.4	63.9	7.3	20.9	10.7	53.3
Kampong Thom	36.4	13.0	27.7	66.0	2.3	12.5	16.4	44.6
Kandal	28.1	9.2	26.2	58.6	4.4	17.9	17.0	49.4
Kratie	38.4	6.5	25.1	50.2	4.7	15.8	12.7	46.2
Phnom Penh	17.9	8.4	12.9	41.0	3.2	14.0	20.4	41.7
Prey Veng	32.7	8.6	22.2	51.3	4.3	12.5	18.4	46.9
Pursat	38.8	12.3	31.6	64.8	5.6	13.1	16.4	46.6
Siem Reap	35.9	9.5	26.2	52.3	5.4	11.6	17.0	41.1
Svay Rieng	32.8	7.6	20.8	49.8	5.7	13.1	19.2	45.7
Takeo	30.7	14.6	22.7	53.1	4.2	13.9	20.3	35.4
Otdar Meanchey	36.3	15.1	26.4	64.3	3.4	12.8	15.2	48.3
Battambang <sup>32</sup>	24.9	7.9	18.2	49.0	3.8	11.9	22.4	42.5
Pailin <sup>32</sup>	24.9	7.9	18.2	49.0	3.8	11.9	22.4	42.5
Kampot <sup>33</sup>	25.2	8.2	21.1	57.3	4.4	17.0	14.0	44.1
Kep <sup>33</sup>	25.2	8.2	21.1	57.3	4.4	17.0	14.0	44.1
Preah Sihanouk <sup>34</sup>	33.4	10.5	22.0	58.1	4.5	15.6	23.8	43.7
Koh Kong <sup>34</sup>	33.4	10.5	22.0	58.1	4.5	15.6	23.8	43.7
Preah Vihear <sup>35</sup>	44.3	13.8	30.7	68.8	8.0	16.4	9.9	53.7
Stung Treng <sup>35</sup>	44.3	13.8	30.7	68.8	8.0	16.4	9.9	53.7
Mondul Kiri <sup>36</sup>	39.8	8.2	26.2	57.7	16.8	10.4	18.9	41.7
Ratanak Kiri <sup>36</sup>	39.8	8.2	26.2	57.7	16.8	10.4	18.9	41.7
<b>Cambodia</b>	<b>32.4</b>	<b>9.6</b>	<b>23.9</b>	<b>55.5</b>	<b>5.4</b>	<b>14.0</b>	<b>18.0</b>	<b>45.4</b>

<sup>23</sup> Data current as of 2013-14 (NIS 2013; CDHS 2014). Provincial names are colour coded according to the four 'natural' regions of Cambodia as referenced in governmental literature. The regions are: Plateau & Mountain: Purple (n=6); Tonle Sap: Blue (n=8); Coastal: Orange (n=4); Plains: Green (n=6).

<sup>24</sup> Stunting is measured by comparing height-for-age. Underweight is measured by comparing weight-for-age. Each of the indices presented above are -2 standard deviation (SD) units from the median of WHO child growth standards (as adopted in 2006) (CDHS 2014).

<sup>25</sup> Nation-wide, nearly 6% of adolescent girls in Cambodia aged 15 to 19 years old are under 145cm, and 28% have a body mass index (BMI) of <18.5 (CDHS 2014).

<sup>26</sup> Reported (any) anemia status by hemoglobin level (includes mild, moderate and severe cases of anemia).

<sup>27</sup> 'The height of a woman is associated with past socioeconomic status and nutrition during childhood and adolescence. A woman's height is used to predict the risk of difficulty in delivery because small stature is often associated with small pelvis size and the potential for obstructed labor. The cutoff point for the height at which mothers can be considered at risk varies between populations but normally falls between 140 and 150 centimeters' (CDHS 2014). A larger percentage of women in Mondul Kiri and Ratanak Kiri are below 145 cm than in other provinces.

<sup>28</sup> A body mass index (BMI) of 18.5 or lower indicates thinness or acute undernutrition (CDHS 2014).

<sup>29</sup> A BMI of 25 or higher indicates overweight or obese (CDHS 2014).

<sup>30</sup> Reported (any) anemia status by hemoglobin level (includes mild, moderate and severe cases of anemia).

<sup>31</sup> In 2014, Kampong Cham was divided into two provinces: Kampong Cham and Tboung Khmum. At the time of writing, the most recent NIS and CDHS data did not reflect the addition of this 'new' province.

<sup>32</sup> For CDHS (2014), data from Battambang and Pailin Provinces are reported together.

<sup>33</sup> For CDHS (2014), data from Kampot and Kep Provinces are reported together.

<sup>34</sup> For CDHS (2014), data from Preah Sihanouk and Koh Kong Provinces are reported together.

<sup>35</sup> For CDHS (2014), data from Preah Vihear and Stung Treng Provinces are reported together.

<sup>36</sup> For CDHS (2014), data from Mondul Kiri and Ratanak Kiri Provinces are reported together.

## An early education in biodiversity: plant and animal knowledge among adolescent girls

*Question: What kind of vegetables do you normally buy at the market?*

*Respondent 1: Limes...*

*Respondent 2: Spring onions...*

*Respondent 3: String beans...*

*Respondent 4: Onions...*

*Respondent 5: Garlic...*

*Respondent 6: Basil!*

10-14 year old workshop, Koh Dach, Phnom Penh

Zarger and Stepp (2004) asserted that the ability of children and adolescents to name local plants '*is a fundamental part of their general ethnobotanical knowledge*', but went on to conclude that, '*Almost no research has been conducted with children*' on this topic. According to environmental anthropologists, this transmission of knowledge is required for survival and cultural competency which is '*Gained through years of first-hand experience immersed in a particular landscape, and practical know-how shaped by culturally situated practice*' (Zarger 2011).

The ethnobotanical learning process in Cambodia, distinct from many traditional educational systems (see for example Ruddle and Chesterfield 1977), often takes place in both a formalised school setting and through experiential and participatory knowledge transmission through interactions between mothers and/or grandmothers and their children / grandchildren. Given their level of involvement with harvesting, tending the household (and school) garden, animal husbandry, food selection and food preparation, ethnobotanical skills are acquired by Cambodian girls at a young age. They learn about food primarily by working not observing, indicating the participatory nature of transmitting ecological knowledge through caregiver-to-child (or teacher-to-child) interactions.

Adolescent girls in Phnom Penh and Prey Veng demonstrated strong ethnobotanical knowledge of the areas where they lived. Girls could not only name the plants around them, but also identify their potential, and multiple, uses for family consumption or as a market commodity. In contrast, girls in Ratanak Kiri had a rudimentary knowledge of caring for animals and could source a few different types of vegetables or herbs (e.g. cassava, lemongrass) from their immediate environments, but the lack of diversity and depth of their ethnobotanical knowledge was notable compared to that demonstrated by girls in the other provinces. This was also reinforced by the lack of diversity in the diets of girls in Ratanak Kiri compared to their counterparts in Phnom Penh and Prey Veng. The following exchange about a lotus flower (a commonly consumed plant that is easily found across much of Cambodia) well illustrates the differences in knowledge between girls of the same age in Ratanak Kiri and Phnom Penh.

*Question: What is this? [indicating drawing]*

*Respondent 1: Lotus.*

*Question: Can you eat anything from the lotus?*

*Respondent 1: The leaves...*

*Respondent 2: The stem...*

*Respondent 3: The flower...*

*Respondent 4: The seeds...*

10-14 year old workshop, Champus K'ek, Phnom Penh

*Question: What is this? [indicating drawing]*

*Respondent 1: Lotus flower.*

*Question: Do you eat lotus flower?*

*Respondent 2: No, you cannot eat it.*

*Question: Not the plant either?*

*Respondents: No.*

10-14 year old workshop, Pleu Toch, Ratanak Kiri

Knowledge of plants was not limited to which plants it was safe to consume, but extended to what parts of the plant were edible as well. The discussion about the lotus plant in Phnom Penh quickly led to an in-depth discussion about the other non-food uses of the lotus plant, which in turn led to discussion about the other sources of food available from the local lake where lotus plants grew (e.g. snails). Girls in Phnom Penh and Prey Veng were able to discuss the variety of uses for other plants including banana trees (e.g. eating the fruit, using the stem to make sour soup, using the leaves to wrap packets of sticky rice), palm trees (e.g. eating the fruit, harvesting oil, using leaves as roof thatching), and coconut trees (e.g. eating coconut meat, drinking coconut water, using the trunk as firewood). Descriptions such as these were absent from discussions with girls in Ratanak Kiri.

When discussing animals rather than plants, however, the situation was reversed. The breeds of animals in Phnom Penh were less diverse than in the other provinces and because of the proximity of housing, animals were more likely to be kept in a fenced area or cage rather than allowed to roam free. Whilst girls in Phnom Penh could identify the different animals in their immediate surroundings, animal husbandry was less likely to be amongst their daily duties and they were less familiar with the requirements of animal care than girls in Prey Veng.

Table 11 outlines the foodstuffs that girls participating in the workshops identified as part of their regular diet. It is constructed solely on the basis of girls' descriptions of their daily diet and should be interpreted within the context of the dry season, during which the research was conducted, when participants confirmed they had a less diverse diet than in the rainy season. With few exceptions, adolescent girls across all provinces were able to list the foods they regularly consumed with the same level of specificity and detail as their caregivers. In addition to the food consumption details provided by the girls, caregivers in Ratanak Kiri also mentioned that if they had funds available they would infrequently (once or twice a month) purchase items from mobile sellers including fresh fish, 'Chinese' spinach, curly spinach, cabbage, tomatoes and onions. Fresh fish in Ratanak Kiri, particularly during the dry season, was most often purchased from mobile sellers rather than self-sourced from the river (as discussed above). In Prey Veng, caregivers also added that they could purchase vegetables from the market if they were not available in their local gardens (e.g. carrots, radishes, cabbage and cauliflower), however they were more likely to rely on personal or community gardens for their vegetables and mobile food vendors for purchasing small quantities of meat (particularly during the dry season).

### **Food classification and the preparation of 'side dishes'**

As a community leader from Prey Veng emphasised, *'There is not a dish in Cambodia that does not start with rice'*. Rice is the most important agricultural commodity in Cambodia and the staple of the national diet (WFP 2008). The concept of a meal is synonymous with eating rice, and adolescent girls across all research sites know how to cook it (discussed further below). It was notable that the consumption of rice was so basic and universal that many women and girls, particularly in Phnom Penh and Prey Veng, neglected to include it when listing their daily food intake, although when prompted, 'cooking rice' was often included in their daily work activities.

Rice is consumed at every meal prepared in the household. Although girls in Phnom Penh were more likely to mention eating additional carbohydrates such as noodles or bread, rice was still a daily food source that other items supplemented. During the dry season in Ratanak Kiri, it was more common for rice to be the only food stuff consumed at one or more meals each day, often with the addition of chili and/or salt for seasoning. Provincial- and district-level stakeholders in Ratanak Kiri suggested that as long as community members could add a strong spice like chili or salt to their rice, they did not appear to care what else they ate so long as they had sufficient energy to keep working. Stakeholders often made this as an oblique criticism of the 'improper' diets of ethnic communities who 'Just eat rice with chili for flavor and nothing else' and did not have a good understanding of nutrition (for example, the dangers of consuming too much salt).



Table 11 – Food identified by adolescent girls as part of their diet

		Eaten daily or regularly			Eaten weekly			Eaten as part of rituals			Available but not eaten		
		RK	PV	PP	RK	PV	PP	RK	PV	PP	RK	PV	PP
Carbs	Rice	✓	✓	✓									
	Noodles			✓									
	Bread			✓									
Vegetables	Cassava				✓								
	Taro				✓								
	Gourd		✓		✓								
	Pumpkin		✓										
	Yam		✓										
	Eggplant				✓								
	Lettuce			✓									
	Bitter melon		✓	✓									
	Winter melon			✓									
	Cucumber		✓	✓									
	Okra			✓									
	Chinese spinach		✓	✓									
	Eggplant		✓	✓									
	Bell pepper			✓									
	Onion			✓									
	Cabbage		✓	✓									
	Cauliflower		✓	✓									
	String bean		✓	✓									
	Carrot		✓										
	Radish		✓										
	Spring onions			✓	✓								
	Morning glory		✓	✓	✓								
	Bok choy			✓									
Banana flower			✓										
Lotus flower		✓	✓										
Moringa leaves		✓											
Herbs	Garlic			✓									
	Coriander			✓									
	Ginger			✓									
	Chili	✓	✓	✓									
	Basil			✓	✓								
	Lemongrass				✓								
	Tamarind		✓										
Fruits	Tomato			✓									
	Mango		✓	✓	✓								
	Jackfruit			✓	✓								
	Banana		✓	✓	✓								
	Coconut			✓	✓								
	Guava		✓	✓									
	Longan fruit			✓									
	Rose apples			✓									
	Lime			✓									
	Palm fruit		✓										
	Pring		✓										
	Jambolan plum		✓										
	Papaya		✓										
Nuts	Lotus seeds					✓	✓						
	Sunflower seeds			✓			✓						
	Cashew nuts						✓				✓		
Fish	Fresh fish		✓	✓									
	Fermented fish		✓	✓	✓								
	Dried fish			✓	✓								
	Clams			✓									
	Snails			✓									
Poultry	Eggs	✓	✓	✓									
	Chicken	✓	✓	✓				✓					
	Duck										✓	✓	✓
	Goose										✓	✓	
Meat	Rabbit					✓							
	Pork					✓	✓	✓					
	Beef							✓				✓	✓
	Buffalo							✓				✓	✓



Cassava  
15 years old, Pleu Toch, Ratanakiri



Vegetable garden at school  
17 years old, Ta Noung, Ratanakiri



Banana tree  
17 years old, Ta Noung, Ratanakiri



Spring onions (raised garden)  
16 years old, Ta Noung, Ratanakiri



Geese  
16 years old, Ta Noung, Ratanakiri

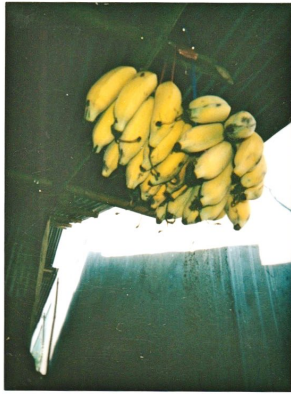


Pigs  
18 years old, Pleu Toch, Ratanakiri

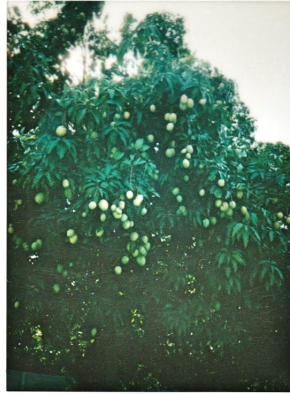
In Cambodia, a nutritious meal is seen to be a meal with ‘balanced’ flavors that in addition to rice involves both wet (e.g. soup) and dry (e.g. fried or grilled meat) food categories. In contrast to many other Southeast Asian cuisines that often combine all preferred flavor groups into one dish (i.e. ‘*one bite of food*’), Cambodian food often seeks to attain balance across a meal of multiple dishes, and a dessert, when available, will almost always involve a selection of one or more fruits.

Because rice is the constant staple, when discussing how they used other food stuffs (as listed in Table 11), women and girls would describe preparing multiple dishes that they referred to as ‘side dishes’ to accompany the rice. The more side dishes consumed during a meal, the more ‘well off’ or food secure a family is perceived to be. In Phnom Penh, community members often reported having one side dish for breakfast, and two side dishes at lunch and the evening meal. In Prey Veng, they reported having one side dish for lunch, and one for the evening meal, whilst in Ratanak Kiri, they were more likely to report having one side dish per day, usually at lunch which was seen to be the primary meal. As one caregiver in Prey Veng concluded, ‘*Everyone has rice. For the side dish, it is not guaranteed*’. In Phnom Penh and Prey Veng, girls suggested that they were more likely to consume their daily portion of vegetables in the evening as a soup or stir-fry, whilst dry foods like fish and pork were considered easier and less time-consuming to eat during the midday meal when they were busy with school or household chores. In Ratanak Kiri, it was more common to eat fermented fish with raw (not cooked) vegetables for the evening meal.

Although all the girls who took part in the workshops in Ratanak Kiri knew how to cook rice and porridge (rice with water and salt), collectively they could only describe three recipes: kokor soup; vegetable or herb



Bananas  
15 years old, Champus K'ek, Phnom Penh



Mango tree  
15 years old, Champus K'ek, Phnom Penh



Eggplant and chilli  
16 years old, Koh Dach, Phnom Penh



Lotus lake  
15 years old, Champus K'ek, Phnom Penh



Fermented fish  
17 years old, Koh Dach, Phnom Penh

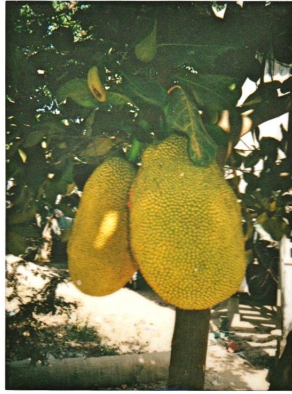


Man selling sugarcane  
16 years old, Koh Dach, Phnom Penh

soup; and stir-fried morning glory. They were also more likely to list 'cooking rice' as one of their more difficult daily chores, due in part to the large quantities of rice that had to be prepared for each meal, and the physical requirements of collecting firewood and water to cook it. Cooking was also more likely to be a solitary experience for an adolescent girl in Ratanak Kiri because she often had to prepare a meal for herself after school, and even if a caregiver had prepared food for her in advance, it was common that she ate lunch alone (as discussed above).

In contrast, adolescent girls in Phnom Penh and Prey Veng articulated positive perceptions and experiences of cooking compared to those of the girls in Ratanak Kiri. They had a diverse selection of recipes in their repertoire and more were more likely to enjoy the process of cooking. They had more knowledge about selecting and using multiple ingredients and being able to produce a range of flavorful side dishes was viewed as a sign of their increased maturity and ability to help their mothers/grandmothers with dinner preparations. In discussing food preparation and recipes, girls in the workshops in Phnom Penh described making stir-fried tomato soup, fish soup with herbs, kokor soup, stir-fried cabbage, vegetable curry, sautéed pork, Chinese spinach soup, winter melon soup, banana flower salad, green papaya sour soup, pork with oyster sauce, and minced fish balls. In Prey Veng, girls described making sour soup with fish, grilled fish, deep fried fish, stir fried onions, fried egg, vegetable soup, gourd dip, and grilled bananas. Girls in both Phnom Penh and Prey Veng spoke with pride about being considered 'good cooks' with the ability to prepare 'special meals' for their families, and in contrast to Ratanak Kiri, cooking was often a social experience as girls prepared food alongside their mothers, grandmothers and sisters.





