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Strengthening Partnerships, Results, and Innovations in Nutrition Globally

Informing Video Topics and Content on Maternal, Infant, and Young Child Nutrition and Handwashing

Situational Analysis and Formative Research in Maradi, Niger




June 2016

About SPRING
The Strengthening Partnerships, Results, and Innovations in Nutrition Globally (SPRING) project is a five-year USAID-funded cooperative agreement to strengthen global and country efforts to scale up high-impact nutrition practices and policies and improve maternal and child nutrition outcomes. The project is managed by JSI Research & Training Institute, Inc., with partners Helen Keller International, The Manoff Group, Save the Children, and the International Food Policy Research Institute.

Recommended Citation
SPRING. 2016. *Informing Video Topics and Content on Maternal, Infant, and Young Child Nutrition and Handwashing: Situational Analysis and Formative Research in Maradi, Niger*. Arlington, VA: Strengthening Partnerships, Results, and Innovations in Nutrition Globally (SPRING) project.

Acknowledgments
The authors would to thank all people who have contributed time and experience in this formative research. Three Maradi-based projects have been particularly generous in lending their staff: Resilience and Economic Growth in the Sahel–Enhanced Resilience (REGIS-ER), Livelihoods, Agriculture and Health Interventions in Action (LAHIA 2013), and Sawki.

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Abbreviations and Acronyms

BF	breastfeeding
EBF	exclusive breastfeeding
DFAP	Development Food Assistance Program
DG	Digital Green
DHS	Demographic Health Survey
FFP	Food for Peace
FP	family planning
FGD	focus group discussion
GA	*Guidan Alkali*
GAM	global acute malnutrition
HG	*Hannou Gazané*
IDI	in-depth interview
IYCF	infant and young child feeding
IYCN	infant and young child nutrition
IRB	Institutional Review Board
LAHIA	Livelihoods, Agriculture, and Health Interventions in Action
LAM	lactation amenorrhea method
HC	health center
HW	health worker
MIYCN	maternal, infant, and young child nutrition
MOH	Ministry of Health
PFE	*pratiques familiales essentielles*
REGIS-ER	Resilience and Economic Growth in Sahel – Enhanced Resilience
SBCC	social and behavior change communication
SC	Save the Children
SC/Niger	Save the Children Niger
SPRING	Strengthening Partnerships, Results, and Innovations in Nutrition Globally
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
URC	University Research Co., LLC
WASH	water, sanitation, and hygiene

Executive Summary

In 2013, the USAID Global Health Bureau asked the SPRING project to collaborate with the Resilience and Economic Growth in the Sahel–Enhanced Resilience (REGIS-ER) project, [1] in providing support for maternal, infant and young child nutrition-related and hygiene-related social and behavior change communication.

In light of an earlier, successful collaboration between SPRING and Digital Green in India (Odisha), SPRING decided that the community video approach used by Digital Green could be tested for use in the resilience context of the Sahel. USAID emphasized the need to include not only REGIS-ER into the proof of concept, but also other interested Food for Peace partners, such as the Livelihoods, Agriculture and Health Interventions in Action project and the Sawki project to strengthen their SBCC work in the field of MIYCN.

Before developing the formative research protocol, SPRING conducted a situational analysis in September 2014, using available published and unpublished reports and other program documents, related to nutrition, water, sanitation, and hygiene, livelihoods, family planning, and gender practices in Niger, focusing on the Maradi region.

The partners selected four existing community groups in each one of the 20 villages to disseminate videos which were planned for production at a later stage. A situational analysis and formative research was to inform the content of the videos to be filmed in the commune of Guidan Roumdji and disseminated in the communes of Guidan Roumdji and Aguie.

Table 1. SPRING/Digital Green Partners and Implementation Villages

USAID Partners	Number of Villages	Commune
REGIS-ER (NCBS CLUSA) and Sawki (Mercy Corps)	15	Guidan Roumdji
LAHIA (Save the Children)	5	Aguie

The formative research was designed to fill the gaps highlighted in the situation analysis for Maradi. A series of 10 focus group discussions and 12 in-depth interviews were carried out by two teams in two villages: Guidan Alkali and Hannou Ganzane, which were representative of the 15 villages in the Guidan Roumdji commune where the videos will be filmed. Each team was assigned a village and was responsible for conducting the discussions and the interviews. In Guidan Alkali, 51 village members participated in the discussions, while in Hannou Ganzané 70 members participated. Twelve interviews were conducted, including four women, four men, and four adolescent girls.

The majority of the Maradi population are subsistence farmers with extremely low levels of literacy. Adults and children alike tend to eat and prepare meals infrequently given the chronic and pervasive food insecurity and the local customs. Most of the maternal, infant and young child nutritional practices in Maradi are suboptimal due to external factors like a poor health care system and a harsh climate as well as internal factors such as low perception of self-efficacy in the difficult Sahel environment, long-existing local beliefs, migration, polygamy and its social complexity, and a low degree of male involvement.[2]

[1] The REGIS-ER project was awarded by USAID on November 15, 2013 to a consortium led by National Cooperative Business Association (NCBA) and Cooperative League of the USA (CLUSA), with University Research Co., LLC (URC), Dimagi, Sheladia, and several local nongovernmental organization sub-awardees. It is a 5-year approximately $70 million Feed the Future project.

[2] The men from the Maradi Region are said to focus much more on their commerce than on the health of their women and children (conversations with health workers from Maradi).

Summary of Findings

Eight priority topics for videos were highlighted as a result of the formative research:

- Women's nutrition in the first 1000 days
- Exclusive breastfeeding for the first 6 months
- Complementary feeding
- Continued breastfeeding through at least 24 months
- Diarrhea and malaria prevention and management
- Handwashing
- Use of family planning services
- Use of maternal health services

For each topic, a set of recommended behaviors and their respective micro-behaviors were identified. A series of videos are planned on these priority topics and behaviors, articulating the barriers and motivators for each recommended practice.

Throughout this process, SPRING will work closely with local partners including the Regional Department of Public Health and Digital Green. Using the results of the formative research, the partners will develop a Package of Packages for each video before production. These Packages will contain the key technical and behavioral messages to be shown in the video. They will be the technical basis for the storyboard, which is the guidance for the video production team when they go to the field for filming.

1. Background and Objectives

In 2013, the USAID Global Health Bureau asked the Strengthening Partnerships, Results, and Innovations in Nutrition Globally (SPRING) project to collaborate with and provide specific nutrition- and hygiene-related social and behavioral change communications (SBCC) to support the Resilience and Economic Growth in the Sahel–Enhanced Resilience (REGIS-ER) project. Awarded to a consortium led by the NCBA Cooperative League of the USA (CLUSA) International, the REGIS-ER project's goal is to increase the "resilience of chronically vulnerable populations in agro-pastoral and marginal agriculture livelihood zones in Niger and Burkina Faso.[3]" The project includes three specific objectives: 1) increasing economic wellbeing, 2) strengthening institutions and governance, and 3) improving health and nutrition status.

In Niger, the collaboration between REGIS-ER and SPRING focuses on Objective 3 - improving health and nutrition status. It emphasizes the promotion of a rational use of food, dietary diversification, and access to new fortified foods, as well as access to health and nutrition services and improved water sources and sanitation.

After consultations with USAID/Niger and stakeholders, SPRING decided to introduce the community video approach, first developed in India with Digital Green for the promotion of agricultural practices, to the resilience context of the Sahel. The collaboration in Niger was intended to further test the feasibility of leveraging the approach for the promotion of key, evidence-based behaviors related to maternal, infant and young child nutrition (MIYCN) and those related to hygiene with a focus on the first 1000 days as a "window of opportunity." Locally produced videos are to be filmed and watched by the local communities, with the idea that people learn better from their neighbors and others just like them than they do from external "specialists."

SPRING was advised to work closely with REGIS-ER and other Food for Peace (FFP) partners: the Livelihoods, Agriculture and Health Interventions in Action (LAHIA) project, with Save the Children as the lead organization, and the Sawki project, with Mercy Corps as the lead organization. The LAHIA project was already using videos for its outreach activities. The approach is also aligned with Mercy Corps' SBCC strategy. All three partners had received grants from USAID to work in the fields of livelihoods, governance, natural resource management and health, nutrition and WASH and this collaboration aimed at strengthening and consolidating their SBCC work in the field of MIYCN.

SPRING carried out a situational analysis and formative research to inform the content of MIYCN videos to be filmed in the commune of Guidan Roumdji and disseminated in the communes of Guidan Roumdji and Aguie, where the partners were implementing projects.

Depending on the villages, different types of community groups participated in focus group discussions (FGDs). The team led a series of these discussions with adolescents in safe spaces group, pregnant and lactating women in mother-to-mother support groups, women in savings groups, men in "écoles des maris"[4] husbands schools, and men and women together in small community groups.

To guide the MIYCN-focused video production and dissemination, the SPRING/Digital Green project's team sought to understand the current nutrition and hygiene practices during the first 1000 days, as well as the socio-cultural and economic context. Results of the situational analysis and formative research aimed to clarify: 1) key

[3] USAID/Senegal. 2013. Resilience and Economic Growth in the Sahel - Enhanced Resilience (REGIS-ER). RFA-685-13-000003, issued March 29, 2013.

[4] Modeled on the United Nations Population Fund (UNFPA) approach

target groups; 2) selected priority behaviors that can be promoted by community videos; and 3) how best to use videos to promote behavior change. The specific objectives of the research were to identify:

1. Existing family relationships in terms of decision-making: Who makes decisions regarding nutrition? (Mothers? Mothers -in-law? Husbands?). Who makes decisions regarding health? How does gender influence what is happening at household level regarding MIYCN?
2. The current MIYCN practices and barriers that need to be addressed such as food misconceptions (taboos); nutritional knowledge and practices of children under two years of age; who are those individuals influencing these practices.
3. The major nutritional issues adolescent girls and women face, such as societal structures/taboos/barriers, as well as promising practices on which to build.
4. Existing handwashing practices and determinants.
5. Households/individuals with positive behaviors who might be featured in the videos, and the motivators for their deviance from the norm.

2. Methodology

Prior to developing the formative research protocol, SPRING conducted a desk review—including both peer-reviewed and gray literature—related to MIYCN and WASH practices in Niger, with a focus on the Maradi region. Despite the large amount of information available, there were still a number of gaps related to priority MIYCN practices. Therefore, the formative research was conducted to delve deeper into barriers and enablers of these priority practices.

The methodology was adapted from the SPRING/Digital Green Community Video for Nutrition Guide[5] developed in Keonjhar, India to suit the context of Maradi, Niger. The formative research protocol, as submitted to the Institutional Review Board (IRB), can be found in Annex 1.

Fifteen villages located in the Guidan Roumdji commune were considered for sampling. According to prior formative research conducted by Save the Children in 52 Maradi villages, only very minor differences were found between villages (LAHIA 2013). Field staff in Guidan Roumdji confirmed that there were almost no cultural or other differences across the 15 villages. In Guidan Alkali a total of 51 village members participated in focus group discussions while in Hannou Gazané 70 members participated. A total of 12 in depth interviews were conducted with four women, four men, and four adolescent girls. Three criteria were considered when choosing the key informants:

1. They participated in well-established community groups
2. The community health worker and lead mother in the village were enthusiastic community volunteers
3. The village chiefs were welcoming of the research team and partners.

Summary of Informants for Formative Research

Table 2. Summary of Informants and Tools for Conducting Formative Research

Informants	Lactating mothers with infants under 6 months of age	Lactating mothers with young children between six and 24 months of age	Mothers-in-law	Fathers of children <2 yrs	Adolescent girls	Total
FGDs	2	2	2	2	2	10
IDIs	4		-	4	4	12

SPRING was responsible for drafting the formative research protocol and tools, and a SPRING team member served as the research manager. All tools were translated into Hausa although some of the discussion group mediators preferred to use the English versions as they had not learned to read Hausa in school and it is primarily an oral language in Niger. The tools were pretested and revised during the one-day training of the research team. While in the field, more revisions were made to the tools, in order to capture the participants' feedback and contextual realities.

The formative research team consisted of men and women from the three USAID-funded projects in Maradi. Each team had four members: one local agent to plan logistics, one mediator, one note-taker and one observer. It was responsible for conducting the focus group discussions and the in-depth interviews in their respective villages.

[5] Community Video for Nutrition Guide https://www.spring-nutrition.org/publications/series/community-video-nutrition-guide

Below is a description of the number of participants in each focus group discussion (per group and per village):

Table 3. Number of Formative Research Participants

Focus Group	Village	
	Guidan Alkali	Hannou Gazané
1. Breastfeeding women with infants under six months of age	9	12
2. Breastfeeding women with young children between six and 24 months of age	11	17
3. Grandmothers with grand-children under 24 months of age	10	15
4. Fathers with young children under 24 months of age	12	15
5. Adolescent girls between 16 and 18 years old[6]	9	11
Total participants	**51**	**70**

After carrying out the FGDs, two members of groups 1, 4 and 5 mentioned above, were interviewed individually. The team leader conducted an additional interview with the Sawki's agriculture project in order to learn Maradi's seasonal calendar. (See Annex 5.)

[6] These were the girls who are part of an adolescent group. Many of them were already married, but, except for one girl with a baby, none had children.

3. Situation Analysis

3.1. The Maradi Context

When Save the Children carried out formative research in Maradi in 2013, it had anticipated that the beliefs, perceptions, and practices observed in five communes in three departments of Maradi would differ from one commune to the next. However, their research results showed strong similarities between the beliefs, perceptions and practices observed. This is in part due to the heterogeneity of the population in the region, predominantly Hausa, together with some groups such as Peulh and Touareg[7] (LAHIA 2013).

3.1.1. Environment

With an area of 13, 600 sq. miles and a population of 3.1 million, the Maradi region lies in the Sahel, a zone of transition in Africa, between the Sahara Desert to the north and the Sudanian Savanna to the south. Having a semi-arid climate, the Sahel is covered mostly in grassland and savanna, with areas of woodland and shrubland.

3.1.2. Population Characteristics

The average household in Maradi includes approximately seven household members (USAID 2014). About half of all households include children under the age of 24 months. The majority of household heads are male (94 percent), and 88 percent of household heads have no formal education and are illiterate. Almost all households (91 percent) include an adult male and female. A challenge and one of the main factors contributing to high levels of stunting in Niger, is the very high rate of child marriage, among the highest in the world, with one out of three girls marrying by age 15 (Mebrahtu 2012). The DHS 2012 calculated that the mean age of marriage for women is 15.3 years in Maradi (vs 19.5 years in Niamey). Men get married at 24.6 years on average. Fifty two percent of the women interviewed in Maradi lived in a polygamous household (INS 2012).

3.1.3. Seasonal Labor Migration

Seasonal labor migration plays a significant role in the lives of people in Niger, primarily as a coping strategy for food insecurity and chronic poverty, and for increasing their income. Fifty to 70 percent of men migrate: internally to larger cities within Niger and externally to neighboring countries (Camber Collective 2014). Interviews found internal migration to be seasonal, with the vast majority taking place after the harvest and storage of crops (after January, and return May/June before the first rains). Only successful businessmen remain in their communities.

Even though this might bring extra income to certain families, some individuals indicated that men's migration places added stress on the household, in particular on women, who then must bear the sole burden of caring for the household (Camber Collective 2014).

> *They can [leave] without sending any money for us during six months, so it is the duty of the woman to feed the household in any way she can…. It is the role of the woman to feed all the family; she must look for money by any means because the husband is not around (Camber Collective, women in Tounkourma).*

When the man is absent, the following persons are responsible for running the household (making decisions on food distribution, buying of soap, buying of extra food etc.): his mother (if she is in good health), the first wife, the father of the man, a friend of the man (businessmen do not migrate) or a brother of the man (Hamani 2013).

[7] Not necessarily using the Tamasheq language as many groups self-identify as Touareg but are, for all purposes, living like the Hausa.

Therefore depending on the relationship of this assigned person with the other family members, and especially the other wives and their children, this can create serious disparities in household distribution of foods and goods.

3.1.4. Gender

Partly due to the Muslim religion, partly because of culture, men are generally only accountable to other men - their peers and elders. Women are not expected to articulate their needs or the needs of their children and in Hausa culture, it is considered shameful for a wife to make demands.

In regards to marriage, 48.4 percent of the population in Maradi is monogamous compared to 63.7 percent nationwide. As soon as a man has climbed up the social or wealth ladder, he is expected to take a second, third, and even fourth wife. In rural areas, the first wife is chosen by the man's parents during childhood and she is usually a person related to the family (like a cousin). This can cause problems as the mother-in-law and the first wife are often seen as "accomplices", hence triggering jealously among other wives. However, there are rules of rotation which often prevent problems (Hamani 2013, Banque Mondiale 2014). The most common rotation method is giving another wife the responsibility of cooking for the entire extended household as well as sleeping with the man, every other day (SPRING).

> *One woman who had four sets of twins (eight children) said: "I will not stop having more children, as I get more affection and attention from my husband when having young children."*

Early marriage is increasing in Maradi due to poverty (Camber Collective 2014). According to a gender study, parents feel that sending girls to schools leads to promiscuity, marriage is a surer path to a life without shame (Banque Mondiale 2014). After marriage, men establish a home within close range of his parents' compound and the wife joins this household (USAID 2014).

Gender roles and responsibilities are clearly defined and are reflected in everyday life in Maradi. Men are the heads of households and primary decision makers on all matters related to the household. This includes decisions about food for consumption and other utilization, health care, economic activity, and children's education. Women have to ask their husband to go out of the house (Banque Mondiale 2014). Men and women have separate resources, including livestock and sometimes land, although men can ask to "borrow money" from their wives when he does not have enough (Banque Mondiale 2014). Women have their own livestock, which the man can buy from his wife if, for example, he cannot provide sufficient food or health care for a child.

Prescribed gender roles by division of labor within the household and livelihood activity are sharply defined in the majority of Sahelian communities. Adult men typically engage in agriculture and young men in animal husbandry, while adult women engage in the harvest and the sale of food products, and young women are responsible for collecting wood for fuel as well as water used by the household. However, it is also common, particularly in Maradi, for women to have their own small allotments of land where they might grow food for household consumption, even though the man often decides what to do with the harvest. Women are responsible for rearing small animals such as goats, while men rear larger animals such as cows and bulls. Within the household, only the women are responsible for child care and preparing food, with female youths and children assisting in food preparation and with both female and male youths assisting in the collection of wood and water. Young children are also responsible for providing care to their younger siblings. When mothers-in-law are in good health, they also help with the typical female tasks but generally not with cooking as that is the wife's[8] role (USAID 2014).

[8] The wife whose turn it is.

In Hausa culture there are long-standing traditions governing the storage and partition of the cereal stock. Men are responsible for providing his wives with cereals to prepare the two staple foods – hura and tuwo.[9] Women are responsible for finding a means to prepare the accompanying sauce or anything else (discussions with staff).

Who makes financial decisions in the family appears to differ between families depending, in part, on who has earned the money and who is on-site when the money needs to be spent. In general, it is the male head of household who is responsible for feeding the family, which means providing the cereal stock for the preparation of meals; and the income from women's small businesses can be spent however the men see fit or can be used to feed the family if necessary. However, some men acknowledged that they make these decisions in conjunction with their wife or wives. Some women also said that her husband decides on the harvest she produces in her "own" plot of land (USAID 2014).

According to different sources, men are an important group to involve in health, as they are the decision makers in the households (LAHIA 2013, PASAM-TAI 2013), even for behaviors like exclusive breastfeeding (LAHIA 2013). For handwashing, the same LAHIA report mentions the importance of creating a dialogue between men and women, "to facilitate the implication of women in decision making, and to achieve a great responsibility for them" (LAHIA 2013).

3.1.5. Poverty

The majority of Nigeriens live near or below the poverty line, which significantly limits the population's ability to access nutritious food. Incomes are insufficient for the poor to purchase food despite availability. Particularly in years with low rainfall, much of the annual harvest, especially high value crops like groundnuts and legumes, is consumed or sold to buy other foods before the end of the lean season, resulting in both insufficient availability for household feeding and a lack of capital for the purchasing of inputs for the following year. Because Niger is landlocked, food prices vary significantly with currency fluctuations (IFAD n.d.).

Poverty is a significant challenge in Maradi. The household survey found that almost two-thirds (64 percent) of the population in the survey areas is currently living in extreme poverty (less than USD $1.25 per day). Daily per capita expenditures average, USD $1.33 per day, per person. Participants in the study identified very few sources of income. The two income sources mentioned most frequently are agriculture (including the sale of crops, the sale of animals, and casual labor on farms),[10] and remittances (USAID 2014).

3.1.6. Food Security

Niger is one of the world's least developed nations. Less than one-third of Nigerien adults are literate, and more than three-fourths of the population lives on less than USD $2 per day (IFAD n.d.). Food crises are common in the region, and much of the population suffers from chronic malnutrition (USAID 2014).

Agriculture is central to the Nigerien economy, and more so in Maradi, which is known as the country's bread basket and economic hub due to its close proximity to Nigeria. The Maradi area is generally a surplus producer of millet and cowpeas, and is an important commercial zone due to its geographic and cultural relationship with Nigeria. However, the rural poor are net consumers of food staples. Many rural families depend on low-yield, small-scale agriculture with insufficient productivity to meet the needs of their households (USAID 2014).

[9] Both made with millet. Fura (boule in French) = millet mixed with milk, Tuwo = millet mixed with water

[10] Those men who have nothing to sell and have no more food left from the last harvest must sell their labor to more well off farmers or merchants.

Labor is limited and most Nigerien farmers rely on their wives and children for cultivating and controlling weeds and pests. Normally, the leanest period for Nigerien farmers begins in June, when the family runs out of last year's harvest, although food shortages for many families often start sooner (IRFC). The lean period coincides with the rainy season and runs through September or October.

Several coping strategies are utilized by individuals and households that experience food insecurity, and in this context, they are regularly used during the period following the harvest, leading up through the lean season. First is a food-specific strategy to reduce food consumption to once or twice a day. As a second strategy, respondents mentioned selling small animals such as goats or other small goods produced, such as beans. With money from these sales, individuals then purchase millet and other foods needed for their households. The third coping strategy involves the search for income sources, such as working as hired labor on someone else's farm or casual labor. The biggest trend, however, is labor migration during the dry season, immediately following the end of harvest (USAID 2014).