Jackfruit  
17 years old, Koh Dach, Phnom Penh



My mom selling vegetables  
15 years old, Champus K'ek, Phnom Penh



Dry land (dry season)  
15 years old, Champus K'ek, Phnom Penh



Shop selling coloured meatballs  
17 years old, Koh Dach, Phnom Penh



Butcher  
15 years old, Koh Dach, Phnom Penh



Man selling waffles  
19 years old, Champus K'ek, Phnom Penh

## Food sources, preferences and consumption

Being able to source a diet that was more diverse than just rice had economic and time implications. This was particularly true during the dry season when a family would not be able to produce as many food items in their family gardens, and fish were not as plentiful in the rivers and ponds. If fresh fish and vegetables were considered important sources of nutrition, then most families would be required to expend greater financial resources to purchase these items from markets or mobile vendors. If families were unable to afford expenditure for additional food during the dry season, then fresh fish would often be replaced with fermented fish during evening meals, and the quantity and type of vegetables reduced to what was available from their household gardens (e.g. plants that were considered drought resistant such as cassava leaves, or were considered easy to grow irrespective of season, like lemongrass).

Family fishponds were common in both Phnom Penh and Prey Veng, but in Phnom Penh they were mainly decorative and adolescent girls were likely to view the fish more as pets rather than food sources (*'Three tailed fish are not good for food'*). The fish ponds and larger fish farms in Prey Veng were established by communities with the assistance of local NGOs, primarily to provide families with a source of fresh fish they could consume throughout the year. Fish was considered the most significant source of animal protein for most community members in Ratanak Kiri. Fish resources were depleted at the time of fieldwork due to the dry season, but community members commented that construction of dams in Vietnam had restricted water flows (and fish migrations) to the Mekong River. Community leaders stated that family consumption



of fish had been reduced in recent years and that fish could only be caught in small quantities that were insufficient to feed an entire family.

The use of herbs was also distinct between provinces. In Ratanak Kiri, women and girls were more likely to describe the use of a herb, like lemongrass, as the primary 'vegetable' component of their meal, whereas girls in Phnom Penh discussed the use of herbs such as coriander as 'decoration' for dishes (i.e. something small to add just before serving a meal, or something to provide a side dish with a little more flavour).

In addition to the similarities and differences of available food types outlined in Table 11 above, the methods by which women and girls sourced their daily meals varied by province. In Ratanak Kiri, caregivers suggested that they 'almost always' had sufficient rice (and rice wine) for family consumption because of their personal rice fields, but the availability of all other food stuffs was highly dependent on the time of year and the family's financial situation. As detailed above, the consumption of meat (buffalo, beef, pork) in Ratanak Kiri was almost entirely dependent upon the 'spiritual distribution' of food following an animal sacrifice. Community members who did not hold 'strong beliefs' suggested that it may be permissible to slaughter a smaller animal, such as a chicken, for household consumption or to sell at market, but this was described as happening infrequently given the need to perform one or more sacrifices during the course of year and the expense of obtaining animals they had not raised. In discussing people who held 'very strong beliefs', community members commented that they '*Wouldn't dare kill the animals*'. Several interlocutors described a time when they hunted small animals in the forest and meat was a larger part of their diet. Due to deforestation and the logging trade, plantation monocultures, and large portions of land being sectioned for conservation (e.g. Virachey National Park), forest resources were considered less plentiful and hunting was no longer a significant source of food for most villagers. As one caregiver in Ta Noug, Ratanak Kiri explained, '*We worry about meat... there are no wild animals anymore. The livestock we raise are not enough*'.

In Phnom Penh, anything other than fruits and herbs (e.g. dried fish, fresh fish, tomatoes, onions etc.) were typically purchased exclusively from mobile sellers, particularly during the dry season. Although markets in Phnom Penh were often comparatively accessible to women and girls (due to their proximity and the availability of transport), women preferred to buy their food from a selection of 'trusted' mobile sellers, rather than buying vegetables 'full of chemicals' from the market. This sentiment was also repeated by women and girls in Prey Veng who produced more of their own 'fresh' fish and 'healthy' vegetables and were only likely to purchase small quantities of grilled meat from mobile sellers. Also because mobile vendors sold their products in the community, often door-to-door, it was seen to be more convenient to buy from them, and required fewer resources (in terms of time and out-of-pocket costs) than going to the market.

Caregiver opinions that vegetables at larger markets could not be trusted were echoed by the adolescent girls who had learned from their mothers and grandmothers to avoid these items whenever possible. The assumption that vegetables (and sometimes fish) sold at markets were 'filled with chemicals' was due to the notion that they must be chemically induced to attain their size and quantity. INGO stakeholders in Phnom Penh and Prey Veng explained that popular television stations such as Hang Meas, frequently discussed the dangers of over-fertilising crops, stressing that children should not handle these 'chemicals'. They suggested that such programming had contributed to the negative attitudes towards vegetables and other food sources sold at markets by unfamiliar food vendors.

Caregivers also associated 'bad' or 'unhealthy' food with food markets where imported foods (e.g. food from Vietnam) were sold. Many caregivers found it difficult to explain why they did not trust 'foreign' food, but the general assumption was that if people in the countries that produced the food did not want to eat it themselves, but required vendors to sell their products in Cambodia, then it must be 'bad'.

In Phnom Penh and Prey Veng, children and adolescents with 'pocket money' were likely to have access to multiple food sources beyond what was prepared at home. Those attending school could choose from the numerous food vendors who set up their food stations and snack shops outside the gates of primary and

secondary schools. Adolescents in Phnom Penh also had an additional source of food via ‘mobile restaurants’, vendors who attached small portable grills to their motorbikes on which they could produce a variety of food from waffles to grilled meat. They also frequented the permanent shops that sold shrimp and rice crackers, sodas and energy drinks, bags of potato crisps and assorted meat products that were designed to appeal specifically to children and adolescents (e.g. brightly colored meatballs dyed pink, blue and green). As one caregiver in Koh Dach concluded, ‘*With pocket money, they can buy whatever they want to eat*’.

Table 12 below depicts the typical daily food intake as reported by adolescent girls in Ratanak Kiri, Phnom Penh and Prey Veng. This highlights that an adolescent girl’s diet is much less diverse in Ratanak Kiri than in the other two provinces.

Where food is consumed and who it is consumed with are also important components in how food shapes gender, identity and social norms (see Table 13 below). As discussed, girls in Ratanak Kiri were more likely to consume one or more of their daily meals alone or in the company of an older sibling who had returned from the farm to prepare their lunch. In contrast, girls in Phnom Penh were more likely to consume one or more meals outside the household, particularly if they are enrolled in ‘extra’ classes and therefore spent a greater proportion of their day at school. Regarding the evening meal, it was more common for girls in Phnom Penh and Prey Veng to eat dinner with their families, whilst in Ratanak Kiri, it is equally likely for family members to serve themselves from a communal food dish at differing times in the evening depending on the time they finished their day’s work.

Table 12 – Typical daily food intake described by adolescent girls, per province

		Breakfast	Lunch	Dinner	Snack
Ratanak Kiri	Option 1	No meal	Rice with chili	Rice with chili, kokor soup, cassava	n/a
	Option 2	Rice porridge	Rice with chili	Rice with chili, fermented fish, raw vegetables	n/a
Prey Veng	Option 1	Rice porridge, fried egg	Rice with chili, fermented fish	Rice, sour soup with fish	Sticky rice, donut/fried dough, energy drink/soda
	Option 2	Rice porridge, fermented fish, boiled egg	Rice, grilled pork	Rice, stir-fried vegetables	Palm fruit, banana, mango
Phnom Penh	Option 1	Rice porridge, dry fish or pork	Instant noodles, energy drink/soya	Rice, fish soup with herbs, grilled pork	Shrimp crackers, waffles, sugarcane juice
	Option 2	Rice, dry fish, fried egg	Rice, grilled pork, fried egg	Rice, green papaya soup, fried fish	Longan fruit, bananas, mango

Table 13 – Where food is typically consumed and with whom as described by adolescent girls, per province

		Breakfast	Lunch	Dinner	Snack
Ratanak Kiri	Option 1	No meal	Home alone	Home alone or with siblings	n/a
	Option 2	Home with siblings	Home with older siblings	Farm with family	n/a
Prey Veng	Option 1	Home with family	Home with family	Home with family	School with friends
	Option 2	Home with family	Home with family	Home with family	Home with family
Phnom Penh	Option 1	Home with family	Home with family	Home with family	School with friends
	Option 2	School with friends	School with friends	Home with family	Home with family

## Pregnancy and postpartum/lactation food taboos and dietary restrictions

There were many and varied food taboos identified by the indigenous ethnic minorities in Ratanak Kiri. A number of general food taboos were highlighted that differed according to ethnic group, village and even family, but were supposed to be adhered to by all members of a community. Due to the sample size of the study, no trends or underlying causation related to local belief systems could be established (but see also Fisher and Sykes (2002) for additional information on the diversity of food taboos in Ratanak Kiri). Specific taboos relating to pregnant and lactating women were also identified, and common themes regarding these emerged from the participants' narratives. Such food taboos were often enforced by strong social norms, and non-adherence risked consequences for the whole community not only the mother and her child. Table 14 presents an overview of the key food taboos discussed during the research, but is not intended to be exhaustive of all taboos practiced in the field sites.

Table 14 – Dietary restrictions during pregnancy, postpartum and lactation dietary, per province

		Pregnancy			Post-partum			Lactation		
		RK	PV	PP	RK	PV	PP	RK	PV	PP
Veg	Raw vegetables						✓			✓
	'Cool' vegetables							✓	✓	
	'Ripe' vegetables							✓		
	Leafy green vegetables								✓	
Fruit	Coconut	✓						✓		
	'Ripe' fruit									
Spice	Chili		✓	✓			✓			✓
Fish	Seafood								✓	
	Large fish				✓					
	Red-tailed fish				✓					
	Jongy fish				✓					
	Fermented fish (salty food)		✓	✓			✓			✓
	Turtle	✓								
Poultry	Eggs / chicken	✓			✓					
	Goose					✓			✓	
	Duck									
Meat	Buffalo					✓				
	Black cow meat					✓				
	Pig's head/snout/tail					✓				

In Ratanak Kiri, food taboos governing the later months of a woman's pregnancy revolved around the notion of trying to ease her delivery by preventing mother and child from 'sticking' together during labour. Therefore, any food that was viewed as closely connected to something else (e.g. a coconut to its husk, or a turtle to its shell) had to be avoided. The physical appearance of a child could also be associated with the consumption of certain foods that many women avoided, for example it was thought that eating eggs may lead to an unattractively round or obese child. In turn, it was known that a larger baby could contribute to a difficult labour, reinforcing the need to avoid certain food stuffs. These findings are supported by both older research and more recent studies amongst ethnic groups in Ratanak Kiri (compare for example Fisher and Sykes 2002; and Breogán 2017).

Breastfeeding was commonly reported in Ratanak Kiri, but there were variations in the way older caregivers and adolescent girls described the practice. Older caregivers would frequently explain that they breastfed one child until their next child was born, whereas adolescent girls were more aware of recent health messages that children should be breastfed 'for at least six months' at which point complementary food sources could be introduced. Many girls and young mothers interpreted this as meaning that they were allowed to stop breastfeeding their children at six months.

In Ratanak Kiri, food taboos that determined women's eating patterns after delivery focused on what lactating mothers should eat to avoid adversely affecting her child through her breastmilk, although the optimal length of such dietary restrictions varied from one to six months, and potentially longer. Women discussed refraining from eating eggs or certain types of fish because of the possible range of 'side effects' for mother and child. Avoidance of 'cool' vegetables such as cucumber or melon, which were thought to cool the body temperature when consumed, were often discussed in terms of reducing maternal uterine infections. The avoidance of ripe vegetables was associated with preventing infants from experiencing upset stomachs or diarrhoea, whilst the avoidance of 'ripe' fruits such as bananas or mangos related to the belief that these foods could cause a previous illness (of the mother or child) to return.

Caregivers' concerns with uterine infections (of the mother) and stomach problems/diarrhoea (of the child) were often linked to issues of poor hygiene during and after delivery. Food taboos and dietary restrictions placed upon pregnant and lactating women should therefore be interpreted in the context of the lack of skilled (clean) birth assistance, limited access to water, and poor sanitation and hygiene conditions. Placing restrictions on the diet of pregnant and lactating mothers who already have low nutritional intake or are food insecure can put both mothers and children at additional risk. It was concerning, therefore, that some of the most practiced food taboos in Ratanak Kiri restricted the consumption of food stuffs that otherwise provided valuable sources of protein (e.g. eggs, fish) and vitamins (e.g. fruit, vegetables). It was also considered to be more important for primigravida to strictly observe food taboos than multipara. This may have contributed to the difficulties many mothers reported in relation to their first pregnancy and delivery, particularly if they were pregnant at a young age.

In both Phnom Penh and Prey Veng, dietary restrictions for pregnant women revolved around avoiding spicy food or food with a high salt content. The notion that these foods were unhealthy for a pregnant woman and could cause problems (e.g. indigestion) were widespread. As in Ratanak Kiri, breastfeeding was common and in both Phnom Penh and Prey Veng food taboos in the postpartum period focused on lactating mothers (see Table 14 above). Restrictions were described as lasting from one to six months after the birth of the child, but the types of restricted foods varied across both provinces.

Mothers in Phnom Penh were more likely to be instructed by elders to avoid fermented fish, fish sauce, chili and 'raw' vegetables. In one community in Phnom Penh, respondents explained that raw vegetables could cause an infant to cough and/or block their nasal cavity making it difficult for them to breathe. In Prey Veng, green leafy vegetables were to be avoided due to the perception that these could cause infections in the mother and diarrhea for the child. Here, mothers were also more likely to be cautioned by elders to avoid several different varieties of meat and 'cool' vegetables to prevent infant diarrhoea. In both locations, however, community members remarked that the observance of food taboos had significantly reduced amongst younger generations. Adolescent girls, particularly those who were 15 years and older, were aware of some of the dietary restrictions placed upon pregnant and lactating women, but were not sure of the purpose of avoiding certain foods. Several respondents commented that it was only the elders who would try to enforce restrictions upon postpartum women. As one caregiver in Ampil, Prey Veng, recounted, *'When I was living with my mother in-law, I had to follow those foods. She said that eating too many vegetables could cause the baby diarrhoea. I was not allowed to eat kokor soup because it has a lot of vegetables. I don't follow this advice when I'm not with her'*. Younger women confirmed that they were more likely to follow the advice that health workers gave them during ANC and PNC. A mother in Champus K'ek, Phnom Penh concluded, *'The doctor told me to eat a lot of green vegetables, meats, and eggs...So I just follow those orders'*.

### **The ongoing impact of food insecurity under the Khmer Rouge**

The Khmer Rouge were the followers of the Communist Party of Kampuchea in Cambodia, led by Pol Pot. They overthrew the military dictatorship of the Khmer Republic in 1975 following Cambodia's Civil War and established a regime from 1975 to 1979 that was characterised by the strict enforcement of social engineering policies. Millions of people were forced from the cities to live and work on 'collectives'



(communal farms) across the countryside and, if they survived relocation, became unpaid agricultural laborers, working in the fields for extended hours on the most minimal rations. The 1976 harvest season in Cambodia was very poor and by early 1977 *'people began dying in large numbers from starvation and disease'* (Kiernan 2002). In the collectives, food that had been harvested was stored centrally and doled out daily. Eating was communalised and meals were scheduled in shifts so that the farms were always tended. As the purging of the cities continued, agricultural productivity continued to drop and allotted food rations reduced even further. During the period 1976 to 1977, daily food rations fell to *'half a can of rice'* for adults and less for children, and then sometimes to nothing for days at a time (Kiernan 2002).

Older female research participants recalled this period and described how they suffered from malnutrition and their menstruation was delayed. As one caregiver in Koh Dach, Phnom Penh, concluded, *'Yes, we were growing up during Khmer Rouge Regime. So, we did not get a lot of nutrition, and we were wasting. Not until the end of the regime when I was 18 did I have my first period'*.

Older male research participants described working punishing hours in the fields, only then to be made to store their yields in communal storage facilities from which they would receive little food in return. As community leaders in Ampil and Poun Wat in Prey Veng discussed,

*Respondent 1: Today is not the same as in Khmer Rouge regime when we had to eat limited portion to make sure that everyone got to eat something. Now it is not like that.*

*Respondent 2: During that regime, everyone had to eat according to the divided portion.*

*Respondent 3: Now there is no division. Everyone can help themselves to the food on the table.*

Community leaders, Ampil and Poun Wat, Prey Veng

Questioning whether food is divided equally amongst household members or whether individuals received a larger portion or better quality food, elicited a strong response from all participants. As a result of the collective memory of the harsh policies of the Regime, community members across all fieldsites were emphatic that food division or food rationing within a household was not practiced. As one community leader stressed *'Everyone can eat until they are full. Everyone is free to eat as much as they want... We are not Khmer Rouge'*. In the workshops, many adolescents confirmed that food was always available and equitably distributed and as 15 year old participant in Prey Veng concluded, *'I have never had nothing to eat. I eat until I'm full'*.

The practice of cooking rice on a daily basis that is now so usual, and often cooking more rice than can be consumed by a family in one meal or one day, can be viewed as a subtle reminder of the harsh treatment and starvation Cambodians experienced under the regime. Rice is typically cooked and stored in a large pot and every family member, young or old, male or female, is allowed to take as much as they care to eat. In general, children are neither prevented nor given priority for the consumption of certain types of food and with a few exceptions, the diet of an adolescent girl can therefore be expected to be closely aligned to that of the rest of her family. However, as noted by caregivers and adolescent girls across all provinces, *'side dishes'* were less plentiful than rice during meals so depending on whether a family eats their meals together or separately can impact who has access to the sour soups or *'dry'* meats served alongside rice. As one caregiver in Ampil, Prey Veng, explained *'We always have extra rice. If we have two more guests to eat with us, we can feed them. But for side dishes, there is no guarantee.'* In Phnom Penh and Prey Veng where it was more common for girls to help their mothers or grandmothers prepare the meal and where the evening meal was eaten together as a family, the girls would have equal access to the side dishes she had helped prepare. As discussed above, girls in Ratanak Kiri who had to prepare their own meals or had food left for them, may not have the same access to side dishes as other family members. Girls who were in school and whose families provided them with *'pocket money'* were also likely to consume more packaged food products (e.g. crackers, soda) than her younger siblings or adult caregivers.



## 5. Engaging adolescents

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The UN Convention on the Rights of the Child, ratified by Cambodia in 1992, emphasises that children and adolescents have the right to participate in decisions affecting their health and well-being. 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 effectively 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 that determine behaviours (UNICEF 2014, CDC 2015). Interrogating the power dynamics between adolescents and their environment can lead not only to greater engagement for nutrition, but also support cross-sectoral programming (e.g. linking health, education, SRH etc.).

### Key influencers

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 during this pivotal and dynamic period of their lives, are better understood.