In a baseline survey by USAID, results show that hunger is a challenge for many households in the region, even though food supplies were predicted to be adequate during the survey months. Nearly one-third (29 percent) of households surveyed suffered from moderate or severe hunger. The hunger models indicated that the drivers of household hunger are related to food access and availability, which are further influenced by seasonal conditions and income sources. Qualitative data indicated that, despite the availability of food in markets, lack of income prevents individuals from accessing these foods and that crops produced for household consumption are generally insufficient to meet the needs of the household for the entire year. Additionally households are motivated to sell their most nutritious food crops so that they can increase their cereal stocks to feed a greater number of individuals (USAID 2014).

3.1.7. Household Dietary Diversity

USAID's baseline survey found an overall Household Dietary Diversity Score (HDDS) score of 3.4, which indicates poor dietary diversity during 24 hours before the survey was conducted with only three to four of the 12 food groups consumed, on average. Almost all households consume foods made from cereal grains such as millet, sorghum, maize, rice, and/or wheat. Less than 20 percent of households consume meat or poultry, and less than 10 percent consume eggs or fish. The HDDS as a measure of food access and socioeconomic status indicates that the population in the program areas has limited means to access diverse foods.

The qualitative baseline data suggested a direct relationship between seasons and the types of food produced for consumption and food purchased. In some areas where the water table is high and gardening is sustainable, home vegetables, such as potatoes, peppers, and tomatoes, are also grown for household consumption. However, the majority of vegetables consumed are foraged from trees and fields in the vicinity. When asked what type of vegetables are foraged, one respondent stated, "There are the leaves of trees which serve us as vegetables [such as]…ridi [sesame leaves], rama [sorrel], tafassa." Most households do not have the means to purchase meats, fruits, and vegetables, and only purchase them occasionally (USAID 2014).

The vast majority of participants in both regions indicated millet as the primary type of food consumed in all seasons in various forms of preparation.[11] Other foods less frequently consumed include sorghum, cassava flour, and occasionally vegetables, niébé (black-eyed peas), milk, meat, fish, eggs, peanuts, rice, macaroni, and couscous (USAID 2014).

[11] millet pap (lalame), millet ball (dawo) – often fermented - mixed with milk (boule = fura), millet mixed with water (pate=tuwo), and so forth

3.1.8. Water, Sanitation, and Hygiene

Access to improved water sources and proper sanitation were among the biggest challenges in the survey population in the USAID baseline (USAID 2014). More than three quarters of households (77 percent) reported that they do nothing to make water safer to drink. Only nine percent of households reported using an improved sanitation facility, in most cases consisting of a pit latrine with a slab. Interviews revealed that open defecation in the bush is common in most communities, even where some latrines exist in villages. Although respondents reported using the bush or common village basic pit latrines, they also reported a lack of cleanliness in the communal latrines (USAID 2014).

Interviewers from the household survey observed the presence of water and soap, detergent, or another cleansing agent at the place for handwashing in only 15 percent of households. However, almost all respondents (90 percent) correctly identified that washing hands is critical before eating. Few were able to identify any of the other four other critical moments for handwashing: after defecation (16 percent), after cleaning a child's bottom (13 percent), before preparing food (7 percent), and before feeding a child (7 percent) (USAID 2014).

3.1.9. Selling vs. Consumption Practices

Qualitative analysis of the USAID baseline data indicated farmers sell surplus millet and other crops after calculating annual needs. Respondents indicated that livestock and poultry serve as a source of income and savings and that crops produced for household consumption are generally insufficient to meet the needs of the household for the entire year. Typically, households eat food produced only a few months of the year—in some cases, only for one to three months after harvest.

Given that there is a standard to eat millet paste with sauce, there isn't much of a decision to be made. The men control the cereal stocks and women forage for whatever else they can add to the meal to make it more robust. Men are the decision makers when it comes to the utilization of foods within the household.

As a general rule: the men are responsible for providing the amount of staple food given from his store, the salt and some extra ingredients for the sauce which accompanies the staple (e.g. tomato paste, onion, dried okra) – which he can buy himself at the market or send a woman from the household. After this, whatever food is still lacking for the sauce, the women will provide, buying it, getting it from the garden or gathering wild foods. Most often, there is no money to buy extra ingredients and women are solely responsible to look for the ingredients for the sauce (conversations with staff).

3.1.10. Intra-household Food Distribution

The majority of participants in the USAID-led baseline reported that everyone in the household ate the same foods, including children and women. Men and women reportedly ate the same types of food and in the same quantity. In some cases, when there was sufficient means, respondents indicated that vegetables, fruits, beans, milk, eggs, and meat were purchased in markets for children and women (USAID 2014). Milk is sometimes purchased but meat, fruit and vegetables are seldom purchased. Men often have their outside of the household while they are with their friends in the markets (conversations with staff).

The woman who is cooking that day (i.e. where the man will spend the night), will divide the food, based on the man's morning instructions. The man would have estimated portion for each wife, based on the number of children she has. The man gets his personal bowl, the older children get one bowl of food to share and all wives, and often neighboring adult women eat together from a shared bowl. The younger children (below one or one and a half years old) eat with their mothers (SPRING).

3.1.11. Women's Health and Nutrition

USAID's anthropometry results indicated nutritional challenges for women ages 15-49 in the program areas. Dietary diversity scores indicate that their diets lack nutritionally diverse foods, and while 74 percent of women ages 15-49 in the survey population have a body mass index (BMI) within the normal range, 20 percent are underweight, and 5 percent are moderately to severely underweight—indicating inadequate health status and/or caloric intake. On daily average, women consume about 3.3 of the nine basic food groups researched in this study. Grains, roots, and tubers (97 percent) and green leafy vitamin A-rich vegetables (76 percent) are the most frequently consumed food groups. Dietary intake of protein is lacking: 55 percent consumed pulses, 38 percent milk or milk products, 17 percent of women consumed flesh foods, and 6percent consumed other protein-rich foods such as organ meat or eggs in the 24 hours preceding the survey (USAID 2014). Women are extremely active and engage in labor that puts extraordinary demands on their bodies; they burn significant calories as they carry heavy gourds of water, pound millet, and breastfeed. (observations).

Over half (52 percent) of mothers of children under 24 months said they attended four or more antenatal visits; a higher rate than that reported in the 2006 DHS of 11.1 percent. Qualitative study findings suggest that there is an increase in the number of women delivering in health centers; however, many respondents reported giving birth at home with traditional midwives, despite strict government fines of 5,000 francs and a legal prohibition against home births. Women predominantly reported using health centers for prenatal, delivery, and postnatal care when health centers are available in their communities; however, women living far from clinics find it difficult to use these services.

When asked to list illnesses that affect their communities, an overwhelming majority of people across all regions reported malaria and diarrhea to be the most common illnesses affecting both adults and children. Other illnesses described were colds and fevers, particularly during the rainy season, eye and ear infections, hemorrhoids, tooth pain, stomach ulcers, heart disease, paralysis, fistula, skin disease, and chicken pox. A discussion of malnutrition as the main cause for many illnesses came up frequently, but not as an illness itself (USAID 2014).

Although there are some cases where women make decisions about when to seek medical attention for themselves or their children, the majority of respondents indicated that male heads of households are the primary decision makers, and their decision-making authority includes the issue of where women give birth (USAID 2014).

3.1.12. Children's Health and Nutrition

Food utilization is poor in Niger due to unsuitable food choices and feeding patterns and poor health and sanitation practices. Less than a quarter of children under six months of age are exclusively breastfed (Coen 2010), and introduction of complementary foods is generally not in line with recommended practices (FEWS NET 2006). Young children have particularly low levels of diversity in their diets.

USAID baseline data indicated that more than half (58 percent) of the children under five years of age in the survey population showed signs of moderate and severe stunting. This rate is comparable to that reported in the most recent 2012 DHS in Maradi where 54 percent of children under five years of age were stunted. The USAID baseline found malnutrition rates to be negatively related with access to agriculture land or raising livestock.

USAID's household survey results indicate that 43 percent of children 0-5 months were exclusively breastfed in areas where the Food for Peace programs will be implemented, with no differences between program areas and none between male and female children. The prevalence of exclusive breastfeeding is highest in the two- to three-month range (54 percent) and gradually decreases with each month thereafter. About 23 percent of children in

the 18- to 23-month age range are no longer breastfeeding. At six to eight months, 55 percent of children are breastfeeding with the addition of complementary foods, with the proportion increasing with age. However, only eight percent of children 6-23 months are receiving a minimum acceptable diet (MAD). The majority of qualitative respondents discussed predominant breastfeeding for children under six months and also discussed breastfeeding as part of their traditional culture (USAID 2014). The DHS indicates that 16.7 percent of children 9-11 months and 8.2 percent of children between 12 and 17 months had not started taking semi-solids or solids yet (INS 2012).

USAID's household survey also found that 14 percent of all children under age five had diarrhea in the two weeks preceding the survey, and 19 percent of this subset had blood in their stools. The 2012 DHS reported a national rate of diarrhea in Niger of 14.1 percent. Caretakers sought advice or treatment for almost two-thirds of the children with diarrhea (64 percent), and more than three-quarters of children with diarrhea were treated with oral rehydration therapy (ORT), compared to the 45 percent found in the DHS 2012. Respondents reported an improvement in the general health of their communities in recent years. However, respondents frequently reported the need for health facilities, community health care workers, and medicine (USAID 2014).

3.1.13. Aspirations

According to the gender study, people consider others as having succeeded socio-economically when they do not need to do rough household work anymore (like weeding or harvesting.). Men have the following aspirations for their children: more opportunities, money and a better life. Often parents invest in one son, for schooling or for migration. Girls themselves would like to become teachers, lawyers or doctors, showing that they are choosing another way of life than their mothers. Boys aspire to become lawyers, doctors, bookkeepers or to go into politics (Banque Mondiale 2014).

4. Formative Research Findings

The formative research aimed at clarifying:1) key target groups; 2) selected priority behaviors that can be promoted by community videos; and 3) how best to use videos to promote behavior change. Specifically, the research objectives were to identify:

1. Existing family relationships in terms of decision-making: Who makes decisions regarding nutrition? (Mothers? Mothers -in-law? Husbands?). Who makes decisions regarding health? How does gender influence what is happening at household level regarding MIYCN?
2. The current MIYCN practices and barriers that need to be addressed such as food misconceptions (taboos); nutritional knowledge and practices of children under two years of age; who are those individuals influencing these practices.
3. The major nutritional issues adolescent girls and women face (societal structures / taboos / barriers / promising practices to build upon).
4. Existing handwashing practices and determinants.
5. Positive deviant households / individuals who might be featured in the videos, and identify their motivators for their current behavior.

The research carried out by the SPRING project was able to highlight the following priority themes to be further developed into community videos. The results also identified specific practices, barriers, and recommendations to include for each video.

1. Women's Nutrition during the First 1000 Days

Recommended behaviors during pregnancy:

1. Eating one small extra meal each day
2. Administrating and taking of iron/folic tablets
3. Reducing workload

Recommended behavior during breastfeeding:

1. Eating two small extra meals each day

Current Practices

Men's support for their wives is practically non-existent regarding nutrition and household level chores, especially for breastfeeding women. Women often do not support other co-wives because of jealousy, especially of the younger wives who may be the husband's favorites.