### The influence of family members

In Cambodia, the mother-daughter dyad and the role of grandmothers, older siblings and peers in influencing adolescent girls and their behavior, vary depending on local context and the focal issue (education, marriage, SRH, nutrition etc.), but also on the level of social proximity. In Prey Veng, it was likely that both parents were living in a different province due to employment, and children were commonly raised by their grandmothers. To a lesser extent this was also observed in Phnom Penh when mothers were working in garment factories. In other areas of Phnom Penh, such as Koh Dach, however, mothers working at home as weavers had frequent daily contact with their daughters, and across the province, mother-daughter collaboration around the preparation of family meals was a uniting factor, as discussed above. In Ratanak Kiri, where caregivers spent considerable time at the family farm, older siblings played a more significant role, particularly in relation to girls who are still at school. This finding was supported by other recent anthropological research in Ratanak Kiri which concluded, *'The most striking aspect of childrearing in highland communities is the amount of time parents spend away from their children after the age of one... By the age of three, most mothers report spending less than half the day or*

*very little time with their children each day. At this point child care is overwhelmingly handled by other, older children' (Breogán 2017).*

Whilst maternal figures were considered to be patient and empathetic, fathers and grandfathers appeared to exert less influence on the daily lives of their daughters, although they were consulted on matters regarding household finances and expenditure (e.g. school fees). Many adolescent girls reported that their fathers were frequently absent, sometimes because of parental separation, but often due to economic generating activities. As discussed above, fathers from Prey Veng often worked outside the province, whilst in Ratanak Kiri, their movement was largely seasonal and fathers could be away from the main household for days or even weeks at a time, living at the family farm during harvest and planting season. In Phnom Penh, fathers were more likely to live in the same house as their daughters, but spent most of their day at work, whereas mothers were more likely to work from home or to return home for lunch. Mothers often reported that children were more 'obedient' to their fathers, but that girls (not boys) 'listened' more to their mothers. The following exchange in a focus group discussion with caregivers in Champus K'ek, Phnom Penh, was illustrative.

*Question: Who in the family has the greatest influence on adolescents?*

*Respondent 1: Only the mothers.*

*Question: How about the fathers?*

*Respondent 2: No, not really. They just concentrate on making a living. They are busy with their work, so only the mothers are able to advise the children.*

*Respondent 3: They are more afraid of their father. They are more obedient to their father.*

*Respondents: Yes.*

*Question: Why are they more obedient to their father?*

*Respondent 4: Because the mother just talks, and doesn't hit them. Their father can hit them. We feel sorry for the children, so we wouldn't dare hit them. But their fathers can use violence to get them to be obedient.*

*Respondent 5: They are afraid of their fathers because their fathers are more aggressive.*

Caregivers, Champus K'ek, Phnom Penh

Caregivers were matter-of-fact in their descriptions of 'aggressive' fatherly behavior towards children, and whilst it was appeared in sharp contrast to the gentle and empathetic approach mothers adopted, such behavior, when discussed, was not seen to be either unusual or socially unacceptable. If they discussed issues of violence towards children, then most provincial-level respondents did so in terms of child labour and child trafficking, but issues of social protection with regards to domestic violence were highlighted in all research provinces. Particularly in Ratanak Kiri, community leaders described the prevalence of domestic violence in their communities, towards both women and children, whereas community leaders in Phnom Penh and Prey Veng were more likely to attribute violent behaviour as being concentrated among 'just a few families'.

### The influence of peers

Adolescent girls across all three provinces consulted with their caregivers (most often mothers or grandmothers and sometimes older siblings) on key life decisions, but reported that they never discussed any topic related to sexual and reproductive health with close relatives. Not all girls had access to information about SRH, but those that did confirmed that their knowledge had largely come from their peer group, or in some cases from online platforms such as Facebook. This finding was also reflected in the research BBC Media Action conducted with Cambodian youth as part of their Love9 programming (see box



on 'BBC Media Action' below). Avoidance of discussing all aspects of SRH including issues about contraception (use and access), sexual partners and abortion, with their parents and elders was consistently attributed to embarrassment rather than issues of age or social hierarchy.

Aside from SRH issues, adolescents were also influenced by their peers in relation to accepted behaviour and social norms. For girls in Prey Veng, for example, the pull of migrating for work in garment factories was stronger when they knew girls who had already migrated and with whom they could stay on arrival in Phnom Penh. Similarly, in Ratanak Kiri, girls who were considering leaving school were influenced in their decision-making by comparing themselves to girls who had already left, got married and started their own families.

#### **BBC Media Action in Cambodia**

BBC Media Action has worked in Cambodia since 2003 using multimedia to address issues of concern amongst Cambodian youth, primarily 15 to 24 year olds. Special programming has targeted civil participation, maternal and child health, sexual and reproductive health (e.g. HIV/AIDS), and employment and livelihood concerns, particularly regarding the low skilled/low wage jobs that are most available to youth who have dropped out of school (e.g. in garment factories, construction, etc.). BBC Media Action has a particular focus on using TV, radio and online media to reach and engage young people in Cambodia. Three specific programmes dedicated to Cambodian youth should be highlighted: Loy9 (to encourage youth involvement in local and national decision-making); Love9 (to help youth learn about sexual and reproductive health issues), and Klahan9 (to improve young people's employment prospects).

The use of the number '9' at the end of programme name is a direct reference to Cambodian youth slang in which adding the number nine emphasises what they are saying. Loy9 meaning 'Cool9', conveys the idea that somebody or something is amazing, whilst Klahan9 or 'Brave9' describes a person who is adventurous and speaks out.

BBC Media Action in Cambodia has undertaken several research studies focusing on youth media consumption patterns and behaviour. Loy9 (2011-2015) and Love9 (2013-2016) programming were featured prominently on the radio and to a lesser extent, television. However, BBC Media Action reported a sharp drop in consumer radio usage among Cambodian youth in recent years, with a corresponding increase in online and social media activities. As a result, Klahan9 (launched in 2014) is more directed towards online programming. According to a BBC Media Action representative, *'We changed strategically, dropping the radio programmes. We now work on the digital side, which is to say social media, because it is the way that we can include more young people, even though they may be in low skilled jobs or in the rural areas. We understand that urban youth have more access to the internet than rural [youth] which is not surprising, but also the low skilled workers like the farmers and fishers can also access digital content through Facebook'*.

BBC Media Action flyers that advertise Klahan9 include links for youth to engage with their programming via Facebook, YouTube, and SoundCloud, in addition to providing information directly on their website.

#### Autonomy and agency to act

Stakeholders across the study confirmed, that although adolescent girls may seek advice and counsel from influential figures in their lives, they had a high level of autonomy and decision-making power. This was most apparent in relation to their education. Whilst strained financial resources and the socio-economic pressure to earn a living shaped the context in which they made decisions about their education, most participants confirmed that the agency to both continue and leave school lay with girls themselves. It was notable that if girls continued to attend school to higher grades, their families were more likely to see the value in investing resources to pay for extra classes, which positively reinforced the girls' decisions.

As discussed above, girls in Ratanak Kiri had a high level of agency regarding sexual activity, although little knowledge of, or access to, family planning. In that province, early marriage was common, and both caregivers and adolescents discussed the decision to get married as originating from 'the young couple'. Mothers explained that a daughter would request familial permission to marry and if it was refused, then the adolescent couple would assert themselves by threatening to elope (although in the event, eloping was not a common course of action taken). Several mothers in Ratanak Kiri described giving permission for

their daughters to marry, even if they thought they were too young to ‘handle the pressures’ of marriage, because they wanted their daughters ‘to be happy’.

### Media and communication landscape in Ratanak Kiri, Prey Veng and Phnom Penh

Studies conducted with adolescent girls throughout the Asia Pacific region demonstrate that technology and social media play an increasingly critical role in their lives (Savage et al. 2013). Young people are increasingly exposed to television, video, radio and the internet, and the CDHS (2014) reported that 21% of women and 25% of men aged 15 to 49 years were exposed to at least one source of mass media (newspaper, television, radio) at least once a week. A comprehensive survey conducted by BBC Media Action (2014) measured Cambodian youths’ knowledge, attitudes, usage and engagement of media and technology, and concluded that the majority of young people (aged 15 to 24 years old) living in rural and urban areas of Cambodia had access to television (96%), radio (92%), and mobile phones (96%) (see box above). In a 2016 study commissioned by UNICEF Cambodia, adolescents aged 15 to 19 years were found to have greater access to and utilisation of the internet (i.e. Facebook), whilst 10 to 14 year olds mainly accessed television and radio as their primary communication channels (Indochina Research Ltd. 2016). According to the Open Institute, the internet (i.e. Facebook) is the most common source of information among Cambodians, whilst the influence of other forms of mass media such as television and radio is declining (Phong et al. 2016). It should also be noted that not all forms of media have been influential in disseminating information about public health, however. For example, a quantitative content analysis of news in Cambodia showed that public health issues such as mental health, sexual health, and food and nutrition are included in news coverage far less frequently than topics focusing on gender-based violence and rape (Gover and Aadlers 2014).

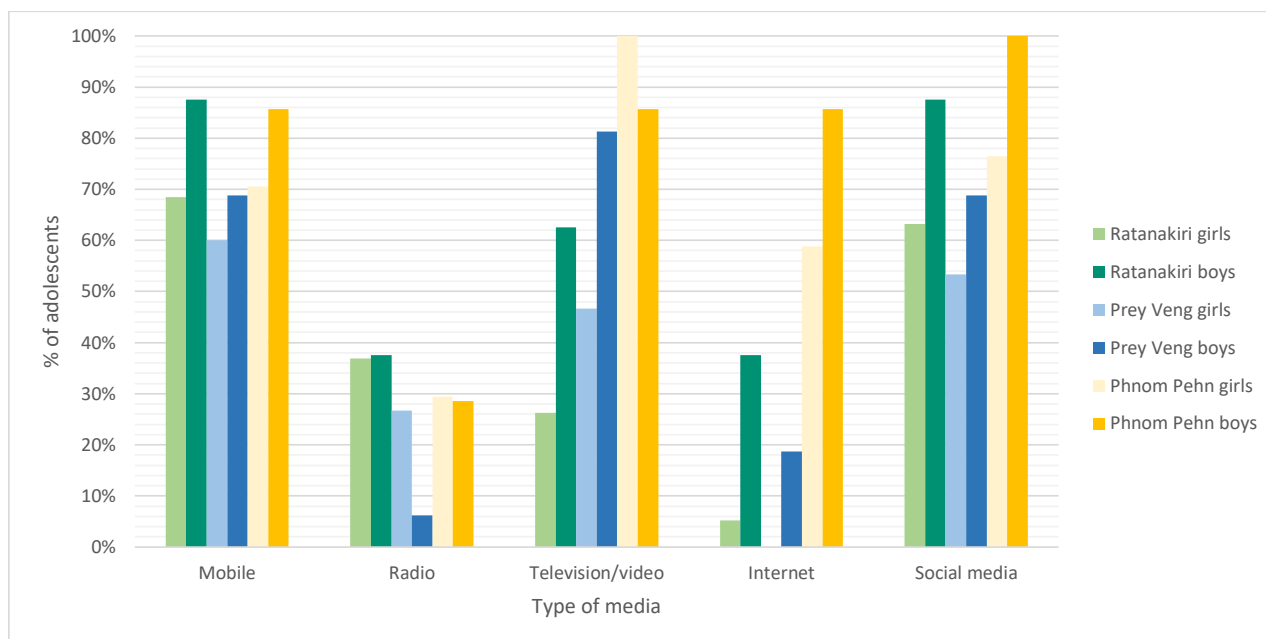
As part of the research, a technology survey assessed the different technologies adolescents and youth had access to and their preferred modes of communication. It included 89 adolescent and youth respondents aged 10 to 25 years who had not participated in the workshops (see Table 15 and Graph 1 below). Because of the small size of respondents poll, the results cannot be extrapolated to a wider country context, although the alignment of findings with other technology literature from Cambodia indicates that the data are likely applicable to adolescents and youth living in similar rural/urban locations in the country. It was possible to triangulate the survey results with technology-specific data emerging from the workshops with 10 to 19 year old adolescent girls to analyse the views of a wider and gender-balanced youth population with similar demographic characteristics.

The synthesis of survey findings and qualitative data from interviews, focus group discussions and participatory workshops is presented below by technology type: radio; television and video; mobile phone; internet and social media. Other non-technological communication channels are also discussed.

Table 15 – Survey respondents

	Male	Female	Total
Ratanak Kiri	8	19	27
Phnom Penh	14	17	31
Prey Veng	16	1	31
	38	51	89

Graph 1 – Use of media by province and gender



### Radio

Of the 89 survey respondents, only 24 (27%) reported listening to the radio: 10 (37%) in Ratanak Kiri; 5 (17%) in Prey Veng; and 9 (29%) in Phnom Penh. In Ratanak Kiri, the majority reported listening to the radio at home or at the farm, either alone or with family, neighbors and friends. The most popular radio programmes were music, news or ‘comedies’, and the average listening time per day was reported to be 110-120 minutes (approximately two hours) although the time of day when the radio was listened to varied from early morning until night. In Prey Veng, all those who listened to the radio reported listening to music programming at home with their parents during the evening. In Phnom Penh, most radio listeners reported listening at home either alone or with friends and family, and again, there was a clear preference for music programming. The most common times to listen to the radio were either in the morning or in the afternoon/evening (i.e. before and after work/school hours).

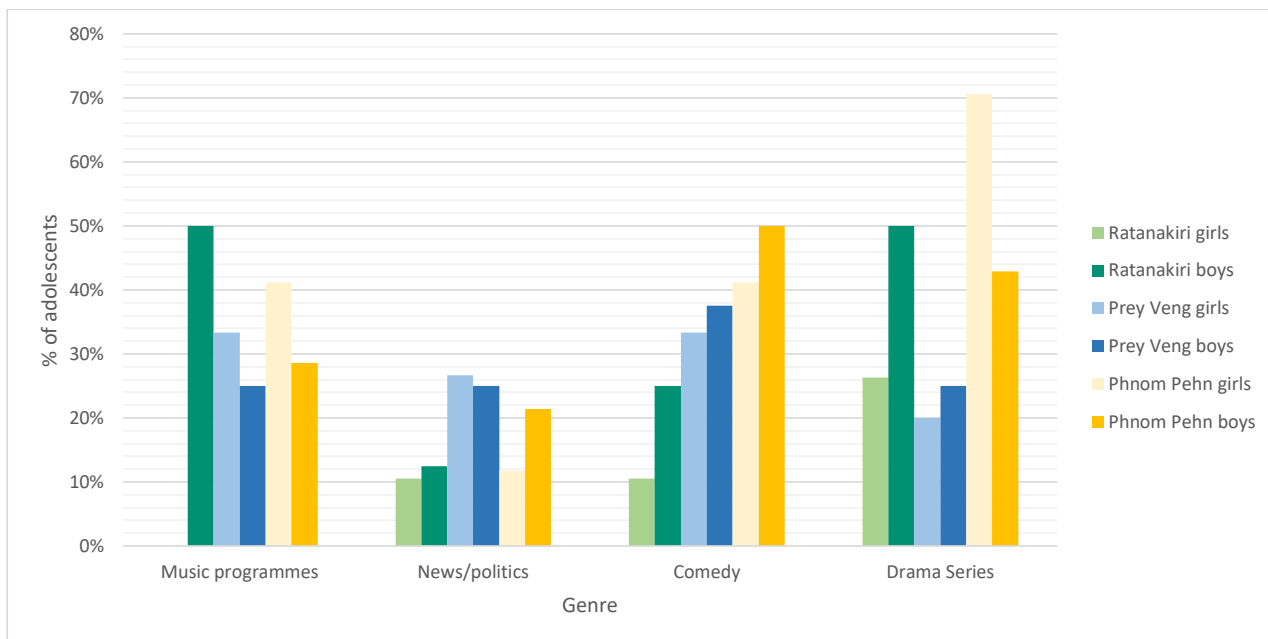
In their nation-wide survey from 2014, BBC Media Action found no significant gender difference in access to radio, although they found that preferred listening times differed by gender with girls more likely to listen at lunchtime and boys more likely to listen in the evening (BBC Media Action 2014).

In general, community members confirmed that it was not common for people to listen to the radio even if they owned one, and the adolescent girls who participated in the workshops agreed that radio was not a significant source of information or entertainment.

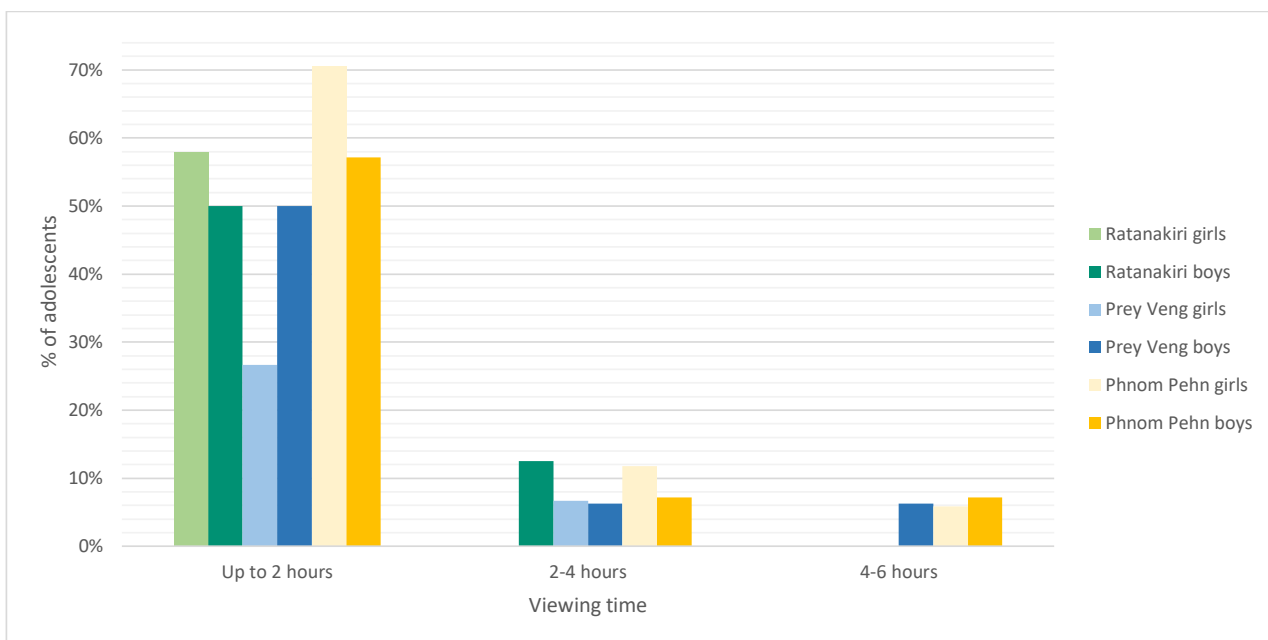
### Television/video

Respondents from the Provincial Health Department (PHD) in Ratanak Kiri affirmed that television was not an effective means of communicating with the majority of residents in their rural province, and after pilot testing, the technology survey was modified for this province to ask about ‘video’ and television watching habits. None of the community members in Ratanak Kiri who participated in the survey owned a television,

Graph 2 – Favourite television programmes by province and gender



Graph 3 – Television viewing time by province and gender



although several did own (or could borrow) portable video players for watching DVDs. Of survey respondents in Ratanak Kiri, 59% (n=16) had access to video players for watching DVDs and other media.<sup>37</sup>

Respondents described a range of video-watching habits either alone or with friends and family (see Graphs 2 and 3). In terms of frequency, most responded that they watched 'occasionally' (n=6), 'once every few days' (n=5), 'everyday' (n=4) and 'once a week' (n=1). Videos were watched most often at the respondent's home or in the home of another community member. The most popular types of DVDs/media to watch on video players were music concerts or music videos, dramas, and comedies. The

<sup>37</sup> External media sources (DVD, SD card/microchip, etc.) could be purchased and loaded onto / into a portable video player.



least popular forms of media to watch were violent or horror movies, and Chinese or Thai dramas.<sup>38</sup> DVDs were most commonly watched in the evening or at night, with an average viewing time of 70 minutes per day. Survey respondents did not report on popular TV channels, either because they did not watch television or because they were not sufficiently familiar with television to discuss specific channels.