However, there seems to be an awareness of the need to spare pregnant women from a heavy workload and to increase their intake of quality food. Some men do help their pregnant wives fetching wood and water. Men are the ones determining intra-household food distribution, followed by the mother-in-law of his first wife in case of his absence. Men appear to be influential individuals in the uptake of a new behavior. This behavior is a very sensitive one, as men in polygamous households need to maintain peace within the household, and giving one pregnant woman more food than a non-pregnant woman might cause intra-household problems. Therefore we would want to stress the need of discussions involving the whole extended family.

Women strive to be good religious women: meals are prepared less frequently during fasting season and most women fast during Ramadan, even when they are pregnant or breastfeeding.

For breastfeeding women, there is not such a strong awareness of the need for extra food, although people believe that the milk of women who do not eat enough is of a bad quality.

Barriers Identified

Awareness about women's nutritional needs during breastfeeding is low; women have little knowledge of how to overcome the nausea that might occur when taking iron-folic acid tablets during pregnancy; polygamy makes it difficult to provide different foods for one pregnant or breastfeeding wife compared to the other. Even though pregnant women are not obliged to fast during religious holidays, they often do because of social pressure.

Recommendations for Video Production

To help lower the socially created expectation of having to fast, we would recommend an Imam supporting his wives to not fast during pregnancy and breastfeeding. We would also encourage and portray couples dialogue in the videos.

Men asked for practical tips on how to better determine and control intra-household distribution, an excellent topic for videos.

To address the nausea related to iron-folate tablets, the video could show a woman taking the pills at night, just before going to bed, and with some food.

Our recommendations are to include breastfeeding in the video on maternal nutrition, raising awareness, providing practical tips on how to support breastfeeding women, and showing an Imam talking about his wife who does not fast during the first six months of breastfeeding. However, we need to stress the importance of extra food to maintain the woman's body and prevent her from feeling hungry.

2. Exclusive Breastfeeding for the First Six Months

Recommended behaviors:

1. Early initiation of breastfeeding
2. Placing the newborn on the breast within one hour of delivery
3. Giving no pre-lacteal feeds; No bottle-feeding
4. Practicing EBF from birth until six months of age
5. Emptying both breasts at each feeding;
6. Frequent breastfeeding – about 10 times/24 hours
7. Good positioning and attachment

Current Practices

Although almost all women feed colostrum to their babies, not all do this within the hour after giving birth. Women give pre-lacteal liquids to the newborn instead of the colostrum to eliminate the first black stools and they often give water and herbal teas before babies are six months old, which replaces breastmilk consumption and can give the child diarrhea. Pressured to return to work, women may rush feedings and not empty both breasts.

People in Maradi believe that a baby needs water (during hot weather) as well as decoctions (a local herbal tea to protect against illnesses). To address widespread and deeply rooted beliefs, we should find mothers who did not administer anything other than breast milk during the first six months of their babies' lives, in order to illustrate that exclusive breastfeeding does not cause death. It is also recommended to emphasize that goat's milk is valuable for both pregnant and lactating women and children 6-23 months. As explained under "early initiation", women also need to be convinced that breast milk is always good, even after the mother has been outside in the sun, is hungry, and even during pregnancy.

The issue about women's high workload should again be addressed by trying to get other community members, especially men, mothers-in-law or other wives, to support breastfeeding women in the household. In the interim, women need practical information on how to take time and sit or lie down to breastfeed, and to feed the infant from both breasts.

Barriers Identified

Even though it is diminishing among respondents, there is a widespread belief that herbal teas are needed to expel the first stools after birth. There is a belief that the first milk might be of a bad quality. Many women do not know that they can increase their milk production by breastfeeding more frequently and many have so much work they may not take time to breastfeed correctly on both breasts. Some may also believe that breast milk can get bad if the mother is pregnant or has been absent and may lead to early cessation of breastfeeding.

Recommendations for Video Production

We recommend that early initiation be mentioned in one of the videos on exclusive breastfeeding, emphasizing that it helps bring in the colostrum which helps to activate the baby's digestive system so the black stools can be eliminated. The video needs to include information that breast milk is always good, and the faster the baby is put on the breast, the faster and the more milk the mother will produce.

As the colostrum of goats and cows is highly valued, we should test the concept that the video might want to include this and also explain its importance for human babies too.

There are lots of issues regarding breastfeeding, related to local beliefs but also to women's high workload, all of which could be addressed through the medium of video by finding positive deviant mothers.

To address the fact that people administer goat milk to newborns because Mohammed also drank it at birth, we recommend finding an Imam who wants to explain that babies drinking goat's milk was acceptable during the time of Mohammed, but that science has now proved that goat's milk is only valuable for young children above 6 months as well as for older children and women.

3. Complementary Feeding

Recommended behaviors:

1. Complementary feeding from 6 until 24 months (Starting at six months, Amount of food offered, Frequency of feeding, Thickness of complementary foods, Diversity of foods, Responsive feeding, Separate plate, Hygiene)

Current Practices

According to the research findings, complementary foods are often not diverse, the consistency is too liquid, and not offered sufficient times a day. Additionally, young children from 6-24 months eat from the family bowl so that

the mother or other caregiver does not know how much an individual child ate; and there is little to no active feeding. No other snacks expect "boule"[12] are left behind for the child and the boule is prepared by adding (non-treated) water.

While it is recognized that people in the Sahel live in very difficult circumstances with very little access to a variety of foods, it is still possible to improve dietary diversity by underlining the importance of drying and storing certain nutrient-rich foods for pregnant and lactating women and children 6-24 months. The drying of certain products already takes place, but it is sold and not used for household consumption (e.g. dried tomato (cowda), dried pepper (tattassey), dried tamarind (tsamia), dried fish/meat, dried okra, dried hibiscus leaves (yakua), dried moringa leaves, dried fruits like dried goruba and other locally available and affordable foods). Also dried groundnut resin[13] (kuli-kuli), dried dates,[14] goat's milk, oil and cow's butter are accessible and can enrich one's diet considerably. These should be shown to be added to the diets of children and women during lean seasons. Men will also need to be sensitized as they are the ones making the decisions regarding what is eaten in the household.

In light of a mother's high workload, we think that all recommendations to prepare baby food should start from the family diet. Staple foods in the Sahel are "boule" (millet porridge) or cereal "pate", which can both easily be mixed with more nutrient-rich ingredients. Boule is already mixed with sugar and milk, and in some instances peanut butter paste. This practice should be encouraged, although it should be stressed to try to give the boule as fresh as possible before the millet ball or the milk is fermented. Fermentation causes the boule to have a sour taste which might not be liked by a baby who then decreases his/her consumption. Another problem with boule is that often untreated water is added. Porridge is more hygienic, if the caretaker's workload can allow her to cook special food for the baby. The pate is always eaten with some kind of sauce; it will need to be stressed that also the very little ones can eat this, but ensuring that the caregiver picks the best pieces from the sauce to mash in into the baby's food. Caretakers need tips on how they can decrease the size of meat, beans, leaves, so that the lack of teeth cannot be an excuse to not give certain types of food to young babies over six months.

There is little data to show how much food children actually consume. All children of a same household receive their food from the same single dish. It is assumed that the little ones receive less food than the older children because they are slower, less dexterous, and more easily distracted. Responsive feeding practices could be done by the mother, but also by alternative caregivers who feed the children when the mother is absent. Practical tips and suggestions are needed, like the special dish exclusively for the baby or explaining to the older sibling where the baby's food is placed for later, which snacks can be taken to the field, how to ensure alternative caretakers have fed the child.

About half of the children are not fed the minimum recommended number of times a day, even though one source claimed that boule is always available in the household throughout the day and throughout seasons. In this case, the problem might be that young children are not able to ask for it, and that signs of hunger are not recognized, or that women are too busy to feed more than 2-3 times per day.

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12 A ball of ground cereal – sometimes fermented, sometimes half-boiled- that is mashed with skimmed fresh milk, milk powder with (untreated) water, or (untreated) water (and sometimes sugar and spices and dates). The "boule" for the family is prepared by all in the same bowl and is drunk with the same ladle.

13 Leftover of peanuts after extracting the oil.

14 Especially consumed during Ramadan, as Mohamed ate a date at his daily break, before eating other foods.

Barriers Identified

Very few seem to be aware that they need to provide special foods and care for their children, especially between the ages of six and 24 months; dried foods are sold rather than kept for the family; and mothers work in the field so other caretakers are responsible for feeding.

Recommendations for Video Production

It will be important to show the preparation of complementary food of the right consistency in the videos. We recommend comparing the thickness needed with the thickness of "pate" eaten at the evening meal with the consistency of the boule given as a snack. Dried foods should also be portrayed as alternative and complementary during more difficult times. Men in the households should be featured as they are the decision makers.

The videos should also encourage caregivers to give young children a special dish so there can be some control on what and how much they eat at each meal as well as in between meals. Additionally, it should be shown that children should be actively fed and encouraged to eat.

In regards to hygiene and its relationship to complementary feeding, handwashing with soap - for both the child and caregiver - before food preparation and feeding should be shown in every video. Addressing hygiene for food preparation should mainly focus on adding boiled/treated water to the boule of the child.

4. Continued Breastfeeding until 24 Months

Recommended behavior

1. Continuing frequent, on demand breastfeeding until 24 months of age and beyond.

Current Practices

Women stop breastfeeding when they become pregnant again. If not pregnant, weaning happens around 18 months depending on the village norm. Despite these norms, it seems that it is mostly the individual choice of the parents. The most common reason for cessation of breastfeeding is a subsequent pregnancy.

Barriers Identified

The belief that the milk of a pregnant woman will make the nursing child ill, perhaps fatally, is strongly held among the Maradi population.

Recommendations for Video Production

Any video mentioning breastfeeding should include a message on breast milk still being OK when the mother is pregnant.

5. Diarrhea and malaria prevention and management

Recommended behaviors:

1. Using preventative health services for children (including vaccinations and regular weighing)
2. Recognizing danger signs and using curative services for malaria and diarrhea
3. Continuing to feed during illness
4. Feeding more after illness.

Current Practices

Malaria and diarrhea are considered "normal" and people do not act when they first see signs; mothers often turn to self-medication to fight the fever and no special diet is administered during and after the illness.

Many misconceptions about diarrhea and malaria continue to exist and parents think that they are a normal part of life, including their children's lives. Parents do not realize the negative impact these illnesses have on children's health, and they often do not seek medical attention, nor do they change feeding habits when the child is sick.

Parents need to pay extra attention to what their children eat during and after illness/diarrhea as they rarely prepare extra or the child's preferred food. No food taboos were found for sick children. However, in the Maradi context, due to the large number of children, it is difficult for some children to be singled out and be given extra or special foods.

Animals are kept inside the compound where people live and children play. In most cases the small ruminants are not tied, and chickens are never kept pinned.

Barriers Identified

There seems little understanding that diarrhea can be prevented, that it is not a part of normal life, and that it can be life threatening for young children. There is often no catch-up feeding after diarrhea. Overall, it seems that the most important barrier to the use of the health care system is the poor quality of care, the inefficiency and the discrimination women face at the health center when not accompanied by a male member of the family.