In contrast to Ratanak Kiri, data collected in Prey Veng and Phnom Penh related to broadcast television. The majority of respondents (71%, n=22) in Prey Veng reported watching television. Respondents most frequently watched television at home with their parents, although a number reported watching at a neighbour's house or the home of another community member who owned a television. Most watched television 'everyday' (64%, n=14), and of the remaining respondents, most reported watching 'occasionally' (27%, n=6). The most popular channels were CTN and Bayon (or BTV), and other channels viewed included Hang Meas, Channel 5 and MyTV. Respondents reported a range of 'favourite' television programming including 'dramas', 'songs' (i.e. music videos), 'comedy' and 'news'. Most watched television in the evening or at night, with an average viewing time of 85-90 minutes per day.

In Phnom Penh, nearly all survey respondents (94%, n=29) confirmed that they watched television. Only two respondents, both of whom were well educated (i.e. possessed a Bachelor's degree), reported not watching. All respondents who watched television did so at home, and some also suggested they watched television at work. Most watched television 'everyday' and Hang Meas was by far the most frequently viewed channel. Other channels mentioned included PNN, MyTV, CTN, and Bayon. 'Dramas' and 'songs' were the most popular type of programming, whilst 'news' and 'politics' were the least popular. Most watched television in the evening or at night, and the average viewing time per day was 60-70 minutes.

For adolescent workshop participants in Phnom Penh aged 10 to 14 years old, watching television was a family activity in the evenings. Although 15 to 19 year old girls in this province also reported this practice, it was not their most common viewing behaviour. Older girls in Champus K'ek were more likely to be occupied with their mobile phones than watch television with their families in the evening, and in Koh Dach, older girls who engaged in weaving activities to assist their mothers reported that they frequently watched television dramas during the afternoon whilst they were weaving, 'to help pass the time'. The most frequently viewed television stations reported by all girls in Phnom Penh were Hang Meas, CTN and MyTV.

When comparing television usage amongst rural and urban youth (nation-wide), BBC Media Action concluded that rural youth were less likely than urban youth to watch popular television channels, perhaps due to their more limited access, with the exception of channel TV5 which was deemed popular and accessible to both groups. They concluded that '*Preferred [television] stations were similar across age groups and genders, though males [were] more likely than females to watch CNC (21% vs. 14%) and Bayon News (30% vs. 24%)*' (BBC Media Action 2014).

The Ministry of Health used television (and to a less extent radio) spots to advertise healthy behaviours such as breastfeeding and the age to start complementary feeding with porridge. Representatives from provincial government departments were unsure if these were effective means of reaching a mass audience and concluded, '*Some don't listen or watch these spots. Some people just change the channel or station when it comes to health programmes*'. Of the adolescent girls aged 10 to 19 years old who participated in workshops in both Prey Veng and Phnom Penh and reported that they frequently watched television with their families, very few could recall health messages they had seen on television.

According to LyLy Food Industries, which conducted a nation-wide marketing strategy aimed at younger children and their parents, radio advertising was better for reaching adults in rural areas of rural provinces, whereas television was better for 'downtown' areas of the provinces. They confirmed that the most

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<sup>38</sup> Popular dramas in Cambodia typically include Thai, Korean, Indian, and Chinese dramas. There are very few Cambodian dramas. Drama is the general term to describe soap operas, and it is common for people to follow several drama series at the same time.

popular time to advertise on television was from 7-8pm when families were typically eating their evening meal. In addition to advertising during children's programmes (e.g. cartoons), the most viewed slots were during educational programmes and dramas (*'Housewives usually watch many of the dramas, so when they see the commercials they would buy the products for their children'*).

### Mobile phones

Mobile phone prices in the Asia Pacific region remain amongst the lowest in the world, and in 2016, the International Telecommunication Union described Cambodia as a low-income country that has been able to achieve competitively low mobile cellular prices due in part to the presence of three strong telecoms (ITU 2016). According to the Open Institute, in 2016 over 96% of Cambodians owned their own phone with nearly half of this group (48%) claiming ownership of at least one smartphone, representing a 21% increase from 2015 (Phong et al. 2016).

In Ratanak Kiri, 74% of survey respondents (n=20) owned or had frequent access to a mobile phone. The remaining seven respondents (26%), who had an average age of 19 years, indicated that they did not own or have access to a mobile phone, although two respondents could borrow a phone from somebody they knew on occasion or in the event of an emergency. The remaining five respondents were 'media dark' as they did not have access to a mobile phone and also reported not using the internet or social media (discussed further below).<sup>39</sup> Three of these individuals reported watching television, and three reported listening to the radio.

Of the 20 respondents in Ratanak Kiri who reported to own a phone, 18 (90%) reported their phone to be functional and charged (i.e. capable of sending and receiving calls/texts) on a daily basis. One respondent stated their phone was only 'occasionally' charged and functional, and one that their phone was 'not working'. The majority of calls received and made were to spouses, other family members and friends. Half of the respondents who had a phone (n=10) stated that they could not make and/or receive text messages, because they could not write in the language(s) available on the keypad of their phones and could not read messages sent to them in Khmer (e.g. 'push' messages sent by phone companies). It is important to note, however, that across all major phone companies in Cambodia (Metfone, Smart, Cellcard), phone calls were often cheaper to make than sending text messages.

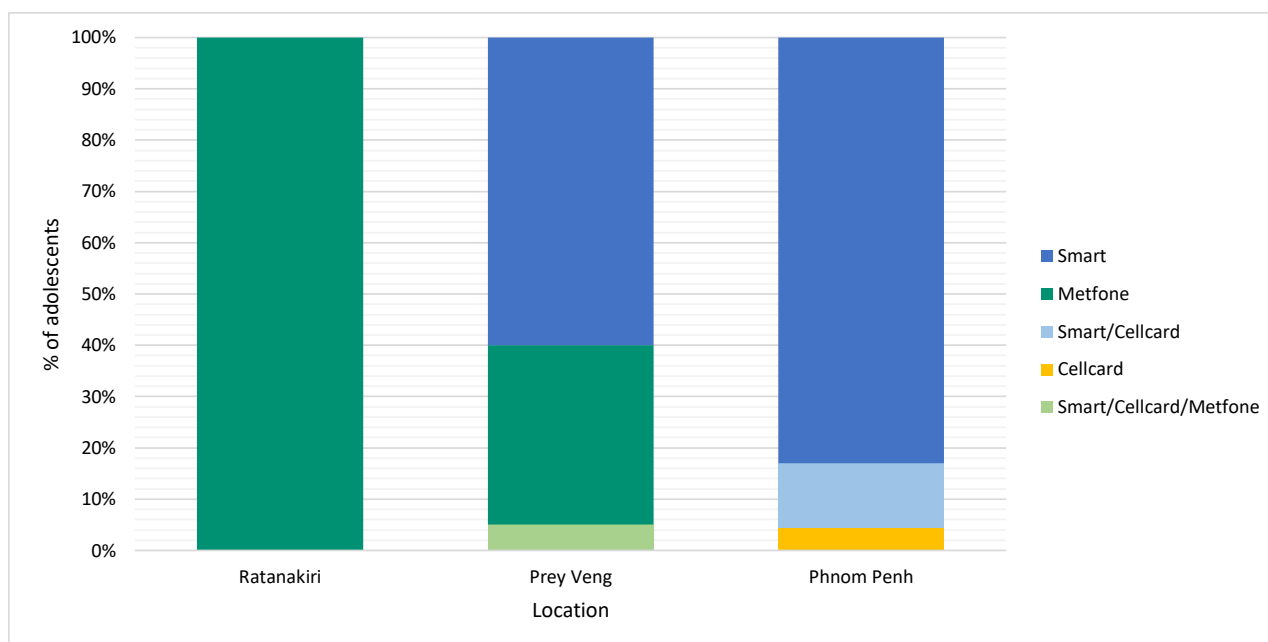
Of the remaining 50% of survey respondents in Ratanak Kiri who could make and/or receive text messages (n=10), eight stated they would text friends (not relatives) and would frequently receive 'push', or one-way, text messages from their phone service provider. All respondents in Ratanak Kiri who had a mobile phone (100%, n=20) used Metfone as their service provider and the majority (85%, n=17) stated that network reception in their areas was 'good' (only three respondents stated that the reception was 'not good'). All respondents could use their mobile phone to make a call from inside their home, however several stated that reception was better in the 'downtown district' (n=7). According to one stakeholder, phone connectivity in Ta Veng district was reliable, whereas coverage in Andoung Meas was more limited. This was confirmed by community leaders in Andoung Meas who explained that they had to visit people at their homes or farms to communicate with them. This was a frequent occurrence during harvesting when villagers spent the majority (or all) of their time at their farms where there was no phone network.

In the participatory workshops in Ratanak Kiri, none of the younger girls owned a phone, although five of the 13 girls in the 15-19 age group (38%) did. None of their phones were capable of connecting to the internet, however, and at the time of data collection, one phone was broken. The girls explained that they used their phones to talk to their friends in the evening rather than join their family to watch videos, and

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<sup>39</sup> BBC Media Action defined 'media dark' as '*Youth who report no access to either a television, radio or the internet at least once a month*' (BBC Media Action 2014). The current research found that only a small number of youth listened to the radio, so the term 'media dark' is used in this report to refer to people who did not have access to mobile phones, internet or social media.

Graph 4 – Mobile phone service providers by province



they also used their phones to listen to music. To these girls, a phone was an alternate and preferred source of entertainment.

In Prey Veng, 65% (n=20) of survey respondents owned or had frequent access to a mobile phone. The average age of the eleven respondents who did not have a mobile phone was 15 years, and only two indicated that they knew a person from whom they could occasionally borrow a phone or in the event of an emergency. Nine people (29%) surveyed in Prey Veng were therefore ‘media dark’, although six of them did report watching television and two listened to the radio. The average age of the nine ‘media dark’ respondents was 15 years, and two were still attending school.

Of the 20 respondents in Prey Veng who owned or had access to a phone, 70% (n=14) reported that it was charged and functional on a daily basis, and 25% (n=5) that it was only ‘occasionally’ charged and functional. One respondent (5%) indicated that their phone was functional ‘once every few days’. The majority of calls received and made were to family and friends. Three (15%) respondents with a phone stated that they could not make and/or receive text messages. Of the 17 (85%) respondents who could, they usually sent messages to their family and friends. Five (25%) respondents reported that they received ‘push’ text messages from their phone companies. The majority (60%, n=12) of respondents in Prey Veng used Smart as their phone service provider; 35% (n=7) used Metfone; and one respondent (5%) described using Smart, Metfone and Cellcard interchangeably (see Graph 4). In this province, respondents were fairly evenly split in terms of whether the network coverage in their area was ‘good’ (45%) or ‘not good’ (55%) (although all respondents who reported ‘not good’ were able to make or receive a call and/or download from the internet inside their home). Of the 20 respondents with a phone, 80% (n=16) were not able to connect to the internet via their mobile phones.

As in Ratanak Kiri, none of the younger workshop participants in Prey Veng owned a phone and only a few reported ‘occasionally’ borrowing a phone from a family member. Phone ownership was common among the workshop participants aged 15 to 19 years, however, with Smart as their preferred phone service provider. Caregivers in Prey Veng explained that only ‘older girls’ were allowed to own phones although they did not agree on what age this was acceptable.

In Phnom Penh, 77% (n=24) of survey respondents owned or had frequent access to a mobile phone, and 71% were able to connect to the internet via their device. The average age of the seven respondents who

did not own or access to a phone was 14 years, and only four could occasionally borrow a mobile phone or had access to a phone in an emergency. Three survey respondents were therefore 'media dark', although all reported watching television.

Of the survey respondents with a phone in Phnom Penh, all but one reported the phone was charged and functional on a daily basis, and 83% (n=20) indicated that they sent text messages. Regarding who they most often telephoned or texted, respondents listed friends, family, boyfriend/girlfriend, and colleagues. The majority of respondents in Phnom Penh (83%, n=20) used Smart as their phone service provider; 12.5% (n=3) used both Smart and Cellcard; and only one respondent (4.5%) used Cellcard exclusively. In assessing the quality of their network coverage, respondents in Phnom Penh, as in Prey Veng, were fairly evenly split, with 54% (n=13) reporting it was 'good', and 46% (n=11) 'not good'. Nearly half of respondents who reported 'not good' (45%, n=5) coverage indicated they were unable to make or receive a call from inside their home.

Phnom Penh was the only province in which participants in the workshops for girls aged 10 to 14 reported owning a mobile phone, although still only three girls (19% of participants) had phone and none could connect to the internet via their device. Girls in this age group who did not own a phone, frequently reported that it was 'forbidden' for them to own a phone until they 'grew up', which they defined as reaching puberty. The following exchange from participants in the workshop for 10 to 14 year old girls in Champus K'ek was indicative,

*Question: Does anyone have their own phone?*

*Respondents: No!*

*Respondent 1: My grandmother doesn't allow me to have a phone.*

*Respondent 2: My father doesn't allow me to have a phone because he's afraid that I will have a boyfriend.*

*Respondent 3: When I grow up, I am allowed to have a phone.*

10-14 year old workshop, Champus K'ek, Phnom Penh

Phone ownership amongst the 15 to 19 year old workshop participants in Phnom Penh was very common, and the majority of their phones could connect to the internet. Girls frequently described preferring their phone to any other forms of communication or media due to the diversity of functions on their smartphones ('We can make a call with our phones...'; 'We can take a picture with our phones...'; 'We can listen to music...'; 'We can go on Facebook...' etc.)

Data from the 2014 CDHS indicates that 87% of Cambodian households own a mobile phone (CDHS 2014). Just two years later, in 2016, the Open Institute reported that at least 96% of Cambodians owned at least one mobile phone, half of which were smartphones (Phong et al. 2016). Data from the technology survey and the qualitative interviews, focus groups and workshops conducted as part of this research indicated that phone ownership (or significant access to mobile phones) increased among adolescent girls after the age of 14 (particularly in Prey Veng and Phnom Penh). Smartphone ownership, however, was only common in Phnom Penh. Furthermore, social interactions appeared to shift when adolescents had their own phone, and adolescent girls with mobile phones tended to spend less time with their families engaging in group activities such as watching television, and more time on their own listening to music, viewing online sites such as Facebook and YouTube, and speaking / texting friends.

Whilst some caregivers in Phnom Penh knew their daughters listened to music on their phones, caregivers across all provinces described not knowing how the technology on mobiles phones worked, and having no control over what content their daughters accessed. Many mothers were concerned that their daughters used their phones to speak to boys and/or boyfriends. This was considered more problematic for 'younger girls' who were not mature enough to manage such interactions and who were therefore prohibited from having phones. This concern and resultant action was not identified in Ratanak Kiri, however, likely due to



the lower levels of phone ownership in general, coupled with parental acceptance that younger girls explored and engaged in relationships with boys their own age and older (Breogán 2017). Although not investigated in this research, it is worth noting that another recent study in Ratanak Kiri found that boys were introduced to pornography at a young age through videos downloaded onto mobile phones (Breogán 2017).

### Internet access and the use of social media

At the time of the research, Cambodia had one of the lowest prepaid handset-based (i.e. mobile phone) mobile-broadband prices in the world, and the prospect of smartphone ownership with internet capability was set to increase rapidly over the coming years.<sup>40</sup> The Ministry of Posts and Telecommunications (MPTC) reported that there were 7.1 million internet subscribers in Cambodia, the majority of whom used mobile phones to access the internet (MPTC 2016). According to BBC Media Action, both Smart and Metfone offered competitive rates for SIM cards with internet capability by 2016.

In the technology survey conducted as part of this research, 28% (n=25) of the respondents who had mobile phones connected to the internet via their device: 71% (n=17) in Phnom Penh, but only 20% (n=4) in Prey Veng and 20% (n=4) in Ratanak Kiri. In Prey Veng and Ratanak Kiri, the respondents who used their mobiles to connect to the internet were the only respondents who were able to go online (meaning that 87% (n=27) of total survey respondents in Prey Veng, and 85% (n=85) of the total survey respondents in Ratanak Kiri could not access the internet through any means). In Phnom Penh, 71% (n=22) of total survey respondents accessed the internet, either through mobile phones (82%, n=18), computers (9%, n=2), or both (9%, n=2). BBC Media Action concluded that urban youth were more likely to have access to the internet via mobile phones than rural youth, and that personal mobile phones were associated with higher income and education levels, and therefore more prevalent in urban areas (BBC Media Action 2014).