In the case of malaria, the population understands that fever comes during certain seasons. People know that malaria is caused by mosquitos, but they do not seem to realize that each time someone gets malaria, it has been transmitted by a mosquito. Furthermore, caregivers have no knowledge that a recovering child needs to be fed more than others.

Recommendations For Video Production

Male involvement and explaining why it is important should be promoted in every video.

We therefore recommend a video explaining the link between mosquitos/flies/lack of hygiene with diseases and weight loss, which could lead to a less developed child.

The danger of self-medication for all illnesses should also be highlighted in the video.

A woman accompanied by a male family member will probably receive better and more efficient care and treatment. It would also help the women to adhere better to treatment since medical instructions are often not very clear.

In the video about diarrhea, it should be clarified that children explore their world by putting things in their mouths. This video should show a household where animals and feces (animal and human) are kept away from playing children.

6. Handwashing

Recommended behavior

1. Handwashing with soap and running water at key moments

Current Practices

Handwashing is part of the religious ritual before praying. It is done with running water from the traditional and available "kettle"; using soap is not a habit, even if people know that soap is needed. There are no fixed handwashing stations in crucial living areas (latrines, kitchen).

Despite some knowledge about handwashing, few people wash their hands before/after the key moments.

Using ashes to wash hands was very acceptable to all focus group participants, as ashes are already used for removing difficult stains and dirt. It should be promoted in case of absence of soap, as it is always available.

Barriers Identified

Cost is sometimes mentioned as a barrier, but it is less important than children often playing with soap and animals eating the bars of soap, hence making it expensive. The soap is hidden and not easily accessible for these reasons, and is mostly used to wash the body and clothes.

There are no fixed places where people wash their hands as kettles for handwashing are lying around the compound.

Men are responsible to buy soap, and since they are not very present in the household, they tend to forget.

Handwashing before eating a main meal is more frequent than before a snack.

Recommendations for Video Production

Based on the research results, a video featuring practical tips on how to make water and soap available at places where handwashing is recommended (e.g. after using the latrine, after cleaning the baby's bottom and before preparing food or feeding). The simplest solution to make handwashing with soap accessible would be to establish a handwashing station and encourage tying soap near the kettle, making it accessible for everyone. To protect soap from animals and to make soap cheaper, they can make liquid detergent from washing powder and install pierced plastic water bottle or the soap can be placed in a deep soap holder made from a plastic bottle.

Because men are the decision makers and influence most behaviors in their households, we recommend making them responsible for hand hygiene in the home.

7. Use of Family Planning Services

Recommended behavior

1. Using family planning methods to space children

Current Practices

In the Maradi region, there is low knowledge of family planning although there is much interest. It is not discussed in the households.

The fertility rate in Niger is one of the highest in the world, and polygamy is one of the contributing factors. Women compete amongst each other to have more children. Having another child results in more attention from the husband, which the older wives crave when their husband has younger spouses. Culturally, having many children equates wealth and status, as children are expected to care for their aging parents later in life.

Men and women realize that a high number of little children complicates life, and from both sides there is much interest in family planning, especially with the objective of spacing births. According to the DHS the fertility rate is

higher than the ideal numbers of children, so there is some space to promote family planning. Men have asked practical tips on how to talk to their wives as there is no discussion among couples.

Barriers Identified

There is a lack of understanding about benefits, effects, and side effects of family planning methods. Often, lactation amenorrhea method (LAM) cannot work because of suboptimal breastfeeding practices. Strongly anchored religious beliefs attribute the number of children and the frequency of births to the work of Allah.

Recommendations for Video Production

The first recommendation is to feature couples having discussions around family planning in all videos. The use of champion couples can be explored to show families with children whose births were well-spaced.

Exclusive breastfeeding in the first six months should be mentioned as a family planning method (LAM), and it should also be mentioned in the video on the "1000 days", as birth intervals of less than three years is correlated to higher child mortality and poor health of women and children.

8. Use of Maternal Health Services

Recommended behaviors

1. Pregnant women going for at least four prenatal visits
2. Women delivering at the health facility

Prenatal care is apparently on the rise in Maradi, especially for the first prenatal visit. However, there is a drop after the first visit if the mother perceives the pregnancy to be going well. Many of the other barriers to the use of prenatal services are external and seem not to be related to the willingness to practice the behavior. Even if more women would want to practice the behavior, it would be difficult to have an effect if the barriers related to the weak health care system are not addressed. Therefore we do not recommend tackling this behavior through video alone.

Similarly when it comes to encouraging women to deliver at health facilities, many of the barriers are external: the weak health care system seems to be the main cause of low delivery rates in their premises. Therefore we do not recommend this as a key behavior to address through video.

5. Conclusions

The formative research confirmed that nutrition, health (including intra-household allocation of food and health resources), and WASH behaviors must be understood within the range of constraints under which fathers, mothers, and other caregivers operate. These include chronic livelihood insecurity, with the concomitant need to maintain productive assets and social and symbolic capital. The development of community videos should take into account power relations at the local household level, polygamy, and widespread migration. In order for behavior change to happen in this environment, it needs to go hand in hand with social change (i.e. increased dialogue between husbands and wives, greater male involvement, and women's decision making). The workload of women in Maradi is undeniable with household chores, childcare, and farming falling on their shoulders. Even though Maradi is the breadbasket of Niger, malnutrition rates will remain high if women's workload is not addressed, with more support from their immediate environment and the community as a whole. Additionally, attempts must be made to allow women to communicate their needs within the household without being penalized. The situation of women in Niger, and especially Maradi, is one of worst of the world, according to *Save the Children's 2012 Mother's Index* which compares the well-being of mothers and children in 165 countries, Niger ranks last (LAHIA 2013).

Problems related to polygamy, religion, or the very high fertility rates add to the difficult environment not necessarily conducive or ready to embrace change. However, if tackled through the community video medium, crucial initial social and behavioral changes might be possible to begin to take hold.

Eight priority topics for videos were highlighted as a result of the formative research:

- Women's nutrition in the first 1000 days
- Exclusive breastfeeding for the first 6 month
- Complementary feeding
- Continued breastfeeding until 24 months
- Diarrhea and malaria prevention and management
- Handwashing
- Use of family planning services
- Use of maternal health services

SPRING will need to plan on meeting with local partners, including the Regional Department of Public Health, and DG in order to discuss the proposed video topics. Collaboratively, SPRING/DG should develop a Package of Practices (POPs) for each of the proposed priority video topics which will serve as a guide providing specific technical details regarding the recommended MIYCN and hygiene behaviors and micro-behaviors to promote. These POPs contain the key messages to be shown in the video, some ideas for a storyline as well as the questions and answers, called annotations, to appear in the video. The POPs form the technical basis for the storyboard, which is the guidance for the video production team when going to the field and shoot the video.

To ensure cultural sensitivity while stimulating behavior and social change, we recommend that all videos showcase the following:

- Each video should show a man with several wives, but supporting and respecting each one of them

- Each wife should have several children but all well-spaced
- The mother-in-law should live in the household and play an active role in the raising of all wives' children and provide support to her daughters-in-law.
- Older wives should be shown supporting younger wives.
- Videos should portray the age-related hierarchy, showing older women (mothers-in-law or older wives) as role models, having something to teach and providing specific support to the younger ones.

Notable findings from the formative research include:

- Handwashing is widely practiced for religious reasons but that there are no fixed stations and people do not typically use soap.
- Women receive no special care or food while pregnant or lactating and issues of multiple wives and favoritism are important barriers to adequate women's nutrition.
- Complementary foods are not diverse and too watery; young children from 6-24 months eat from the family bowl so that the mother or other caregiver does not know how much an individual child ate.
- Breastmilk is often supplemented in the first 6 months and breastfeeding ceases when the woman becomes pregnant again.
- There is high interest and unmet need for family planning but lack of couple communication is a major barrier.
- Malaria and diarrhea are both considered normal and many don't know that these diseases are preventable.

More specifically, the videos should:

- Provide solutions to the goats eating the handwashing soap, provide memory aids to remind people to wash hands.
- Show how one can give a child a separate plate without harming cultural practices and how to be responsive to the feeding needs of a young child.
- Show giving newborn colostrum, and that it is not harmful.
- Address beliefs surrounding breast milk: not having enough and spoiling with heat or pregnancy.
- Show examples of healthy babies at six months who have not drunk a drop of water
- Show examples on how to diversify a young child's diet, taking into account the difficult local context
- Show how to increase dietary frequency using practical examples
- Focus on the diet of women and how to adapt it according to the age and reproductive stage
- Address the barrier stating that some diarrhea is part of normal life and does not need treatment, combine with poor sanitation linked to animal husbandry in and around the home.
- Show how intra-household discussions on harvest planning might improve the nutritional status of the family.

These results of the formative research are fundamental to the adaptation of the approach, informing the selection of priority nutrition behaviors for the videos, the adaptation of a series of nutrition sensitization trainings for key community agents, the overall strategy for the production and dissemination of the nutrition videos, and the verification points for the behavioral adoptions tracking plan.

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Annex 1. SPRING/Niger Formative Research Protocol, as submitted to Institutional Review Board (IRB)

SPRING/Niger Formative Research Protocol

October 24, 2014

Introduction

The Strengthening Partnerships, Results and Innovations in Nutrition Globally Project (SPRING) has a commitment to identifying and testing proven or highly promising social and behavior change communication (SBCC) tools and models. Beginning in the fall of 2012, SPRING collaborated with Digital Green in testing the feasibility of using their innovative "human mediated digital learning approach" - previously focused on the promotion of improved agricultural behaviors - for the promotion of high impact maternal, infant and young child nutrition (MIYCN) and hygiene behaviors in Keonjhar District of Odisha, India. Specific MIYCN content was introduced through community videos produced and disseminated by a local NGO to women farmers participating in self-help groups (SHGs). The results of the feasibility study, conducted by the International Food Policy Research Institute (IFPRI) and the London School of Tropical Medicine and Hygiene, were very supportive of scaling the collaborative model in India and in other contexts.

This SPRING/Digital Green collaborative approach is currently being adapted in the Maradi region of Niger in partnership with the Resilience and Economic Growth in the Sahel – Enhanced Resilience Program (REGIS-ER), Save the Children, and Mercy Corps. The objective of the proposed one year pilot project is to establish the feasibility, effectiveness and scalability of this collaborative model, and to also document the process and costs associated with its adaptation in the resilience context of the Sahel. This document describes the formative research, to be conducted during the first phase of the proposed one year collaboration.

Background

With the proposed pilot project in the Maradi region of Niger, SPRING and Digital Green plan to evaluate whether or not the facilitated community video approach that was successfully tested in India can also work in the resilience context of Niger. Prior to proposing a design and location for the pilot, SPRING and Digital Green conducted a joint scoping visit in July, during which they met with key stakeholders, including USAID, and participated in a field visit to Tillabery South, four hours by car from Niamey. The approach was deemed feasible for that region of Niger. After discussions with USAID, and the expression of interest by the Food for Peace (FFP) partners, a recommendation was made by the REGIS-ER management to implement the pilot in two communes in Maradi, in collaboration with Mercy Corps and Save the Children. The pilot will be designed for future scale-up by all partners to other communes in Maradi and to other regions of Niger.