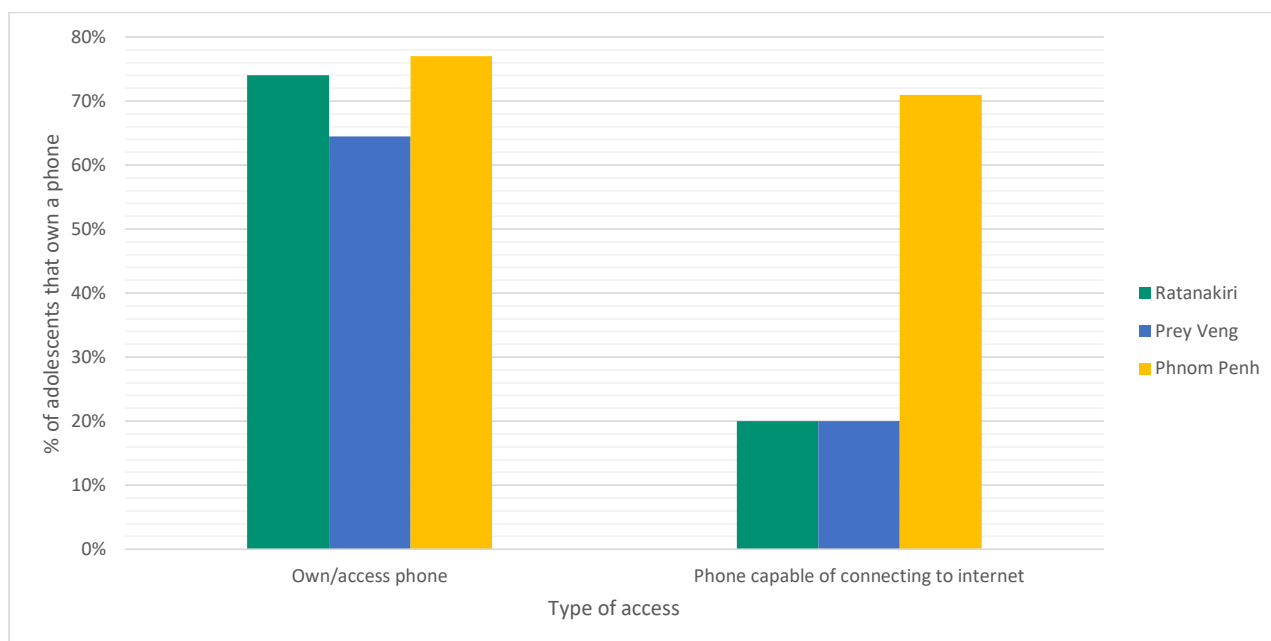
The internet is one of the most common sources of information among Cambodians of all age groups (Phong et al. 2016). According to stakeholders from BBC Media Action, only one-third of Cambodian youth were connected online by 2014, but at the time of this research, they estimated that nearly half of all youth aged 15 to 24 years old could access the internet. Cambodian youth reported that accessing news and social network applications via Facebook were the most common reasons they used the internet (BBC Media Action 2014). In the technology survey conducted as part of this research in Prey Veng, for example, approximately half of the technology survey respondents (all based in Ampil) had their own Facebook page(s), despite not having regular access to the internet. The reported number of connections ('friends') they had on Facebook ranged from two to 2,000 people. Respondents who did not have their own page (all based in Prey Somroeng) still confirmed that they accessed Facebook through friends' accounts, and borrowed their phones to access the site. In Phnom Penh, the majority of respondents who used Facebook (98%) did so to chat with friends, look at photographs and read the news. Their connections were mostly with family and friends, although a small number also reported connecting with work colleagues. The highest number of connections was reported to be 4,000 and the lowest number of connections was three.

In assessing their level of trust in the information received via Facebook, 55% of all technology survey respondents indicated that they did trust the information, whilst 45% did not trust or only 'somewhat' trusted it. Distrust of Facebook as an information source was greatest in relation to reading news stories posted on or linked to the platform and 30% of all respondents reported having received 'fake' news stories

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<sup>40</sup> International dollars using purchasing power parity (PPP), is the exchange rate of any country's currency that is required to buy the same amount of goods or services in their domestic market as a US dollar would buy in the United States. At the time of the research, mobile broadband prices in Cambodia were offered for less than PPP \$4 per month. In 2014, mobile broadband access available for under PPP \$5 was only found in Europe. This indicates that within the last few years, Cambodia has been able to reduce mobile broadband prices to very low levels thereby increasing accessibility

Graph 5 – Internet access via smartphone by province



via Facebook. Trends in social media usage suggest that consuming news via the internet/Facebook is becoming increasingly popular amongst Cambodians of all age groups (Phong et al. 2016), however, the extent to which these messages are trusted by adolescents needs to be analysed prior to programming which uses social media as a delivery channel.

The ubiquitous use of Facebook has resulted in the internet itself being colloquially referred to as ‘Facebook’. Only respondents in Phnom Penh reported using other social media platforms including YouTube, Messenger and Line. According to BBC Media Action (2014) after Facebook, the second most visited site by Cambodian youth was YouTube. Older participants in the workshops in Phnom Penh reported that whilst they could access videos through YouTube, they did not do this often because ‘*It costs a lot of phone credits*’. BBC Media Action (2014) also reported differences between the content accessed by more educated youth and those in urban centres compared with illiterate youth and those in rural areas. As one BBC Media Action stakeholder explained,

*Even though youth in the rural areas are low-educated, and have difficulty reading and writing, they still access Facebook. They clearly said to us that it is user-friendly. It is easy. They just create an account, and scroll to see pictures. But the educated young people, they consume more content to support their education, study, have group discussions, follow the pages on scholarship programmes or they learn from tutorial programmes on YouTube. They access more news online rather than buy a newspaper. But for the low-educated people or those in the low skilled work like garment factory workers, construction workers, farmers, or fishermen, the way they access the internet is completely for entertainment like videos, dramas...any content that doesn't make them read.*

According to technology survey respondents, the most common times for Cambodian youth to be online were in the morning for a short period (e.g. 10-15 minutes) and then in the evenings for an extended period (e.g. two hours). In Ratanak Kiri, survey respondents who accessed the internet on their phones (via Facebook) most commonly watched or read the news in the morning, afternoon or evening whilst alone at home, and for an average of 90 minutes divided across the day. In Prey Veng respondents indicated that they went online in the evenings from a few minutes to several hours each day. Most visited Facebook, and a minority reported watching dramas and sports. In Phnom Penh, 57% (n=12) of survey respondents who used the internet did so daily, whilst 33% (n=7) went online ‘once every few days’, and 10% (n=2) only ‘occasionally’. Respondents used the internet during the afternoons or evenings/at night, for 60 minutes

per day on average. In addition to communicating with friends, watching music videos, reading the news, playing games and watching dramas online, respondents in Phnom Penh also described using the internet to look for jobs and to help with homework. All survey respondents in Ratanak Kiri and Prey Veng and the majority in Phnom Penh confirmed that their online activities were unsupervised by caregivers or responsible others.

Ministry and provincial-level stakeholders were often pragmatic about the uses of the internet and social media sites like Facebook, acknowledging that whilst online sites had the power to reach large audiences with positive and educational messages, there was also the potential for sharing harmful content (e.g. cyber-bullying). Several interlocutors concluded that youth *'Catch new technologies very fast'*, and suggested that this ability made them more resilient and skilled for the future. One representative from the Ministry of Agriculture, Forestry and Fisheries concluded that their use of technology made youth more adaptive and able to take advantage of contemporary agricultural techniques that could produce greater crop yields, rather than solely relying on the *'traditional way'* of doing things.

#### Other (non-technology) communication channels

Various modes of non-technological based communication were also discussed by participants. Survey respondents who had access to technologies and those who were 'media dark' highlighted interpersonal communication channels that acted as sources of information included youth groups, sports clubs (football, volleyball, table tennis), school groups (discussed in Phnom Penh) and classmates or class monitors (discussed by in-school adolescents in Prey Veng). In Ratanak Kiri, numerous sources were highlighted including village chiefs, child clubs, parent clubs (including adolescents with children), peer educators, health professionals and Village Health Support Groups (discussed further below).

In Ratanak Kiri participants (in the workshops, focus group discussions and interviews) all highlighted face-to-face communication as the most preferred source of information sharing and knowledge transfer. NGOs, such as KYA, focused much of their engagement accordingly (see box below).

It was notable that in Phnom Penh and Prey Veng, girls often maintained close social ties to friends both in school and those that had already left to pursue employment. Those who remained in school frequently commented, *'We take what we have learned, and share it with them'*, highlighting the transfer of knowledge between peers and the role school children play as educators themselves. In contrast, however, girls at school in Ratanak Kiri asserted that they could not convey information to peers who had already left school, concluding, *'When we tell them something, they don't believe us. They even get angry with us'*. According to girls in the workshops, the reason underlying this lack of exchange was linked to the different life stages of girls in and out of school. Those who were still in school were seen to be dependent on their families, whilst those who had left school to get married and/or to support their families were considered more mature and independent, and it was not appreciated to receive advice from younger girls still in school.

The use of pamphlets and brochures as a method of communication with girls, women and youth (more broadly) was only discussed in Phnom Penh and only in reference to specific communication campaigns. The Department of Women's Affairs in Phnom Penh described distributing 'leaflets' directly to women and girls in target venues such as 'entertainment clubs' and garment factories as an effective method to reach women who were working full-time and had potentially limited access to information. The content of the leaflets was primarily pictorial to convey information about issues such as human trafficking and labour abuse, and included a hotline number for women and girls to call if they needed advice or assistance. As one stakeholder concluded, *'It [leaflets] is the best way to spread information to the entertainment workers because they don't have much time to listen to you, but you can give them something... They can read a little but it is better to use a lot of pictures. If we put too many words, they wouldn't read it anyway. So it has to be attractive to them'*.

## **Plan International – improving adolescent sexual and reproductive health, and nutrition in Ratanak Kiri**

In Ratanak Kiri, Plan International (Plan) decided to focus their programming efforts in Ta Veng and Andoung Meas Districts after initial baseline assessments determined *'There were no projects to address the issue of adolescent sexual health in those areas, not in the communities and not at the health centre'*. To address the gaps in providing adolescent 'friendly' sexual and reproductive health services to Ratanak Kiri youth (who have the highest rates of early pregnancy and marriage in Cambodia) Plan partnered with two local NGOs in January 2015, Khmer Youth Association (KYA) and Phnom Srey Organization for Development (PSOD).

KYA and PSOD were specifically selected to address the issues of adolescent sexual and reproductive health needs from two different angles: community learning and empowerment (KYA); and capacity-building at the health facility level (PSOD).

KYA used targeted outreach activities including child clubs (also referred to as peer educators) divided into two age groups (10-15 years and 16-24 years), and parent clubs (24 years and older) to provide monthly reproductive health training and information sessions to a selected group of youth and parents in their target communities in order to increase demand for health services (*'sexual health or reproduction, they never talk about this openly in the community'*). Group members were then expected to share what they have learnt with their wider communities. KYA also supported Village Health Support Groups (VHSGs) at the community-level to gather participants for monthly meetings, monitor the activities of child and parent clubs and report any issues of concern to KYA, or make recommendations for those in need of a 'referral card' and transportation fees to the health facility. KYA focused on reaching out-of-school youth with their child clubs in order to provide information to those least likely to receive targeted communication from any other source (e.g. school). One of the key issues adolescents in child clubs raised was that they were deterred from discussing sensitive sexual health topics with unfriendly or inaccessible health facility staff (e.g. due to working hours, language barriers). KYA shared such concerns with PSOD so they could be addressed during health facility training (*'When there is a problem, KYA informs PSOD so that PSOD can solve it with the health centre'*).

PSOD worked closely with health centre staff, in collaboration with the Provincial Health Department and Operational Districts, in order to facilitate the training of health facility staff on reproductive health issues; counselling on how to speak to youth (specifically those who may be reluctant to seek reproductive health services); and nutrition. Across the two project districts in Ratanak Kiri, PSOD trained staff at four health centres and two health posts, in addition to supporting community outreach activities (e.g. childhood vaccination). As a PSOD stakeholder explained, *'Now we are branching out to nutrition, but it is not fully integrated yet, it is just beginning... We thought we are working in those areas, so why not expand our projects to include nutrition? Everyone has to contribute bit by bit to the issues [of concern] and we see the opportunity in integrating more health messages because the participants are pregnant women, youths, and people of reproductive age'*.

At the outset of their adolescent strategy, Plan staff in Ratanak Kiri confirmed they had not had a nutrition component in their sexual and reproductive health programming. However, after reviewing CDHS (2014) data regarding high rates of malnutrition amongst children in their area, and in recognition that governmental nutrition programming relies heavily upon donors, their new Country Strategic Plan (2016-2021) was designed to include nutrition, particularly adolescent girls' nutrition, as one of the five pillars of its work in Cambodia. *'Adolescent girls and youth [should] have and apply the knowledge, time, and resources to both provide themselves with appropriate, adequate nutritious foods and to delay marriage and early pregnancy until after 18 years of age'* (Plan International 2016). At the time of the research, nutrition was being integrated into Plan's strategy for reaching adolescents and their communities in Ratanak Kiri. As a KYA stakeholder working in Andoung Meas district concluded, *'Last week I gave a training to peer educators as an introduction and reminder to nutrition because last time we only gave training on comprehensive reproductive health, not on nutrition. So, now we add nutrition into the training'*.

## **Adolescent programming**

Within their area of operation, provincial-level governmental departments often rotate the district(s) where they target health (and nutrition) programming to concentrate their limited budget and human resources. As a stakeholder from the Department of Women's Affairs in Phnom Penh explained, *'Each year we don't have enough funds to cover all the programmes in each district at the same time... That's why we alternate the programmes each year. Our strategy is to cover selective [high-risk, high mortality] districts first and then move on the other districts'*. An I/NGO programme may therefore be implemented in a district where governmental programmes are operational for that year, and/or be rolled-out in areas not



currently receiving governmental resources. At the time of the research, for example, UNICEF supported programming for children under-five in five operational districts of Phnom Penh, and the government allocated their resources to support similar programming in two additional districts. Government representatives also described inter-governmental communication gaps between ministries which, they suggested, led to failed programming and/or programmatic gaps, particularly in relation to directing resources to 'target areas' most in need.

Government representatives were clear that any adolescent programme should be linked to national structures and go through 'proper' channels, meaning that I/NGOs needed to inform national and provincial-level authorities of their work and link this work with designated local governmental structures. Both national and provincial level respondents described that most projects originated at the provincial level through the creation of bilateral agreements between provincial authorities and I/NGOs, and that implementation cascaded to more local levels. As one stakeholder explained, *'In reality, provincial departments have the capacity to create a work plan to get national budgets or donor funds directly through their own channels... Some departments are very independent so that they are able to implement projects in their areas... Every department has its own donors and action plan'*. Respondents from the provincial governments in all three provinces included in the research provided multiple examples of what they termed 'failed' projects, when I/NGOs operated without going through or linking with the appropriate government or local structures (*'Sometimes they [NGOs] go directly to the village and even skip the commune council. It is hard to implement their projects like that'*).

It is national policy to have gender and child focal points in government ministries at the provincial level to mainstream gender, child protection and child development. At the time of the research, the Ministry of Agriculture, Forestry and Fisheries, for example, had 75 gender and child focal points across Cambodia, approximately three per province. The focal points were meant to participate in projects implemented in their operational area in order to guarantee programming was both gender and child sensitive. The extent to which focal points were supported in each province and how well they were connected at the community level was, however, highly variable and stakeholders frequently reported that *'Some ministries have better working structures than others'*.

Respondents from both the government and I/NGOs recommended that the 'Woman in the Village' volunteers in Phnom Penh and Prey Veng were well placed to facilitate community-level outreach services for adolescent programming. 'Woman in the Village' is an informal term often used to reference the Commune Women and Children Focal Point (CWCFP or WCFP), a female member of the Commune Committee for Women and Children (CCWC) who serves as the main contact for the provincial-level gender and child focal points (from any ministry) to liaise with the community (*'If the commune has no female member, they must select a woman to be the WCFP'*). In governmental literature, CCWCs are described as *'Consultative committees for women's and children's issues, such as maternal and child health, community pre-school, hygiene/sanitation, gender equality and child protection'* (MoWA 2014). The Department of Women's Affairs in Prey Veng described the Woman in the Village as *'Handling all issues related to children, women, and health... They can counsel with the people in the community and help guide them to the health centre.'* Women in the Village are roles assumed by a member of the community in which they worked, and are technically under the aegis of the Provincial Departments of Women's Affairs (DoWA), although she could be supported by any provincial-level governmental department or I/NGO in order to facilitate programming at a village level. A similar position was often held by a woman at the commune level, although the effectiveness of this role was sometimes questioned (discussed below).

The structure described was evident across Prey Veng and Phnom Penh, but stakeholders commented that working through local government authorities in Ratanak Kiri was challenging. Government and I/NGO stakeholders asserted that the province received less governmental resources than any other area in the country and consequently the local government was weakened. As a stakeholder from the Provincial Health Department in Ratanak Kiri asserted, *'When allocating budgets, less funding comes here. That's the normal thing. You can see that there are many projects [money] going on to Siem Reap or Kampong Som or even Phnom Penh. The inequality of funds here is very visible'*.

In Ratanak Kiri, the province's remoteness, ethno-linguistic diversity, and politically independent highland villages created additional complexity for programme delivery. Woman in the Village structures were present, but community leaders emphasised that members of Village Health Support Groups (VHSGs) were better placed to support community-level programming. Under the leadership of Provincial Health Departments, VHSGs were composed of 'frontline' health personnel (e.g. health volunteers, midwives, etc). Typically, there were two health volunteers per community. Although they were labelled as 'volunteers' they were remunerated for their work by the government and/or NGOs who used them to implement local programming. According to stakeholders engaged, the primary activity of health volunteers was to refer patients to health centres. VHSGs members were supposed to be selected by the communities they served, operational district and health centre management committees, although it has been reported elsewhere that rather than being elected through fair and transparent methods, members were often summarily appointed by village chiefs (Aryal 2015). Stakeholder suggested that VHSG members received some level of training on specific issues from both governmental and I/NGO programme implementers, and were frequently mentioned as a source of health information and facility referrals for children under five.

Although government stakeholders in Phnom Penh and Prey Veng were more likely to describe the Woman in the Village as a key resource for organising community-level programming for adolescents, community health volunteers were also mentioned in both provinces, mainly in relation to programming for children under five. Respondents confirmed that most of the training community health volunteers received focused on issues related to children under five, suggesting they had little knowledge about issues affecting adolescents and limited engagement with them as a target group. The content or quality of information community health volunteers may have provided to adolescents (e.g. family planning) was not assessed as part of the research.

Cambodia's provinces are divided into over 160 districts that are further sub-divided into communes, or clusters of villages. Each commune has a council, whose members are political appointees and typically meet once a month to discuss community building projects (e.g. roads, bridges), educational issues, birth registration, census taking and other development and administrative issues. Community leaders characterised commune councils as having a '*Strong responsibility to handle all affairs within the community*' but noted their low human resource capacity for the high workload.

Councils compete for government resources by submitting a budget to Cambodia's Provincial Plan (CPP) with a list of priority villages to target for services, and as council members, village chiefs can assume a strong position to advocate for resources for their villages. Because commune councils are seen as key stakeholders in developing community-level programming, provincial-level authorities inform commune councils of their programming effort to secure 'official approval'. In practice, however, the councils' roles in organising or supporting local efforts were often described as being limited. In Ratanak Kiri, commune councils were described as being particularly weak due to the low education of local members and lack of awareness of key health issues affecting their villages. Commune councils were also perceived to be highly politicised. Respondents explained that it was 'difficult' or 'embarrassing' to report issues that reflected negatively on local authority, and as one community leader suggested, '*It is difficult to be strict because people will hate us. If we follow the rules and regulations all the time, it would affect the result of the election. They threaten not to vote for us if we are strict with them*'. Due to such pressures, it was suggested that commune councils may deliberately under-report challenging issues and were not seen to be a significant structure through which to deliver health-related programming or convey messages to the community level. As a result, provincial-level resources were often directed to the community, rather than the commune, level.

To implement programming at the community level, it was widely recognised across all provinces, that the village chief and their associated local authorities had to be engaged, and it was often the key focal points (either the Woman in the Village or VHSG) who acted as liaison (see box below). As one national-level stakeholder confirmed, '*We inform the community leaders and ask for their permissions... If we don't contact the community leaders, there can be misunderstanding with the local authority. When there is a large group gathering, the community leaders may have a wrong idea that we are a part of a political party.*

So it can create problems. The focal points play a very important role in gathering people in the community and in working with the local authorities and other partners'. Community-level leadership structures often comprised a village chief, an assistant village chief, health volunteers and potentially other influential members of the community who themselves may sit on the commune council. It was notable that in Ratanak Kiri in particular, research participants considered the village chief and local health volunteers to be the most effective and trusted sources of information.

#### **Helen Keller International – family gardening and market activities in Phnom Penh and Prey Veng**

At the time of the research, Helen Keller International (HKI) in Phnom Penh and Prey Veng operated a project called 'Family Garden for Future' which prioritised female headed households, pregnant women, and families with children under five years old. Family Garden for Future had several key activities: agricultural training and development, gender promotion, market activities, and nutrition.

Agricultural training and development provided women with training on what types of vegetables to grow and how (during both dry and rainy seasons), and how to establish small-scale chicken and fish farms with healthy and disease-free animals. Programming in Phnom Penh and Prey Veng was similar, although due to the reduced land available for fish farming and family garden activities in urban communities in Phnom Penh, activities there emphasised chicken farming and 'container' gardening techniques, growing vegetables and edible plants in containers instead of planting them in the ground ('They don't have like a plot of land to work on...they grow vegetables in buckets and rice bags').

Gender promotion and market activities supported women's decision-making within the agricultural sector, including how to build a customer base and set an appropriate price for the sale of meat and vegetables. Nutrition programming promoted awareness of a healthy diet and the importance of hygiene when preparing meals. Cooking demonstrations were given to mothers on how to prepare mixed porridge for children. Conveying knowledge about appropriate water, sanitation and hygiene practices was emphasised by HKI field staff in both Phnom Penh and Prey Veng as it was reported that many families frequently neglecting to boil water prior to use. 'Most people don't understand nutrition. That, on top of the seasonal food shortages, creates health problems within the family. Children are not unhealthy because they don't have enough nutrients. They are unhealthy because they don't drink clean water. In the rainy season they rely on rainwater, and in the dry season they rely on the pond water'.

HKI programming in both locations prioritised working with village chiefs and other community leaders in order to promote their projects and to help disseminate key nutrition messages.

*'I am bigger than children, and I am more knowledgeable than children'. Drawing by an 11 year old girl, Poun Wat, Prey Veng.*



## 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 lifestyles'* – Adolescent girls 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 lifestyle of adolescents and must recognise their competing priorities.
- *'Use our groups, don't group us'* – Girls stressed the importance of creating opportunities where they could meet with peers. In line with their different experiences, however, they highlighted that those in- and out-of-school girls had different social groups, as did girls who were already married and had children, compared with those who did not.
- *'Show us real experiences'* – Adolescent participants across all research sites emphasised their desire to have activities for young people facilitated by youth leaders who were close to them in age and socio-economic status, and who had shared similar experiences and challenges growing up. This was particularly important with regards to sexual and reproductive health, as girls stressed they would not discuss such issues with their families or elders.
- *'Provide trusted online information'* – Girls across all research sites were unable or unwilling to discuss sensitive topics with their families, particularly related to sexual and reproductive health. They preferred to consult with their peers and use social media platforms such as Facebook. They often questioned the validity of information online and suggested that trusted and secure online sources of information should be developed and promoted.
- *'Include the people around us'* – Because of the important gatekeeper roles that caregivers play in their lives (particularly mothers and grandmothers), adolescent girls emphasised that initiatives directed at their engagement (with the exception of sexual and reproductive health initiatives) should also involve their families.
- *'Ask us, include us'* – Adolescents stressed they wanted to be engaged in a participatory manner and involved in key decision-making processes so that their voices were heard and their opinions recognised.
- *'Speak our language'* – Adolescents stressed that they were not a uniform group and that boys and girls, older and younger adolescents and those from different communities should be engaged in the most appropriate way. Girls in Ratanak Kiri, for example, stressed the importance of using their local languages so they felt comfortable and could fully participate.
- *'Make it entertaining'* – Adolescent girls reported that they want to be engaged in a fun manner. They recommended the use of music, different media and sports activities as positive hooks to engage them.
- *'With food, we need energy now...'* – Adolescents reported that having energy was a priority to ensure that they could complete their daily workload. They often associated this with being able to consume as much rice as they wanted/needed. Adolescents with access to (and the ability to pay for) energy drinks also highlighted them as an important source of energy.





## Conclusions and key considerations

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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.

At the conclusion of formative research in Cambodia, a roundtable meeting was convened by WFP with I/NGO stakeholders and partners in Cambodia to present and validate preliminary data findings focusing on conclusions and key considerations. Discussions with key in-country stakeholders focused on several inter-related issues: aligning adolescent issues with the Sustainable Development Goals (SDGs) and national food security and nutrition strategy in order to address the lack of available data on issues of concern; learning how to package and disseminate key messages regarding adolescent health and well-being in order to raise awareness of the daily challenges they face; and creating and maintaining policy-level platforms and partners to address adolescent nutrition. Stakeholders concluded that *'The timing for high-level discussions on adolescent policy in Cambodia is now'*.

### The Sustainable Development Goals and national policy opportunities

The Sustainable Development Goals (SDGs) are a universal set of goals, targets and indicators that UN member states are expected to use to frame their agendas and policies over the next 15 years. Several SDGs relate directly to key child and adolescent targets and indicators.<sup>41</sup>

**SDG 1** – End poverty in all its forms everywhere

**SDG 2** – End hunger, achieve food security and improved nutrition and promote sustainable agriculture

**SDG 3** – Ensure healthy lives and promote well-being for all at all ages

**SDG 4** – Ensure inclusive and quality education for all and promote lifelong learning

**SDG 5** – Achieve gender equality and empower all women and girls

**SDG 6** – Ensure access to water and sanitation for all

**SDG 7** – Ensure access to affordable, reliable, sustainable and modern energy for all

**SDG 8** – Promote inclusive and sustainable economic growth, employment and decent work for all

In the community-level interviews, focus group discussions and adolescent workshops, participants were asked to identify and describe the issues they felt most affected adolescents in their community, which issues were the most challenging for girls and boys to overcome, and which should receive increased governmental and I/NGO attention and support. Table 16 presents the synthesis of respondent answers by province, and aligns them to the SDGs 1-8. This highlights how closely the global agenda resonates with adolescent issues in local communities in Cambodia.

The interrelated nature of these issues was apparent. For example, community leaders would often relate the rise in road accidents amongst adolescents to alcohol consumption. The implications of dropping out of school were almost always identified by adolescent girls as connected to their need to pursue waged labour due to poverty (e.g. the inability to pay for school fees, and the need to work to help support their families).

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<sup>41</sup> See <http://www.un.org/sustainabledevelopment/> for additional information.

Table 16 – Locally identified adolescent issues of concern in relation to the SDGs

SDG	Ratanak Kiri	Prey Veng	Phnom Penh
1	Poverty	Poverty/gambling	Poverty/gambling
2	Food/nutrition	--	--
3	HIV/STDs	--	--
3	--	Road safety/accidents	Road safety/accidents
3	Alcohol/drug abuse (boys) <sup>42</sup>	Alcohol/drug abuse (boys)	Alcohol/drug abuse (boys)
3 / 5	Adolescent marriage Early pregnancy (girls)	--	--
3 / 5	Domestic violence	--	--
3 / 5	Sexual violence/rape (girls)	Sexual violence/rape (girls)	Sexual violence/rape (girls)
1 / 4 / 5 / 8	Leaving school for low-skilled economic activities: - Timber/illegal logging (boys) - Farm labour (girls)	Leaving school for low-skilled economic activities: - Brick factories/construction (boys) - Garment factories/ 'entertainment' workers (girls)	Leaving school for low- skilled economic activities: - Brick factories/construction (boys) - Garment factories (girls)
5 / 8	--	Human trafficking (girls)	--
6	Water, sanitation and hygiene	Water, sanitation and hygiene	Water, sanitation and hygiene
7	Electricity	--	--

The nutrition landscape in Cambodia in terms of both policy and programming, is centred on the first 1,000 days of a child's life. Government officials, particularly those within Departments of Health, frequently mentioned that children under five were their primary concern, citing that if young children were healthy then they would grow into healthy adolescents. Such statements indicate the lack of general understanding about the need for proper adolescent nutrition and, according to government stakeholders, is compounded by the deficit of data on adolescence in Cambodia due to limited donor and government interest and resources for adolescent issues (*'For adolescents, the reason why there is no study is the lack of funds. No funds are available for this topic'*). It was notable that only community- and provincial-level participants in Ratanak Kiri identified issues of food and nutrition as relevant for adolescents, and then most often in connection to adolescent pregnancy

Despite low levels of knowledge and awareness about adolescent issues, all governmental stakeholders engaged in this research were receptive to learning more about the needs of adolescents and recognised them as a growing and dynamic demographic in Cambodia.

The Council for Agriculture and Rural Development (CARD) has an important role to play in this regard. An inter-sectoral body providing policy support, partnership dialogue, monitoring and oversight, information and knowledge management, and capacity building between governmental ministries, CARD also supports cooperation with I/NGO development partners, civil society and the private sector. CARD leads a Technical Working Group on Social Protection and Food Security and Nutrition (TWG-SP&FSN), a platform for coordination and budget advocacy, which can be used to sensitise both governmental and I/NGO partners on key issues relevant for adolescent Cambodians. The TWG-SP&FSN sets the priorities and joint monitoring indicators for action plans on food security and nutrition (e.g. National Strategy for Food Security and Nutrition, National Action Plan for the Zero Hunger Challenge in Cambodia) and advocates for financial resources to be directed towards partner-agreed upon priority issues of concern. While CARD was established to facilitate the integration of food security and nutrition across governmental ministries, they do not have authority over ministries or a budget, therefore any work to integrate adolescents into Cambodian policy needs to consider who is best positioned for leading and enforcing this work. CARD may

<sup>42</sup> Alcohol abuse in Ratanak Kiri was only described by provincial-level respondents as an issue of concern, not local communities who view the consumption of alcohol as part of their customary and spiritual practices.

be able to facilitate cross-sector coordination, but multi-sectoral governmental ministries will need to make a commitment to working together.

The new five-year National Strategy for Food Security and Nutrition (NSFSN) in Cambodia is due to be launched in 2019. This presents a critical opportunity for international donors and locally operating I/NGOs and CBOs to advocate for explicitly including adolescents in the NSFSN. The current strategy (2014-2018) did not mention adolescence. Stakeholders must therefore demonstrate the critical importance of engaging adolescents as the human capital that Cambodia will need to succeed in its transformative agenda and to continue the health and economic gains made over the past decade.

## **Key considerations**

This research gathered new empirical data in Cambodia 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

- Nearly 20% of the population in Cambodia are aged between 10-19 years, yet they are largely invisible in policy. Adolescent health and nutrition is a large-scale challenge, and as a sub-population with unique nutrition and other needs, adolescents are at risk of being left behind. Focused advocacy efforts are needed to encourage key actors to commit to interventions for this group. The development of the new National Strategy for Food Security and Nutrition (NSFSN) which is due to be implemented in 2019-2023 presents a valuable opportunity for raising the visibility of adolescents as a priority group to be explicitly included in key national policy.
- 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, the complex root or underlying causes for their nutrition practices, and potential solutions to improve their food-related behaviours. At national and sub-national levels, competencies must be developed to analyse, interpret and apply both qualitative and quantitative data.
- At the national-level, adolescence is defined differently across sectors and ministries, and in so doing the needs of adolescents risk becoming diluted or falling through the cracks. This reduces the visibility of adolescents, hampers the identification of adolescent-specific problems, and limits the development of appropriate strategies and programmes designed to meet their needs. Similarly, the definition of adolescence at the national level is not consistent with definitions used at the community level. Interventions must be sensitive to variables including age, gender, socio-economic status, life experiences / stages, livelihoods and ethnicity. Regardless of the terminology used, effective engagement should target groups as defined and understood at the community level.

### Influencing adolescent nutrition

- When taking adolescents as the central unit of analysis, it becomes clear that this group is uniquely affected in Cambodia. Programmes targeting adolescents must take account of the nutritional challenges faced in different contextual settings, and the impact this has on their overall growth, development and well-being.



- 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 (e.g. education and employment, and sexual and reproductive health).
- 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 during non-school hours. 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. container-gardens) may be particularly relevant and appealing for adolescents residing in urban and peri-urban localities.

### 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 use of local languages; and showcasing real experiences. They emphasised the importance of privacy, and trust. They wanted interventions to develop their skills for the future, and for interventions 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 and grandmothers; peers; teachers (for those in-school); and community leaders. Although participants confirmed that whilst adolescent girls may seek advice and counsel from influential figures in their lives, they had a high level of autonomy and decision-making power. Still, securing the buy-in and support of key influencers is vital in both generating demand and facilitating utilisation of programmes and services.
- Adolescents can be agents of change for family members and their 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 their younger siblings and 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 adolescent 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 and reproductive health; economic empowerment and livelihood support; education; social protection; and leadership related to youth participation. Overall, however, programmes were not implemented at scale and coverage was limited. Only a few programmes were designed with adolescents as the primary beneficiary, but multiple

programmes 'accidentally' included adolescents (such as health interventions for pregnant women, and livelihood support programmes for farmers).

- Various platforms engaged adolescents at the community level. For those in formal education, particularly younger adolescents, school was identified as a positive and trusted platform for engagement, although it was noted to be a selective platform given that not all adolescents (particularly older adolescents) attended. Health facilities were only discussed as places that provided health and nutrition related advice by girls who had recently given birth.
- 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. Girls in urban areas were more likely to use social media and watch television. These girls reported using platforms such as Facebook to chat with each other. Girls' internet usage was not closely monitored by their caregivers. Radio was accessible for adolescents in all areas although it was not widely used. Television was the preferred mode of entertainment in urban and increasingly in rural areas.

#### Entry points for strategic partnerships

- Policy and programming entry points need to be strengthened and expanded. Currently, programming is selective and localised. Further investment in both nutrition programming and nutrition-sensitive adolescent programming is needed if the most vulnerable girls are to be reached.
- Actors already engaging adolescents in other sectors should be encouraged to incorporate nutrition-sensitive and nutrition-specific activities in their work and those who have developed adolescent-specific communication methodologies should be identified as potential avenues for linking policy and action.
- Similarly, actors who are already active in nutrition, food and agricultural sectors should be encouraged to expand their policies and interventions to better reach adolescents.
- Many adolescents are included in activities that are orientated towards adults. In acknowledging this, programmes should be aware of the special needs of adolescents of different ages and encouraged to modify their services appropriately. 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.
- Coordination between government, partners and programme implementers should be improved to support an enabling environment for adolescent engagement. Commitment to channels that can reach the most marginalised and vulnerable adolescents is needed. Adolescent programming must be creative and use approaches that target particular groups of adolescents (e.g. out-of-school adolescents and mature minors) in ways they prefer and are receptive to. Investment in these channels should be prioritised in mainstreaming nutrition-sensitive and nutrition-specific activities.
- 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.
- As a member of Scaling Up Nutrition (SUN), Cambodia has established several networks: a UN network chaired by UNICEF, a donor network chaired by USAID, and a civil society network chaired by Helen Keller International. The SUN business network could be strengthened to serve as an effective entry point to develop strategic partnerships with the private sector. WFP Cambodia's Nutrition Unit works to provide support and strategic information to the government and collaborate with relevant partners via the SUN movement.

## Summary of key policy and programme implications

Theme	Key considerations
Rice and side dishes	<ul style="list-style-type: none"> <li>Rice is the most important agricultural commodity in Cambodia and the staple of the national diet. Fortifying rice could be a good way of improving access to nutritious diets, and more should be done to explore the opportunities to fortify rice and other staple foods nationally.</li> <li>Knowledge of healthy food does not directly translate to healthy food practices, so investment should be made to ensure adolescents and their families have access to affordable and nutritious foods and assume healthy diets and consumption patterns. There is a universal desire for side dishes to accompany rice, but financial constraints, seasonal availability, land issues and food taboos often limit what is purchased, available, prepared and eaten. Adolescents and their caregivers must be better informed about the most affordable healthy foods available to them in addition to fortified rice.</li> </ul>
Food sources	<ul style="list-style-type: none"> <li>Make diverse, healthy, natural and affordable foods available and attractive to adolescents and their families, particularly in times of scarcity. Promoting healthier foods in small shops and food carts (particularly those located close to schools and workplaces) would increase their availability to adolescents, who should be encouraged to choose healthier food over other options.</li> <li>Snacks and convenient ('on-the-go') foods are particularly appealing to this age-group, and so cheap, safe and healthy ready-made food should be made widely available. Ongoing initiatives to fortify snack foods should also be supported.</li> </ul>
Food preparation and consumption	<ul style="list-style-type: none"> <li>Because adolescent girls 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.</li> <li>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 (future value). Interventions that focus on food and meal preparation may be helpful, particularly if available technologies can make cooking less arduous and time consuming for women and girls (particularly in North East provinces). Interventions to improve storage and processing capacity will also help reduce time spent on food preparation.</li> </ul>
Land and agriculture	<ul style="list-style-type: none"> <li>Poverty is widespread, particularly in the North East provinces of Cambodia, and is exacerbated by the reduction of land available for family farming due to logging, plantation monocultures and conservation zones. Policies invoking the activation of social safety nets and food assistance may help mitigate the impact of shorter crop rotations and reduced opportunities to fish and forage.</li> <li>New seed varieties and agricultural technologies may also be beneficial in reducing the work burden that falls on women and girls responsible for cultivating family crops.</li> </ul>
Education and employment	<ul style="list-style-type: none"> <li>Structural weaknesses in the school system need to be overcome if schools are to be an effective delivery platform. Social protection programmes that aim to keep children in school, such as the education scholarship programme, are important initiatives. Despite the potential value of school as a platform for sustained engagement, however, 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.</li> <li>Income-generating activities are often prioritised by adolescent girls over school attendance, due to pressures to contribute to household economy and food security (e.g. agricultural labour, garment factory work). These activities require a high level of energy expenditure and may be exploitative. Adolescents and their families need strong incentives to continue formal education for this age group and to limit the household responsibilities of girls so that they can spend more time on their studies. Safe income-generation opportunities should be made available, but designed around keeping adolescent girls in school.</li> </ul>
Maternal health and food taboos	<ul style="list-style-type: none"> <li>Reducing adolescent pregnancy 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. This is particularly important for the North East provinces which report the highest rates of adolescent pregnancy in Cambodia.</li> <li>Awareness must be raised around good nutrition during pregnancy and the risks associated with food taboos followed by pregnant and lactating women. In parallel, initiatives should improve antenatal care, delivery practices and postnatal care, particularly amongst rural populations with restricted access to health centres (such as in the North East provinces). Delivery with skilled attendance and exclusive and continued breastfeeding should be actively promoted.</li> <li>In areas other than the North East provinces, women and girls described good access to and agreement with maternal and child health advice provided at health facilities. This is in marked contrast to the reluctance adolescent girls displayed in discussing sensitive sexual and reproductive health issues with health workers or family members. The focus on maternal and child health advice needs to shift to include more information on sexual and reproductive health. Technology and social media should be explored as trusted platforms to convey sexual and reproductive health issues to adolescent girls who may be able to access it privately and in confidence.</li> </ul>







**Annex 1: Map of Cambodia**



Source: <https://commons.wikimedia.org/wiki/File:Un-cambodia.png>

## Annex 2: Detailed methodology

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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 the Ministry of Health (MoH) National Ethics Committee for Health Research (NECHR) of Cambodia (study number 045NECHR) and supported by the WFP Country Office in Phnom Penh, Cambodia.