The proposed pilot takes into account the feasibility study results and other program learnings from the SPRING/Digital Green collaborative approach in India, and applies them to the design of a similar but expanded collaboration focused on the use of facilitated community video for the promotion of high impact MIYCN and hygiene behaviors in the resilience context of Niger. This pilot will be conducted in 80 community groups, located in 20 villages, over the course of one year, beginning in October 2014. Four existing groups ranging from 10 to 25 members have been selected in each village. It is estimated that this will reach over 2000 farmers with 70 percent adolescent girls, pregnant women and/or mothers of children under the age of two years. REGIS-ER and Mercy

Corps selected 15 villages in the commune of Guidan Roumdji, prioritizing working through adolescent girls groups. The videos will be shot and disseminated in these villages. Save the Children selected five villages in the commune of Aguie, where Save the Children implements preventative and curative activities to address malnutrition. The videos shown in these villages will be the ones produced by REGIS-ER and Mercy Corp agents in Guidan Roumdji.

The objective of the proposed one year pilot project is to establish the feasibility, effectiveness and scalability of this collaborative model, and to also document the process and costs associated with its adaptation in the resilience context of the Sahel. This pilot and associated evaluation is expected to last for a total of 12 months and will include the production of at least 10 nutrition and hygiene-focused videos; the facilitated dissemination of those videos; data collection; and an assessment of adoptions and associated costs.

One of the first components of the SPRING/Digital Green collaborative approach is to conduct formative research to identify and better understand local nutrition-related practices and behaviors; as well as barriers and facilitators for the adoption of recommended behaviors. The results of the formative research will be used to guide the technical content and approach for production and screening of nutrition-focused videos. Currently recommended at a national level, these practices include improved maternal nutrition, the early initiation of breastfeeding, exclusive breastfeeding for the first six months of life, the timely introduction of complementary foods at six months; active or responsive feeding, diversified diets, feeding during illness, handwashing, family planning, use of health services, among others. UNICEF and FFP partners have already conducted excellent formative research about most of these behaviors in Maradi, but not in other communes. The formative research is intended to help the project team determine if these findings are also relevant for the commune of Guidan Roumdji, to dig deeper into certain findings, and also to hear the population's suggestions on addressing certain previously identified barriers to behavior change.

Specific Formative Research Objectives:

To guide the nutrition-focused video production and dissemination, the SPRING/Digital Green project team needs to understand current practices as well as the communities' contextual realities (socio-cultural-economic) and how these are promoting or hindering optimal nutrition practices during the first 1,000 days. Results of the formative research will clarify: 1) key target groups; 2) selected priority behaviors that can be promoted by human mediated videos; and 3) how best to use videos to promote behavior change. Specifically, the research will:

1. Identify existing family relationships in terms of decision making: Who makes decisions regarding nutrition? (Mothers? Mothers -n-law? Husbands?). Who makes decisions regarding health? What are some of the relationships linked to gender?
2. Identify the current MIYCN practices and barriers that need to be addressed such as food misconceptions (taboos); nutritional knowledge and practices of <2yrs children; influencing individuals.
3. Identify the major nutritional issues adolescent girls and women face (societal structures/taboos/barriers/promising practices to build upon)
4. Identify people practicing correct handwashing technique and understand how they managed to change their behavior.
5. Identify positive other deviant households/individuals who might be featured in the future videos, and identify their motivators for their current behavior

Methodology

Village Selection:

Because the videos will be produced in Guidan Roumdji, where 15 out of 20 villages are situated, only these 15 villages have been considered for sampling. According to a formative research conducted by Save the children in 52 villages of Maradi, only very minor differences were found between villages. Field staff in Guidan Roumdji confirmed that there are almost no cultural or other differences in those 15 villages. A total of two villages have been selected, based on the following criteria:

1. They have well established groups
2. The community health worker and lead mother are enthusiastic
3. The villages chiefs are welcoming

These are Guidan Alkali et Hannou Gazané.

Table 1: Selected villages for pilot and for formative research in the Commune of Guidan Roumdji, Maradi Region.
Name of the Villages
Guidan Alkali
Hannou Gazané

Literature Review:

The SPRING Project has done a landscape analysis of existing formative research for the region in Niger. A lot of information is already available, and the proposed formative research is intended to add to this existing information in fill in any remaining gaps.

Data Collection

A mix of qualitative research methods will be used, including, focus group discussions (FGDs), observations, and in-depth-interviews (IDI). Respondents will be recruited from the existing women's and men's groups, the primary beneficiaries of this pilot project. A maximum of 12 people and a minimum of eight will participate in a FGD. Both the FDGs and IDIs are heavily focused on open-ended questions that guide the interview, and encourage probing by trained facilitators/interviewers to elicit additional information and insights.

The field research will be conducted with a wide range of respondents (see Annex 2 below) to understand current perceptions regarding the importance of nutrition in promoting healthy development of children; current maternal and infant and young child knowledge and practices; barriers such as possibly socio-cultural norms, existing taboos.

Annex 2 presents a summary of the proposed Focus Group Discussions (FGDs) and In-depth Interviews (IDIs) that will be conducted with both primary and secondary targets audiences during the field research.

Primary target audiences:

Adolescent girls 16-18 years old

- Two FGD with adolescent girls (one per village) will be conducted to understand their nutritional issues and the societal norms around adolescence. Estimated number of adolescent girls per f FGD: 8 -12.
- Four IDIs (two per village) will be conducted with adolescent girls 16-18 years old.

Breastfeeding women with children <6 months old

- Two FGD with breastfeeding mothers of children <6 months old (one per village) will be conducted to identify their perceptions on exclusive breastfeeding. Estimated number of breastfeeding women of children <6 months per f FGD: 8 -12.
- Four IDIs (two per village) will be conducted with breastfeeding mothers of children <6 months old.

Breastfeeding mothers of children >6months and <2years old.

- Two FGDs with breastfeeding mothers of children >6 months old and <2years old (one per village) will be conducted to identify their knowledge and practice regarding complementary feeding. Estimated number of breastfeeding mothers of children >6 months and <2 years per FGD: 8—12.

Secondary target audiences: Influencers within the households

Mothers-in-laws

- Two FGD s with mothers-in-law with grandchildren <2 years, focusing on nutrition and child care practices, to understand their perceptions regarding maternal and child nutrition; and to identify decision making relationship in the household. The estimated number of mothers-in-law per FGD is 8—12.

Fathers of children <2yrs old

- Two FGDs with fathers of children <2 years to understand their perceptions regarding maternal and child nutrition; and to identify decision making relationship in the household.
- Four IDIs with fathers of children <2 years to understand their perceptions regarding maternal and child nutrition; and to identify decision making relationship in the household.

Other key informants as needed

- There is some time foreseen on the last day of the formative research to collect some additional information of this would be necessary.

Schedule for the Formative Research Teams:

The proposed schedule for the formative research is presented in Annex 4. The research will be conducted by two teams, each led by a team leader who speaks and writes Hausa. All of the partner selected team members have had prior experience in conducting FGDs and IDIs. Each of the teams are composed of the following four members:

- A Facilitator
- A note-taker
- An observer
- A liaison between the village and the researchers

One day has been estimated for training, immediately followed by three days of field work, data cleaning, and initial analysis. The final analysis will be done at home office.

(See Annex 2: Summary of Informants and Tools for Formative Research; Annex 3: Proposed Schedule for Formative Research; and Annex 4: Proposed Formative Research Teams.

Annex 2. Summary of Informants and Tools for Formative Research

Summary of Informants and Tools for Conducting Formative Research

Informants	Lactating mothers with children <6 months	Lactating mothers with children >6 months and <2yrs	Mothers-in-law	Fathers of children <2 yrs	Adolescent girls	Total
Tool						
FGDs	2	2	2	2	2	10
IDIs	4		-	4	4	12

Annex 3. Proposed Schedule for Formative Research

FRIDAY 31 Oct	MONDAY 3 Nov	TUESDAY 4 Nov	WEDNESDAY 5 Nov	THURSDAY 6 Nov
MORNING				
Meeting with field facilitators (from the TWO sampled villages) in order to plan the formative research	Digital Green workshop	Focus Group Discussions groups Led (FGDs) / grandmothers with at least one grandchild between 0-24 months 2 In-depth Interviews (IDIs) / grandmothers	Tools revision	Tools revision + begin the analysis
AFTERNOON				
	Meeting on the objectives, tools , logistics, etc. and on SPRING's formative research Review of tools from Tuesday	FGD / Breastfeeding Women with babies under 6 months 2 IDI / Breastfeeding Women with babies under 6 months	FGDs / MEN with child < two years 2 IDIs / MEN with child < two years FGDs / Breastfeeding Women with child under 6 months- 2 years 2 IDIs / Women with child 6mo- two years	FGD/adolescent girls 14-18 2 IDIs / adolescent girls
				Results analysis (continuation) 18 à 22 heures

Annex 4. Proposed Research Teams for Formative Research

Guidan Alkali Team (45 min)		Hannou Gazané Team (20 min)	
Position	**Designated Person**	**Position**	**Designated Person**
Village contact/link	Zalika Abdoulaye (Mercy Corps - Nutrition officer)	Village contact/link	Rabiou (REGIS-ER – team manager Guidan Roumdji)
Mediator	Aboubacar Sale (Save the Children - SBCC)	Mediator	Gabriel Ora (REGIS-ER – Health and Nut Maradi)
Note taker	Assan Zouladeini (Mercy Corps - WASH)	Note taker	Souley Adamou – (Health and Nut Niamey)
Observer	Amadou Sita (Mercy Corps-SO1 team leader)	Observer	Tamo Maitourare Ado (Save the Children - gender)
Observer	Aboubacar Sale (SBCC-Save the Children)	Observer	Tamo Ado (Save the Children-gender)

Annex 5. Seasonal Calendar for Maradi

Seasonal Calendar for Guidan Roumdji

Harvest	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Cereals												
Millet	X	x	X	X	x	x	x	x	x	x	x	X
Corn	X	X	X	X	x	x	x	x	x	x	X	x
Sorghum	x	X	x	X	x	x	x	x	x	x	x	x
Roots and tubers												
Potatoes		x	x									
Yam-imported	x	x	x	x	x	x				x	x	x
Sweet potatoes	x	x	x	x	x	x				x	x	x
Cassava								x	x	x	x	
Market Vegetables												
Eggplant		x	x	x	x	x						
Okra								x	x	x	x	x
Tomato	x	x	x	x	x	x	x	x	x	x	x	x
Onion	x	x	x	x	x	x	x	x	x	x	x	x
Garlic			x	x	x	x	x	x	x	x	x	x
Chili pepper			x	x	x	x	x	x	x	x	x	x
Cucumber			x	x	x	x	x					
Squash	x	x	x	x	x	x	x	x	x	x	x	x
Pumpkin (gouna)							x	x	x			
Carrot		x	x	x	x	x						
Cabbage	x	x	x	x	x	x						
Pepper		x	x	x	x	x						