### Research team

The study was conceived by Lynnda Kiess, Senior Policy Advisor, and supported by Indira Bose, Fill the Nutrient Gap Consultant, at WFP. Both provided oversight throughout the project. The study was led by Anthrologica. It was managed by Juliet Bedford (JB), Director of Anthrologica, who contributed to each stage of the research, provided technical guidance and was responsible for the final deliverables. The in-country research was led by Ginger Johnson (GJ), Senior Research Associate at Anthrologica. GJ developed the research tools, undertook data collection, conducted the full analysis of material generated and drafted the final report in collaboration with JB.

In-country support was provided by national Research Assistant, Ponnary Pors (PP). PP worked alongside GJ, and translated from English to Khmer during data collection sessions, transcribed all interviews, focus group discussions and workshops, and inputted all survey data into Excel. Two additional national Research Assistants, Soun Kabak, Village Health Volunteer for Ta Veng District, and Pheun Sophanna, Village Health Volunteer for Andoung Meas District served as translators and technology survey enumerators for communities in Ratanak Kiri Province. Soun Kabak translated between Pouv and Khmer, and Pheun Sophanna translated between Ka Chak, Jarai, Tom Poun and Khmer. In Phnom Penh Province, Siem Bros, Vice President of the Koh Dach Youth Association, and Suon Sochan, Member of the Koh Dach Youth Association served as technology survey enumerators. In Prey Veng Province, Khiev Chien, Sao Nakry and Ti Ket, Village Health Volunteers for Kampong Trabaek District, served as technology survey enumerators.

Francesca Erdelmann, Deputy Director of WFP Cambodia, Programme Officer Hanneke Van Dyke and Programme Assistant Seanglay Din collaborated with Anthrologica throughout the project, providing strategic support to research partners and key stakeholders. Anthrologica Research Intern Jiaxun Gao contributed to the initial document search and background literature review.

### 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. Targeted literature reviews were conducted for the four focus countries. Key policy and programmatic texts reviewed for Cambodia included: National Strategic Health Plan 2008-2015 (NSHP); National Nutrition Strategy 2009-2015 (NNS); National Policy on Youth Development 2011 (NPYD); National Strategic Plan for Food Security and Nutrition 2014-2018 (NSPFSN); National Population Policy 2016-2030 (NPP); and National Action Plan for the Zero Hunger Challenge 2016-2025 (NAP/ZHC).

A series of online databases were used to identify and source additional literature: EBSCOhost; Scopus; Google Scholar; BMC Public Health; CINAHL; Communication and Mass Media Complete; ERIC; Family and Society Studies Worldwide; MEDLINE/PubMed; ScienceDirect; ProQuest; Asia Pacific Journal of Clinical Nutrition; AnthroSource; NCBI; SOLO Bodleian Libraries; and JSTOR.

Specific search terms for Cambodia focused on the following key words (both individually or in combination): adolescent, adolescents, adolescence, adolescent health, adolescent girls, adolescent refugees, approach, Cambodia, Cambodian, Cambodian youth culture, child bride, child marriage, communication, communication strategies, decision-making, deworming, diet, dropout rates, East Asian, eating, education, female, females, food intake, food pattern, garment factory, garment industry, gender disparity, girl, girls, health, health campaign, health promotion, intervention, interventions, intervention study, intervention studies, juvenile, malnutrition, malnourishment, mass media, media, migration, mobile phone intervention, non-communicable disease, NCD, nutrition, nutritional, nutrition disorders, nutritional status, obesity, over nutrition, over-nutrition, overweight, Royal Government of Cambodia, sexual reproduction education, slum, social media, stunting, technology, teen, teens, teenagers, teenage, teenage mother, teenage pregnancy, under nutrition, under-nutrition, undernourishment, underweight, wasting, women's career development, young adult, young woman, youth, youth communication, and youth communication strategies. The terms were used with several search methods including truncation (using asterisks at the end of words), wildcard (replacing an alphabet with hash and/or question marks), Boolean (using and/or), and phrases with double quotation marks. The synonyms of the above terms were also included in the search databases to maximise the results yielded and to ensure that any relevant articles were included in the final review.

The complete literature review was submitted as a standalone report, with a comprehensive bibliography. The full texts of all referenced material were deposited into the project's Dropbox and submitted as part of the research portfolio.

## **Phase 1 – Stakeholder mapping and programme landscape exercise**

The initial field visit to Cambodia was conducted 7-11 November 2016. The objective was to introduce the project to key stakeholders and potential partners and to launch the mapping and landscaping exercise.

### Stakeholder mapping and visualisation

The core research team (GJ and PP) conducted preliminary meetings with identified I/NGO stakeholders and facilitated a workshop to provide an overview of the stakeholder mapping, secure partner engagement and identify additional stakeholders using a snowball technique. Information on each stakeholder organisation engaging adolescents (not only on nutrition but broader issues) was collated in an Excel spreadsheet.

Information was collected in Excel, and formatted to conform to 'tidy data' standards in which each variable is a column, each observation is a row, and each type of observational unit is a separate table (Wickham 2014). The variables included were: organisation, programme, project aims, location, target group, delivery channels, partners, and timeframe. Excel data was then imported into R (R Core Team 2016) together with country shapefiles downloaded from the Global Administrative Areas (GADM) database (GADM 2015). Data was cleaned to ensure consistency in the spelling of geographic units between the shapefile and the Excel table. These were then merged and wrangled to allow visualisation of the data by geographic location, such that a single location would show information for *all* organisations, programmes and projects operating within that location. An interactive map was generated using the Leaflet for R package and exported as an html file (Cheng et al. 2017).

### Review of policies and demographics

The national Research Assistant (PP) reviewed the country context, policy arena and programme landscape. Synthesising existing information, the review is a brief situational analysis of adolescent girls in Cambodia and includes an overview of relevant demographics, pregnancy statistics, education statistics, employment levels, current dietary practices and trends, and nutritional issues. It also identifies entry points for

advocacy and programming. The document has been submitted in the project's portfolio as accompanying material and key points have been integrated into both the literature review and this report as appropriate.

## **Phase 2 – 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 from April-June 2017, including 22 days intensive in-country fieldwork from 9-31 March 2017 (see Annex 1 for detailed fieldwork schedule).

### Fieldwork facilitation partners

In Cambodia, WFP does not implement programmes at the local level aside from the flagship school-based feeding programme in select areas. The geographic footprint and target population of school-based children and adolescents that this programme offered was too limited to use as platform for the formative research. It was agreed, therefore, that I/NGOs identified during the stakeholder mapping as having a local presence be approached to collaborate with the research team, primarily to help facilitate the community-level engagement critical for the fieldwork component of the study. Partners were required to liaise with the Provincial Health Departments (PHDs) to introduce the research project and request a letter of support, a criteria to obtain ethics approval. They were responsible for organising meetings between the research team and relevant interlocutors at provincial, district, commune and community levels, and were required to provide at least one staff member (for a maximum of four days) to accompany the research team in the field to make introductions at the local level.

Plan International and Helen Keller International were selected as research partners due to their interest and commitment to the project, and because of their local expertise and existing networks in the potential research sites (see below). HKI facilitated fieldwork in Phnom Penh and Prey Veng, and Plan International in Ratanak Kiri, provinces where the respective organisations have on-going programming.

In Cambodia, Plan International has four priority programmatic areas: nutrition; youth-managed nutritious food enterprises; integration of sexual and reproductive health rights and nutrition in technical vocational education training programmes; and adolescent sexual reproductive health. Plan International works in Stung Treng Province (Thala Borivat and Siem Pang Districts), Ratanak Kiri, Siem Reap, Tboung Khmum, and Kampong Cham, primarily with adolescents and youth (15-24 years old), pregnant women, parents and caregivers, and rural and indigenous out-of-school youth (10-24 years old). Their key partners include the Ministry of Health, SUN and UNICEF and more locally, NGOS including KYA and PSOD. At the time of the study, Plan International had recently commissioned an anthropological study on indigenous parenting practices across multiple generations in Ratanak Kiri (Breogán 2017).

The primary programmatic focus of Helen Keller International in Cambodia is nutrition and vitamin A supplementation orientated around nutrition, micronutrient deficiency, assessments and research on child feeding practices, and school health programming. HKI works in Phnom Penh, Kampot, Prey Veng, Kampong Cham, Tboung Khmom, and Ratanak Kiri, and engages with women of reproductive age (15 and over), including pregnant women and lactating mothers. Nationally, their key partners include the Ministries of Agriculture, Women's Affairs, Rural Development, and Health, and at the local level they work with multiple NGOs and civil society organisations (CSOs). HKI has conducted or been involved in numerous research studies in Cambodia, including exploring the extensive use of commercial food products amongst infants and young children; assessing the pervasive promotion of breastmilk substitutes in Phnom Penh; and issues of household food security and dietary diversity in rural Cambodia.

### Study sites

The research sites were selected in collaboration with WFP, Plan International and HKI. In considering



different sites, a number of key questions were posed:

- Are both urban and rural locations selected?
- In each location, is there a diversity of population (e.g. in urban areas does the population include both long-term city dwellers and rural migrants to urban centres, and in rural areas does the population include ethnic minorities and different livelihoods; are different ethnicities and religions represented)?
- In each location, is there 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)?

Initially the WFP country office in Cambodia proposed the study be conducted in four provinces. Due to time and available resources, however, Anthrologica advised a maximum of three provinces be included: the first providing an urban location and population; the second providing a rural local and population comprised of majority Khmer; and the third providing a rural population comprised of majority non-Khmer ethnic groups.

The three provinces selected were Phnom Penh (urban); Prey Veng (rural, Khmer majority); and Ratanak Kiri (rural, multiple ethnic groups). In addition to the selection criteria outlined, the choice of Ratanak Kiri and Prey Veng deliberately targeted rural areas of Cambodia that consistently report the highest rates of school drop-out, early marriage and early childbearing. Ratanak Kiri also reports higher levels of maternal and child mortality. By comparison, Phnom Penh reports the lowest rates of these variables in the country.

It was intended that two districts would be selected per province, although due to recruitment challenges in Prey Veng, only one district was included. One community in one commune was selected in each district in Phnom Penh and Ratanak Kiri, and two communities in two communes were selected the district in Prey Veng. Overall, therefore, eight communities across six communes in five districts of three provinces were included.

### Participants and recruitment

Study participants were selected using purposive, nonprobability sampling. A total of 280 participants were enrolled across the three provinces, and 130 data collection activities undertaken: 17 in-depth interviews were conducted with 28 participants; 12 FGDs were conducted with 74 participants; six workshops were conducted with 48 adolescent girls aged 10-14 year old; six workshops were conducted with 41 adolescent girls aged 15-19 years old; and 89 technology surveys were completed with community members aged 10-25 years old.

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. All national-level interviews were conducted in Phnom Penh. At the provincial-level, informants selected for interview included a purposive sample of governmental, I/NGO and CSOs involved in adolescent and/or nutritional programming.

At the community-level, informants selected for interview, FGDs or adolescent workshops included community leaders (e.g. commune leader, village chief, et al.), caregivers of adolescents, and adolescent girls aged 10-19 years old.

## 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 3) was presented, explained in detail and read aloud for illiterate participants. The contact details of the WFP national focal point for the research (Seanglay Din) 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. In a small number of cases, caregivers were not available for the research team to engage with, so local village authorities (e.g. village chief, health volunteers) who were informed about the study and often responsible for recruiting participants, provided verbal consent on behalf of a caregiver. The study and their participation were explained to the adolescents in an appropriate and accessible manner. 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. At the conclusion of fieldwork, all consent forms were retained in hard copy by WFP Cambodia and soft copy by Anthrologica.

## Data collection

Data was gathered through a combination of the following:

- 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 and youth
- 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 (see Annex 4). 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 4). The key themes were addressed in each interview, focus group discussion and workshop thereby allowing the analysis of themes across participant groups and field sites. 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 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 meeting spaces (e.g. pagodas, community meeting houses), 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 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 graffiti walls (to depict perceptions of community life and daily activities), drawings (to depict perceptions of adolescence) and photovoice using Polaroid cameras (see Annex 4). 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; Johnso, 2011) photovoice was used in the creative workshops with older adolescent girls (aged 15-19 years) to document and reflect their communities, their daily realities, and their 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 three hours.

Technology surveys – After pilot testing the technology survey in Ratanak Kiri, the research team adapted the questionnaire so that it was easier to understand by both the enumerators and research participants. This involved adapting questions about television to also include 'video' given that many community participants did not own or have access to broadcast television, but did often have portable video players for playing DVDs and other media. Also in Ratanak Kiri, the term 'internet' was not well understood because of the linguistic diversity in the province, and the limited penetration of social media. In consultation with local enumerators and Plan International field staff, the research team decided to use the phrase 'internet or Facebook' as in other areas of the country, 'Facebook' is often used interchangeably with 'internet'. Individual technology surveys were administered to male and female adolescents and youth aged 10 to 25 years old. Survey questions were asked systematically in a step-wise manner on topics related to radio, television, mobile phone, internet use, and social media engagement and behaviour. 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 (see Annex 4). The technology surveys 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 thanks, all interviewees, and FGD and workshop participants were provided with a bottle of water and a bar of soap and technology survey respondents with a bar of soap. Because the workshops were of longer duration and directly engaged adolescents, the participants were also given a snack and a Polaroid photograph of themselves or a group photo with their friends, depending on their preference.

#### Data management, transcription and translation

All interviews, FGDs, and adolescent workshop discussions were recorded using a digital voice recorder,

be used. Detailed notes were taken by both GJ and PP during each data collection session (and particularly during the interview that was not recorded). At the conclusion of each day, GJ and PP transcribed their notes and compiled data for review and verification. All data were stored securely on GJ's password protected laptop and backed up on a portable hard drive each evening. At the end of data collection, the audio recordings of all the data collection sessions were transcribed into English by PP. Anonymised transcripts were produced in Microsoft Word. The transcripts were reviewed by GJ 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 local enumerators. The hard copies were collected and by GJ. At the end of the fieldwork, PP entered the data into Excel, cross checking the entries against the original paper copies. Hard copies of all the technology surveys were retained by WFP at the conclusion of the fieldwork, and Anthrologica retained soft copies.

### Data analysis

Preliminary analysis of data was conducted throughout the data collection process and GJ 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 GJ 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 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, budget and human 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.

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, abstractions, idiomatic expressions and jargon. Careful phraseology was used when posing questions. Sections of narrative were back translated to confirm or clarify participant 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 photovoice activities in the community also served as a method of verification (e.g. the existence of animal sacrifice alters, community gardens, food carts outside the entrance to primary schools, etc.).

In Khmer, there are two ways to translate the concept of adolescence (discussed further in the report). After consultation with several stakeholders at the beginning of fieldwork, and after pilot testing the interview and discussion frameworks in Khmer-speaking locations, it was decided to use the term '*kmeng chom tong*'. This term was understood by a broader group of stakeholders and was more closely associated with the age group of adolescents involved in the study. It should be noted, however, that the



associated with the age group of adolescents involved in the study. It should be noted, however, that the use of this term for ethnic Khmer speakers may have biased respondents towards interpreting adolescents as having a lower range of ages. Similarly in Ratanak Kiri, none of the local ethnic languages ('pouv', 'ka chak', 'jarai', and 'tom poun') had a word for adolescence and there was no direct translation that was mutually intelligible across the various ethnic groups. It was therefore necessary for the research team to define adolescence to the local translators and discuss the more appropriate way to convey the concept and period of adolescence to community-level respondents. 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 in Ratanak Kiri to provincial-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'.

The limited time and resources for this study resulted in engagement with stakeholders at provincial and community levels being prioritised. The maximum possible number of interviews, FGDs, workshops and surveys were conducted at each fieldsite given the time and operational constraints. Accessing some of the fieldsites was challenging due to poor road conditions and lengthy waiting periods for travel by ferry.

In Cambodia, there is a diverse landscape of governmental and I/NGO partners delivering community-based health services for women and children and it was not possible to engage all 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. Governmental stakeholders in particular were difficult to engage and even if appointments were set for interview, competing interests may have prevented these being realised. In Phnom Penh, several political party meetings were occurring during fieldwork due to upcoming communal elections, making it difficult to find a suitable day and time to meet with all appropriate community leaders so the research team prioritised speaking with the village chief.

In some locations, it was difficult to find an appropriate time to schedule adolescent workshop activities given the participants' attendance at school. In Cambodia, it is usual for children to go to school for half days (either mornings or afternoons) in order to accommodate more students. The research team attempted to work with this existing schedule as much as possible, however, some adolescent girls were unable to attend the workshop due to their school activities. Similarly, a number of out-of-school girls who had been invited to participate in the workshops could not do so because of farming and/or familial responsibilities (it is notable that the fieldwork was conducted during the harvest season).

Due to the difficulty in finding an adequate number (i.e. >8) of 15-19 year old workshop participants in Prey Veng, participants from two communities in each of the two communes visited were combined. The challenge in recruiting 15-19 year old female participants in this province was related to the high levels of out-migration for this age group to seek work opportunities in other areas such as Phnom Penh (e.g. garment factory work). This is further discussed as a research finding below. Only in one session with government stakeholders did participants withdraw during the consent process citing that the ethics clearance granted by the Ministry of Health did not cover their involvement, and suggesting that for their participation, the research would have to be approved by their Ministry. This only occurred once and provincial-level interviews with the same government department had been successfully completed. It was agreed not to pursue the national-level interview given that it was not possible to secure consent from their Ministry in the time available.

Given the small sample size of the study, results cannot be extrapolated to a wider country context, although the saturation of findings from rural multi-ethnic communities in Ratanak Kiri, rural Khmer-majority communities in Prey Veng, and urban communities in Phnom Penh, indicate the data are likely applicable to adolescents living in other areas of the country with similar ethnicities in rural/urban settings. The findings were broadly corroborated by the literature reviewed.