Harvest	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Lettuce		x	x	x	x	x						
Corn		x	x	x	x	x						
Bean leaves							x	x	x			
Moringa leaves	x	x	x	x	x	x	x	x	x			
Amaranth	x	x	x	x	x							
Yalo leaves	x	x	x	x	x	x				x	x	x
Wild Tree Leaves												
Baobab	x	x	x	x	x	x	x	x	x	x	x	
Danya					x	x	x					
Jiga					x	x	x					
Yadia					x	x	x					
Tafasa						x	x	x				
Cultivated Fruits												
Cantaloupe	x									x	x	
Watermelon	x									x	x	
Guayave	x									x	x	
Mangos				x	x	x						
Sahel apples							x	x	x	x	x	
Lemon	x	x	x			x	x	x				
Grapefruit	x	x	x			x	x	x				
Wild Fruits												
Magaria (wild apples)	x	x	x								x	
Corna (wild apples)	x	x	x								x	
Gawasa				x	x	x						
Wild grape (farou)				x	x	x						

Harvest	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Doumiers (fruit of the Oum palm tree)				x	x	x						
Vegetables												
Lentils										x	x	
Peanut									x	x	x	
Niebe									x	x	x	
Souchet (small and large type)	x									x	x	
Grains												
Balanites	x										x	x
Dorowa (fermented = soumbala)	x	x	x	x	x	x	x	x	x	x	x	x
Sesame										x	x	
Animal Food Source												
Fish	x	x	x	x	x	x				x	x	x
Cricket	x	x								x	x	x
Egg	x	x	x	x	x	xx	xx	xx	x	x	x	x
Cow's milk	x	x	x	x	x	xx	xx	xx	x	x	x	x
Goat's milk	x	x	x	x	x	x	x	x	x	x	x	x
Yogurt	x	x	x	x	x	xx	xx	xx	x	x	x	x
Butter	x	x	x	x	x	xx	xx	xx	x	x	x	x
Cheese	x	x	x	x	x	xx	xx	xx	x	x	x	x
Beef, lamb, chicken, goat, camel, guinea fowl, pigeon, duck	x	x	x	x	x	x	x	x	x	x	x	x
Other												
Amarath flowers (bissap)	x									x	x	x
Dorowa (yellow flour in pods)				x	x	x						

XX means it is available in abundance

Annex 6. Detailed Findings of the Situational Analysis and Formative Research

In Table 1, the findings of both the situational analysis and the qualitative research are combined and summarized by key behaviors. The results of the situational analysis of existing literature are shown in **black,** the reference[15] is shown between brackets, and the SPRING formative research (FR) results are added in **red**. Findings from the village of Guidan Alkali are labeled with GA, and findings from Hannou Gazané are labeled with HG.

Table 1. Findings of Situational Analysis and Qualitative Research

Ideal Behavior	Current Behavior	Household Enablers/Barriers	Environmental Enablers/Barriers	Recommendations for the Video
Pregnant women going for at least four prenatal visits	• 30.5 percent of women living in rural areas in Niger went for at least four prenatal visits during their last pregnancy (INS 2012); no Maradi-specific data are available • More recently, women started to go for prenatal care, but after the first or second visit they do not continue going if all seems to be well (Hamani 2013)	**Enablers**: Reminders help: • One man in GA: my wife lost a lot of blood from her former pregnancies. But since she goes for prenatal visits, no more problems • One man in HG said he regrets his wife did not do prenatal consultations; she died. Since then, he sees the importance **Barriers**: • Many pregnancies (Hamani 2013) • Men are not accompanying their wives to the clinics (LAHIA 2013) • Women not wanting to reveal their pregnancy care (personal conversations with staff)	**Enablers**: • Presence of food distributions (Hamani 2013) • Geographic accessibility (Hamani 2013) • An accompanying man increases the quality of care (personal conversations with staff) **Barriers**: • Health center too far (Hamani 2013) • Long waiting time (Hamani 2013) • Health worker's' bad attitude (Hamani 2013) • Non-availability of medicine, especially those related to free health care (Hamani 2013) Confirmed • Health workers responsible in small health centers are very often absent (trainings, vaccination campaigns)	Many of the barriers are external and are not related to the willingness to practice the behavior. Even if more women would want to practice the behavior, it would be difficult to have an effect unless the barriers related to the weak health care system are addressed. This behavior is not recommended as a key behavior video for now.

[15] Which refers to the reference list at the end of the document

Ideal Behavior	Current Behavior	Household Enablers/Barriers	Environmental Enablers/Barriers	Recommendations for the Video
			(Hamani 2013) • Health workers compensate for the free health care by asking more money for other care (Hamani 2013)	
Women delivering at the health facility	• 26.7 percent of women in Maradi delivered at a health center for their last pregnancy (INS 2012) • Other women deliver at home, and for the first baby, new mothers go back to their parental home (Hampshire et al. 2009)	**Enablers**: • Being at the health center two to three days before delivery (Hamani 2013) **Barriers**: • Unavailability or attitude problem of the health workers (One man in HG tried to wake up the health worker seven times at night, and he did not wake up; the man's wife died) • Not being able control the delivery conditions at the facility – no private quarters or no properly equipped quarters for delivery (personal conversations with staff)	**Enablers**: • Presence of food distributions (Hamani 2013) • Geographic accessibility (Hamani 2013) • An accompanying man increases the quality of care (personal conversations with staff) **Barriers** : • Health workers are most often men (Hamani 2013) • Not a problem anymore. All respondents feel they have no choice but to go to the male health worker (GA, HG)	Many of the barriers are external and are not related to the behavior itself. This behavior is not recommended as a key behavior for now.
Women eating one small extra meal during pregnancy Administration and taking of iron–folic acid tablets during pregnancy Reduced workload during pregnancy	• 42 percent of women are anemic (INS 2012) • 14.4 percent of women did not take any iron tablets during their last pregnancy, while 37.8 percent took more than 90 tablets (INS 2012) • In Kantché,[16] only one-third of women who received iron had	**Enablers**: • People know that iron–folic acid tablets will "increase blood" and improve the health of mother and fetus (Hamani 2013) • Women know that green leafy vegetables are iron rich, no other sources are mentioned	**Enablers**: • Pregnant women who feel weak can decide not to fast during fasting season,[17] although they will have to make up for this after having delivered (GA, HG) • Men who feel concerned know the risks of heavy work during pregnancy (PASAM-TAI 2013)	As men are the ones deciding about intra-household food distribution, give practical tips on how to improve their pregnant wives' diet. The video could show a man who has understood this and talked to his wives. They could still be eating together, but supporting

[16] A department in the region of Zinder, a neighboring region to Maradi.

[17] Once a year, for 30 days.

Ideal Behavior	Current Behavior	Household Enablers/Barriers	Environmental Enablers/Barriers	Recommendations for the Video
	actually consumed it (PASAM-TAI 2013) • Women's Dietary Diversity Score 3.3 (USAID 2014) • 61.5 percent of households had iodized salt (INS 2012) • All women of the family (concession) eat together from the same bowl. Those eating fastest get the most and the best food (GA, HG)	(PASAM-TAI 2013) **Barriers**: • Women feel nauseated when taking iron tablets (Hamani 2013) • All men said they help pregnant women with work on the field, fetching fire wood and even washing clothes or grinding cereals (GA, HG) • All women of the same family eat from the same bowl (GA, HG) • Men do not support their pregnant wives with extra/special food. They know pregnant women should eat more but because of polygamous households this cannot work; it would create problems between wives (GA, HG) • Women said to have taken iron, albendazole, anti-malarials. When they felt nausea, they took them late at night (HG) • Women in GA have taken traditional medicine against nausea, as well as iron and other medicines from the health center (GA) • Belief that iron would give you too much blood ("augmenter le	• Men in GA said to support their pregnant wives so they would not lose the unborn child; Leader GA: For the development of the child in the womb; Leader GA: To avoid "lack of blood" during delivery, to make sure the child who is born is not malnourished **Barriers**: • Some food taboos but not so important (PASAM-TAI 2013) • Food taboos: -Souche, taro: will make you feel itchy (GA) -Camel meat will cause a longer pregnancy of 12 months (GA) -Yam, lady fingers (HG) Healthy pregnant women feel social pressure to fast during fasting season[18] (GA, HG) Socially very difficult to single out one woman to give her more of better food (GA, HG)	the pregnant ones. An Imam could talk about his wife who does not fast during pregnancy. Mention the tip of taking iron at night, and with some food, to reduce nausea.

[18] Ramadan, once a year, 30 days.

Ideal Behavior	Current Behavior	Household Enablers/Barriers	Environmental Enablers/Barriers	Recommendations for the Video
		sang nuisible") (PASAM-TAI 2013) Not confirmed		
Women eating two small extra meals during breastfeeding	• No special diet for breastfeeding women, except for Kunu (kind of porridge) which breastfeeding women with young babies consume throughout the day (GA, HG) • All women of the family (concession) eat together from the same bowl. Those eating fastest get the most and the best food (GA, HG)	**Barriers**: • Neither women nor men think a breastfeeding woman needs a special diet (GA, HG) • Polygamy makes it difficult to single out certain women (GA, HG) • All women of the same family eat from the same bowl (GA, HG)	**Barriers**: • Some food taboos but not so important (PASAM-TAI 2013) • Foods that cause bad milk: -yam, fish, lady fingers (GA) - yam, lady fingers (HG) • Socially very difficult to single out one woman to give her more of better food (GA, HG)	As men are the ones deciding about intra-household food distribution, give practical tips on how to improve their breastfeeding wives' diet. The video could show a man who has understood this and talked to his wives. The women could still be eating together, but with co-wives supporting the breastfeeding ones. An Imam could talk about his wife who does not fast during the first 6 months of breastfeeding – to avoid the woman being hungry, not to improve the quality/quantity of milk. A husband should be shown supporting his breastfeeding wife, so she can breastfeed.
Early initiation of breastfeeding: - Placing the newborn on the breast within one hour of delivery - Giving no pre-lacteal feeds - No bottle-feeding	• 40.7 percent of infants born within two years of the study were breastfed within the hour after birth (INS 2012) • 68.1 percent of infants born within two years of the study were breastfed within the day after birth, of which 38 percent received something else to drink before that (INS 2012) • Almost all women feed colostrum to their babies, but not all within the hour after	**Enablers**: • Having delivered at a health center (PASAM-TAI 2013) • All mothers claimed to have given colostrum; but grandmothers said only those who delivered at the HC did • Mothers said they can talk to their mothers-in-law to share what they have learned in the group/video • In the Hausa culture, newborn cattle are always given their	**Enablers**: • People know that eliminating the black first stools is necessary and beneficial (Hamani 2013) (colostrum also has that effect) **Barriers**: • Belief that yellow milk is of bad quality and the need to wait until it is white (Hamani 2013, Hampshire et al. 2009) • If pregnant for the first time, not sure their milk is good, the	No special video on early initiation is needed, but the exclusive breastfeeding video should mention: - colostrum helps to eliminate the black stools - breast milk is always good. - colostrum is always good and should be given immediately after birth (compare with animals) - the faster you put the baby to the breast, the faster milk will come in, and the more milk will

Ideal Behavior	Current Behavior	Household Enablers/Barriers	Environmental Enablers/Barriers	Recommendations for the Video
	giving birth (PASAM-TAI 2013)	mother's colostrum, which is highly valued **Barriers**: • Being pregnant for the first time, as young women are closely supervised by older ones (Hamani 2013) • While waiting for the milk to "come-in," they give goat's milk or powdered milk (Hamani 2013), sugared water, sugared lime juice (PASAM-TAI 2013) • Decoctions[19] are considered to be a form of local vaccination and necessary for the baby's well-being (Hamani 2013) • Decoctions are also given to the newborns for stomach ache, to make the child lively (PASAM-TAI 2013), to "open the intestines," and to create appetite (Hamani 2013) • Decoctions can be for adults and children and their recipes are inherited from the parents (Hamani 2013) • We tested the idea that the decoctions could be given to the women for the baby to drink through the milk, but women preferred us to say not to give decoctions to children anymore	milk needs to be tested, results only available after 3–4 days (Hamani 2013) Not confirmed • The risks of disobeying one's mother and potentially damaging relations with the natal family. Mothers have particular influence for the first child, since daughters usually return to their natal homes to give birth for the first time. With subsequent children, many were able to ignore their mothers' advice and start breastfeeding straightaway (without disclosing this to their mothers) (Hampshire et al. 2009)	come in.