### Annex 3: Fieldwork schedule

Day	Activity
Thursday, March 9	Arrive in Phnom Penh (GJ)
Friday, March 10	Briefing with WFP Mapping, etc. updates with Research Assistant HKI: Meeting with Hou Kroeun Plan: Meeting with Wathna Chhuon
Saturday, March 11	Training with Research Assistant Confirmation of logistical arrangements
Sunday, March 12	Travel to Ratanak Kiri
Monday, March 13	Fieldwork in Ratanak Kiri (Day 1)
Tuesday, March 14	Fieldwork in Ratanak Kiri (Day 2)
Wednesday, March 15	Fieldwork in Ratanak Kiri (Day 3)
Thursday, March 16	Fieldwork in Ratanak Kiri (Day 4) Travel to Phnom Penh
Friday, March 17	Fieldwork in Phnom Penh (Day 1)
Saturday, March 18	Fieldwork in Phnom Penh (Day 2)
Sunday, March 19	Research team independent work
Monday, March 20	Fieldwork in Phnom Penh (Day 3)
Tuesday, March 21	Fieldwork in Phnom Penh (Day 4) Travel to Prey Veng
Wednesday, March 22	Fieldwork in Prey Veng (Day 1)
Thursday, March 23	Fieldwork in Prey Veng (Day 2)
Friday, March 24	Fieldwork in Prey Veng (Day 3)
Saturday, March 25	Travel to Phnom Penh Fieldwork in Phnom Penh (Day 5)
Sunday, March 26	Research team independent work
Monday, March 27	Meet with partners, government/ministries and national-level stakeholders Fieldwork in Phnom Penh (Day 6)
Tuesday, March 28	Fieldwork in Phnom Penh (Day 7)
Wednesday, March 29	Final stakeholder meeting Review and debrief with WFP Fieldwork in Phnom Penh (Day 8)
Thursday, March 30	Fieldwork in Phnom Penh (Day 9) Complete mapping
Friday, March 31	Fieldwork in Phnom Penh (Day 10) Final wrap-up with Research Assistant Depart Phnom Penh

## Annex 4: Research tools

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- A) Topic guide
- B) Interview/FGD guide: UN agencies, I/NGOs stakeholders and research implementation partners
- C) Interview/FGD guide: Representative from government ministries
- D) Interview/FGD guide: Representative from private sector/industry
- E) Interview/FGD guide: Community leaders and caregivers
- F) 1) Technology survey: Adolescent/youth communication and technology channels (English)  
2) Technology survey: Adolescent/youth communication and technology channels (Khmer)
- G) Adolescent workshop: 10-14 years old
- H) Adolescent workshop: 15-19 years old

### A – 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?*

#### I/NGO, 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

Social accountability for adolescent girls/nutrition

Areas for collaboration with government? NGO coalitions? Etc.?

#### HEALTH (GENERAL)/SEXUAL & REPRODUCTIVE HEALTH (SRH) ISSUES

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

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)

- *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 & 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 (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)

- *Perception of adolescents' participation in healthy eating*

Acceptability, appropriateness, feasibility, potential  
Advantages/disadvantages  
Existing participation mechanisms/networks  
Practical suggestions (case study?)

## 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  
Urban/rural 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, 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, 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)  
Case study (most impactful platform?)

#### RESEARCH NEEDS, DOCUMENTATION & OTHER REQUESTS

- *Areas where there is lack of data / Need for more data on working with adolescents*  
DHS data/MICS 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?
- *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)?
- *Suggestions for partnerships? WFP?*

#### IT/TELE-COMMUNICATION CONTEXT (LESSONS LEARNED & FUTURE CONSIDERATIONS)

- *Communication channels*  
Urban vs. rural 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 (SRH, nutrition, FP, 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, garment industry)

- *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*

**B – Interview/FGD guide: UN agencies, I/NGOs stakeholders and research implementation partners**

**DATA SHEET**

- Country: \_\_\_\_\_
- City/Commune/Community: \_\_\_\_\_
- Venue: \_\_\_\_\_
- Date: \_\_\_\_\_
- Name of interviewer: \_\_\_\_\_
- Name of translator (if used): \_\_\_\_\_
- Time: \_\_\_\_\_
- General comments and observations:

**PARTICIPANT INFORMATION SHEET**

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

(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 programs 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 district/provincial 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 districts/provinces? 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 programs, 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?

- 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 the 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/INGO 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 program 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, etc.)
- What local capacity is needed to address these issues? Provincial or national capacity?
- Any local practices or behaviours that you think are harmful to adolescent nutrition?
- 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 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 program 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 selected for formative research, 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)?



- 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, anemia, 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?
  - 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)?
- Economic context:
  - Most common source of income/employment (Adults? Adolescents)?
  - Presence of local industries for employing adolescents and young women (e.g. 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
  - (If program 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

**C – Interview/FGD guide: Representative from government ministries**

**DATA SHEET**

- Country: \_\_\_\_\_
- City/Commune/Community: \_\_\_\_\_
- Venue: \_\_\_\_\_
- Date: \_\_\_\_\_
- Name of interviewer: \_\_\_\_\_
- Name of translator (if used): \_\_\_\_\_
- Time: \_\_\_\_\_
- 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?**
- (N) 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 institutionalization? If not, how do you think this alignment can occur? (P, D) 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?)

#### 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 programs, 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?)
- **Are projects largely donor driven or is governmental money set aside for adolescent/nutrition programmes?**

#### 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?
- 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?** Is there a breakdown in data for the adolescent age range?
- **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?)
- **Are there any issues related to women and children that you would like to have more data 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 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 communication methods / delivery platforms that are currently spreading harmful messages to adolescents?**
- **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.)**

#### 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



**D – Interview/FGD guide: Representative from private sector/industry**

**DATA SHEET**

- Country: \_\_\_\_\_
- City/Commune/Community: \_\_\_\_\_
- Venue: \_\_\_\_\_
- Date: \_\_\_\_\_
- Name of interviewer: \_\_\_\_\_
- Name of translator (if used): \_\_\_\_\_
- Time: \_\_\_\_\_
- 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

(GF) = garment factory 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? How old are they? (GF) How old is the majority of your workers? Male or female?**
- 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? (GF) Does your factory employ any older adolescents (15 and above)?**

#### 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 – 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? (GF) Garment factory workers?** (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?

#### 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/GFW 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/GFW specific communication activities / target the adolescent segment of the market? And why?

#### Q5– 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 licensing fees, costs of airtime; 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?

#### 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 population, 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/GFWs 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/MICS 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 are the intended beneficiaries of these delivery platforms/communication channels? Differences in urban vs. rural channels? 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

- **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?
- 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

**E – Interview/FGD guide: Community leaders and caregivers**

**DATA SHEET**

- Country: \_\_\_\_\_
- City/Commune/Community: \_\_\_\_\_
- Venue: \_\_\_\_\_
- Date: \_\_\_\_\_
- Name of interviewer: \_\_\_\_\_
- Name of translator (if used): \_\_\_\_\_
- Time: \_\_\_\_\_
- 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.)*



**PARTICIPANT INFORMATION SHEET**

**Focus group discussion guide – Demographic information for community leaders**

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

**Focus group discussion guide – Demographic information for caregivers**

<b>Gender</b>	<b>Age</b>	<b>Marital status</b>	<b>Years of education</b>	<b>Children? How many?</b>	<b># of persons in household</b>	<b>Ethnicity</b>	<b>Religion</b>	<b>Occupation</b>

*[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].*

(CL) = community leader interviews (chief, women's leader, youth leader, religious leader, etc.)

(CM) = community member interviews

(CG) = caregiver interviews (persons currently caring for/living with adolescents; mothers, grandmothers, etc.)

#### Q1 – Background

- Please introduce yourself and describe your role in the community.
- Tell me about the health issues of women and children in this 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)? What are the differences in responsibilities between childhood and 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.)
- (CL) **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 program 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/Regular Diet

- 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'?
- Good food/bad food?

#### 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?
- Do adolescence regularly eat food that is 'bad' for them?
- 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?

#### 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? **Adolescent girls?** Does authority lessen as adolescents get older? Do key influencers of adolescent behaviours 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?
- **Are there any communication methods / delivery platforms that are currently spreading harmful messages to adolescents?**
- **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.)**

#### 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



## F – Technology survey: Adolescent/youth communication and technology channels

Target number of interviewees (per community): 14-20 (7-10 girls/young women, 7-10 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:**

**Ethnicity:**

**Occupation:**

**Years of education:**

**Religion:**

**Location:**

**# in household:**

**General income range:**

### Q1 – Radio

a. Do you listen to the radio? *Yes, No* [If no, ask follow-up on 'why' then skip to Question 2]

If No – Why not?

b. How do you listen (e.g. along, with parents, with friends)?

c. Where do you listen (e.g. at home, on the bus)?

d. How often? *Less than once a week, Once a week, Every day* [Circle]

e. What radio station(s) do you listen to most often?

f. What type of radio program do you like the most?

Why?

g. What types of radio program do you like the least?

Why?

h. When do you usually listen to the radio (e.g. day, time)?

i. On average, how many hours per day/week do you listen to the radio?

### Q2 – Television/Video

a. Do you watch television/video? *Yes, No* [If no, ask follow-up on 'why' then skip to Question 3]

If No – Why not?

b. How do you watch television/video (e.g. alone, with parents, with friends)?

c. Where do you watch television/video (e.g. at home, at an Internet café, other social setting)?

d. How often? *Less than once a week, Once a week, Every day* [Circle]

e. What television channel(s)/DVD do you watch most often?

f. What type of TV program/video do you like the most?

Why?

g. What type of TV program/video do you like the least?

Why?

h. When do you usually watch TV/video (e.g. day, time)?

i. On average, how many hours per day/week do you watch television/video?

j. \*What about television advertisements – are there any commercials that you particularly like?

Why?

### Q3 – Mobile phone

a. 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]

b. How often is this phone charged/functional? *Not at all, Less than once week, Once week, Every day*  
[Circle]

c. Is this phone capable of sending and receiving phone calls? *Yes, No* [Circle]

d. Does the phone currently have credit and able to make a call? *Yes, No* [Circle]

e. Do you make or receive calls? *Yes, No* [Circle]

f. Who do you frequently call or receive calls from?

- g. Is this phone capable of sending and receiving text messages? *Yes, No* [Circle]
- h. Can you read text messages from the phone? *Yes, No* [Circle]
- i. Do you make or receive text messages? *Yes, No* [Circle]
- j. Who do you frequently text or receive texts from?
- k. How is the network reception in your area? *No reception, Not very good, Good, Excellent* [Circle]
- l. Can you make or receive a phone call using this phone from inside your home? *Yes, No* [Circle]
- m. Is there another location where cell reception is good/better than within your home? Where?
- n. What phone company provides service for this phone?
- o. Do you use the phone to connect to the Internet/Facebook? *Yes, No* [Circle]

**Q4. Social networks – mobile phone**

Do you know of anyone who has a mobile phone? *Yes, No* [If no, skip to Question 5]

*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. [1 = very close; 2 = close; 3 = not very close/strangers]

<b>a</b>	<b>b</b> _____	<b>c</b> _____	<b>d</b> _____	<b>e</b> _____
<b>b</b>	<b>c</b> _____	<b>d</b> _____	<b>e</b> _____	
<b>c</b>	<b>d</b> _____	<b>e</b> _____		
<b>d</b>	<b>e</b> _____			

### **Q5 – Internet/Facebook**

- a. Do you connect / use the Internet? *Yes, No* [If no, ask follow-up on ‘why’ then skip to Question 6]  
If No – Why not?
- b. How do you connect to the Internet (via computer, phone, Internet café, school)?
- c. How often? *Less than once a week, Once a week, Every day* [Circle]
- d. For what purpose do you use the Internet?
- e. Which websites do you like to visit?  
Why?
- f. When do you usually use the Internet (e.g. day, time)?
- g. Where do you usually use the Internet (e.g. location)?
- h. Do you use the computer alone or with others?
- i. On average, how many hours per day do you use the Internet?
- j. Is your internet usage supervised by your parents or others? *Yes, No* [Circle]

### **Q6 – Social media**

- a. Do you use social media? *Yes, No* [If no, skip to Question 7]
- b. What sites / platforms do you use?
- c. Which ones do you like to use the most? [List up to 3]  
**Platform 1:** Why do you like this platform?  
**Platform 2:** Why do you like this platform?  
**Platform 3:** Why do you like this platform?
- d. Which platform do most of your peers/friends use?

-----[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?

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.]? \*What social media platform do you connect with them on?

First name/initials**	Relationship	Social media?
na _____	_____	nf _____
nb _____	_____	ng _____
nc _____	_____	nh _____
nd _____	_____	ni _____
ne _____	_____	nj _____

Please describe the relationship ties between persons listed above. Note: The grid will only be filled completely if interviewee listed 5 names. [1 = very close; 2 = close; 3 = not very close/strangers]

a	b _____	c _____	d _____	e _____
b	c _____	d _____	e _____	
c	d _____	e _____		
d	e _____			

**Q7. Other communication channels/communication groups**

- 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?

\* *Prey Veng and Phnom Penh only.*

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

## G – Adolescent workshop: 10-14 years old

Gender	Age	Marital status	Years of education	Children? How many?	# of persons in household	Ethnicity	Religion	Occupation

*[Age and gender segregated groups. Activities will be modified based on the type of delivery platform for programming utilised by INGO stakeholders].*

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

Time estimation: 2-2.5 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.
- Questions?

### A day in the life of...(timeline drawing and community mapping) (30-40mins)

- 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?
    - o Experiences/sources of food
  - Does someone take care of you at home? Who? (mother, grandmother, etc.)
  - Any time spent doing other 'typical activities' (food preparation, child care, 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 other's timelines...)
- Discussion: Day to day decision making exercise. Which decisions adolescents can make themselves and which they cannot? And why?



### From childhood to adolescence to adulthood (30-40mins)

- 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?
- Discussion: What do you want to be/do when you are older? Why? What might prevent you from doing this? Is there anything that you are afraid of?

### **FOOD/REFRESHMENT BREAK (20mins)**

#### Communications channels (10-20mins)

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

- Discussion on preferred communication methods and information resources:
  - Where do you look for information on topics important to you? (probe: conversations with friends, library, 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 to 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: Library? 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?

#### Conclusion (10mins)

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

## H – Adolescent workshop: 15-19 years old

Gender	Age	Marital status	Years of education	Children? How many?	# of persons in household	Ethnicity	Religion	Occupation

*[Age and gender segregated groups. Activities will be modified based on the type of delivery platform for programming utilised by INGO stakeholders].*

Target group size: 8-10 (aged 15-19 yrs.)

Time estimation: 3-3.5 hours

### Introduction (5mins)

- 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.

### Discussion: A day in the life of... (20mins)

- 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?
    - o Experiences/sources of food
  - Any time spent doing other 'typical activities' (food preparation, child care, 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 other's timelines...)
- Discussion: Day to day decision making exercise. Which decisions adolescents can make for themselves regarding daily activities and which they cannot? And why?
- Discussion: Reflection on life activities. Thoughts about being an 'adolescent'...what does this mean to you? To your family/community?

- 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.)?
- Defining adolescence.
- Defining the problem (e.g. adolescent 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?)

#### Guided photo 'walk' through community (60mins)

*[Use of Polaroid cameras]*

Distribution of cameras and discussion on use of cameras and ethics

- Purpose of the activity/objectives
- Use of photography to tell a 'story'
- Generation of questions (from adolescents) to guide picture taking according to objectives
- Safety, authority and responsibility of using a camera
- Acceptable ways to approach others to take their picture
- Question/answer session

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

- Example photo prompt 1: 'Good Food, Bad Food' (e.g. trip to the market, food preferences)
- Example photo prompt 2: 'People/places of importance' (e.g. children, parents, school, etc.)
- Example photo prompt 3: 'Communication channels' (e.g. meeting spaces, village activities, technology hubs)

#### **FOOD/REFRESHMENT BREAK (15mins)**

*[Number Polaroid photos on table. Code and organise per participant. SHOWeD method].<sup>43</sup>*

#### Photo elicitation (50mins)

<b>Steps in Photo Elicitation</b>	
<b>Step</b>	<b>Description</b>
1	Ask participants to write a 1-2-word caption/give a title to their photos (write on the white space at bottom of Polaroid image).
2	Ask participants to select 1-3 images they feel are most significant.
3	Ask participants to describe what is in the photo and where it was taken, and a rationale for why the photo was included in the data set. Participants present some of their 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"> <li>- What do you <b>See</b> here?</li> <li>- What's really <b>Happening</b> here?</li> <li>- How does this relate to <b>Our</b> lives?</li> <li>- <b>Why</b> does this situation <b>exist</b>?</li> <li>- What can we <b>Do</b> about it?</li> </ul>
4	If applicable, ask participants to place photos on the timeline/drawing previously created.
5	As a group, identify the themes of the activity based on collection of images on the wall.

<sup>43</sup><http://www.mapc.org/sites/default/files/Photovoice%20Facilitators%20Guide%20with%20Resources.pdf>

### Communications channels (10-20mins)

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

- Discussion on preferred communication methods and information resources:
  - Where do you look for information on topics important to you? (probe: conversations with friends, library, 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 to 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: Library? 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?

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

### 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.) Anything that you are afraid of?
  - 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

## Annex 5: Consent forms

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### Informed consent (20+ years)

#### WFP Partnership for Adolescent Nutrition: Formative Research

##### **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, and many national development frameworks fail to account for adolescent girls as valuable to their countries' development. 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) and Knorr, through its 'Force to Good' social mission, 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 Cambodia 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 about this study, you may contact WFP Programme Assistant Mrs. Seanglay Din via email [seanglay.din@wfp.org](mailto:seanglay.din@wfp.org) or telephone 017 768 786. If you have any concerns regarding your participation you may contact the ethics review committee for Cambodia at No.2 Street 289 Sangkat Broeung Kak 2 Khan Toul Kork Phnom Penh or telephone 012 842 442.



**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.

## **Adolescent assent (10-19 years)**

*[Information for individuals under the age of 19 who are being asked to take part in formative research].*

### **WFP Partnership for Adolescent Nutrition: Formative Research**

#### **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 Cambodia 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 19 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 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 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 also be asked to share your ideas about how organisations like the 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 your 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 made 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 Cambodia 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 Mrs. Seanglay Din via email [seanglay.din@wfp.org](mailto:seanglay.din@wfp.org) or telephone 017 768 786. If you have any concerns regarding your participation you may contact the ethics review committee for Cambodia at No.2 Street 289 Sangkat Broeung Kak 2 Khan Toul Kork Phnom Penh or telephone 012 842 442.

**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**

\_\_\_\_\_ **Signature**

\_\_\_\_\_ **Date**

\_\_\_\_\_ **Name of Parent/Guardian**

\_\_\_\_\_ **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.

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