[19] Herbal tea made from boiled leaves and often fermented for several days.

Ideal Behavior	Current Behavior	Household Enablers/Barriers	Environmental Enablers/Barriers	Recommendations for the Video
Exclusive breastfeeding (EBF) for the first 6 months - Practicing EBF from birth until 6 months of age - Emptying both breasts at each feeding - Frequent breastfeeding – about 10 times in 24 hours - Good positioning and attachment	• Only 13.3 percent of Nigerien babies 4–5 months of age were exclusively breastfed (INS 2012) – no Maradi-specific data are available • First child has more chances to be EBF, probably due to time (Salissou 2012) • Observation showed that women do not take time to breastfeed, not even sitting down to breastfeed • Fewer than 5 percent of Nigerien children were fed with a bottle, with the highest percentage occurring in babies 0–1 month old (INS 2012); no Maradi-specific data are available	**Enablers**: • Women's knowledge of the message of exclusive breastfeeding until 6 months of age is high (Hamani 2013) • The advantages of EBF are well known: no diarrhea, less sick, more lively, walks quickly (Hamani 2013) • Fathers said: less expenditures (Hamani 2013) **Barriers**: • Mothers are not yet convinced about not giving water in such a hot climate (Hamani 2013, PASAM-TAI 2013, GRET 2012) • Some women claim it is the child's right to drink (Hamani 2013), people think EBF is dangerous for a child as no one can live without water (LAHIA 2013) • When women have to go work on the field, the babies get sugar water or goat's milk from the grandmother (Hamani 2013) • Time constraints: women even breastfeed while grinding cereals (Hamani 2013, Salissou 2012). Confirmed. Women estimate taking about two minutes to breastfeed when they sit down (all) • Water-based infusions of	**Enablers**: • Women have to stay home for 40 days after delivery (not good for postnatal care but allows her to focus on breastfeeding) (Hamani 2013) • Babies less than a year old stay with the mother – tied on the back • Grandmothers agree to take over work from women to allow them to breastfeed; men do not. They are OK with the woman suspending the work for some time • Men will not help with cooking (GA) • Men can fetch water or hold the baby that cries while the mother is working (HG) **Barriers**: • Belief that breast milk becomes warm if the child drinks too long from the same breast, or when the mother has walked for a long stretch of time (Hamani 2013) Latter confirmed • Belief that breast milk of pregnant women is bad (and women are very often pregnant) (Hamani 2013) • Women believe they do not have enough milk because they do not eat sufficiently (LAHIA 2013): one woman said she did not have enough milk because	Administering water (for the heat) and decoctions (to protect against illnesses) to babies under 6 months of age is widespread. Find positive deviants who did not feed water or decoctions. Find an Imam who explains that drinking goat's milk was acceptable in the "old times," but that science has now proved differently. Include the message: breast milk is always good, even if a mother has been outside or in the sun, or she is hungry, or when she is pregnant (include an allusion to Allah). Confirm the benefits of the culture of allowing rest for 40 days after delivery, to be able to focus on establishing EBF. Also mention that breast milk replaces the need for decoctions. Mention the need to empty both breasts at each feeding or to allow the child to be satisfied, so people start understanding the need to take time for breastfeeding. Explain that the more a mother feeds, the more milk she will produce. Show a supportive husband, taking actions that permit breastfeeding wives to work less.

Ideal Behavior	Current Behavior	Household Enablers/Barriers	Environmental Enablers/Barriers	Recommendations for the Video
		medicinal plants (decoctions) given regularly during at least the first 40 days of life (Hampshire et al. 2009) • Early supplementation with millet-based foods is widespread (Hampshire et al. 2009) • The most common reason for cessation of breastfeeding is subsequent pregnancy (Hampshire et al. 2009) • Many mothers recognize that abrupt weaning could be harmful, and therefore introduce supplemental foods too early in case they would become pregnant again (Hampshire et al. 2009)	she was fasting (Hamani 2013) • The Koran prescribes people should only fast when they feel they can, but in reality breastfeeding women all do • One Imam in GA said he does not allow his own wife to fast when pregnant and in the first four months of breastfeeding • Good and bad milk are distinguished. The good milk is the milk that the child drinks vigorously and will make him/her walk sooner. Bad milk is warm, diluted, sugary or contains colostrum (SC, Hamani 2013) • Belief that the milk becomes of bad quality when the mother does not have enough to eat. Women did not believe our statement that the mother's diet does not affect the milk (HG, GA) • When a child drinks "bad milk" he will suffer from health problems (HG, GA), diarrhea, vomiting (HG) • Grandmothers said they would buy artificial milk[20] for the baby or make porridge, so the baby would survive if the breast milk got bad (HG) • *Le rubutu* (religious writings in	

[20] Which very few people can afford.

Ideal Behavior	Current Behavior	Household Enablers/Barriers	Environmental Enablers/Barriers	Recommendations for the Video
			ink washed from a wooden tablet) are given to drink to protect against bad spirits (Hamani 2013) • Mohomat also drank goat's milk (Hamani 2013) Confirmed, Imam Maradi: Mohomat already drank goat's milk at birth • Mothers are not supposed to pay too much attention to the decoctions that are administered to their children, especially not to the first child. Men are the ones who buy the decoctions from the traditional healers (Hamani 2013) • Women not ready to believe that the decoctions could be given to the women for the baby to drink through the milk. They preferred us to say not to give it anymore • Regarding EBF, fathers' influence more important than influence of family or friends (Salissou 2012)	
Complementary feeding from 6 until 24 months - Starting at 6 months - Amount	• 55 percent of children 6–8 months old are breastfeeding with the addition of complementary foods, and only 77 percent of children 12–17 months old are doing so	**Enablers**: • Large local production of cow peas, moringa trees/leaves and peanuts, grass hoppers, hibiscus[24] etc. (GA, HG) • Mothers say they leave feeding	**Enablers**: • Wild leaves – Euphorbes, Balanites, Yadia – are often collected to add to monotonous diets (LAHIA 2013) • Drying of fruits and vegetables	The video needs to show that boule is too liquid and that pate is the thickness we are looking for. Men need to be sensitized on the importance of complementary

[24] Oseille the Guinée, used to make the local drink "bissap"

Ideal Behavior	Current Behavior	Household Enablers/Barriers	Environmental Enablers/Barriers	Recommendations for the Video
- Frequency - Thickness - Diversity - Responsive feeding - Separate plate - Hygiene	(USAID 2014) • Of children age 6–23 months: 7.5 percent receive four or more food groups; 52.9 percent receive minimum meal frequency; 3.7 percent are fed according to the optimal feeding practices of young children and infants (INS 2012) • Only the young babies (until about 9 months) get special porridge to eat, which is too liquid) • Overall HDDS score of 3.4 (USAID) • Only eight percent of children aged 6–23 months receive a minimum acceptable diet (USAID 2014) • Breakfast is heated up food from last night, or porridge[21] if nothing was left (all) • Throughout the day the whole family consumes boule[22] (all) • Boule fed mostly enough in quantity but is too liquid (especially in hunger season they tend to add more water) and of too low energetic content and diversity. Boule is left in a calabash for all the	instructions to the other caregivers when they go out, and that they check afterwards if these have been followed. For the little ones they leave special food separately (all) **Barriers:** • Too little time to cook (Hamani 2013) • Few families keep the cow peas for consumption only, much is sold (Hamani 2013) • Men are served first, and typically get the best bits (e.g., meat) (Hampshire et al. 2009) • Children over a year of age eat from a common plate, separately from adults, who thus have little control over how much, or what, each child actually eats (Hampshire et al. 2009) Confirmed • Cultural practices of food distribution make it very difficult for parents to single out a child for special treatment (Hampshire et al. 2009) • Nutrient-rich foods (e.g. hibiscus, grasshoppers, dried tomatoes, tamarind, dried peppers, etc.) are not used for	is very accepted and widespread, also imported dried fish is available (observation on market) • The children of the first wife are more likely to be neglected, while [the father] takes more notice of the children of a new wife (Hampshire et al. 2009) • In extended polygamous households, a mother's status (based on considerations like reproductive success, family background and perceived sexual desirability) can determine bargaining power for food (Hampshire et al. 2009) **Barriers**: • Belief that eggs and meat are bad for young children because if they consume these foods they develop an insatiable appetite for high quality foods (HG, GA) • Belief that young children without teeth cannot eat meat, they cannot chew it (but they would agree to feed it if shown how) • Belief that feeding eggs might make your child into a thief	foods. Show tips on how to improve dietary diversity during hunger season (e.g., drying and storing foods).[26] Children need to be shown being actively fed, from a separate plate/dish. The different women in the concession should be shown supporting each other in giving special portions to the youngest children. Ideally, the man would have discussed this with them. Handwashing before food preparation and feeding should be part of the handwashing video. Tackling hygiene for food preparation should mainly be focused on adding boiled/treated water to the boule of the child. Parents, but also alternative caregivers like older siblings and grandmothers, need practical tips on how to feed children when the mother is absent. Mothers should receive tips on how to teach these to other caregivers. Mothers should receive tips on what easy foods they can take for

[21] Porridge can be kunu (flour beaten into boiling water) or koko (more finely sieved, smoother porridge)

[22] A ball of ground cereal – sometimes fermented, sometimes half-boiled – that is mashed with skimmed fresh milk, milk powder with (untreated) water, or (untreated) water (and sometimes sugar and spices and dates). The "boule" for the family is prepared by all in the same bowl and is drunk with the same ladle.

Ideal Behavior	Current Behavior	Household Enablers/Barriers	Environmental Enablers/Barriers	Recommendations for the Video
	family to consume at will. Because it rarely runs out, even in the pre-harvest hungry seasons, most mothers conclude that all their children have • enough to eat (Hampshire et al. 2009) • In the evening they eat pate[23] with sauce • Nobody uses an individual plate, including babies (Hamani 2013) Observed • Feeding complementary food to the baby is the woman's responsibility (Hamani 2013) • When the mother is absent and the child is more than a year old, grandmothers are the first choice for child care, and older brothers/sisters of the baby are a second option	child food but for sale (all) • For 7–14 hours each day, the mothers do not control what their young children eat, as they are left with another caregiver (Hamani 2013, SC) • Babies less than a year old stay with their mothers – tied on the back, but the mothers do not take anything to eat for the babies (all)	(GRET 2012)[25] • Men decide how much food to sell, how much to keep for the family and how much is for him to finance his travel or other. The amount of food to keep for the family is not influenced by the presence of women or children, or the number of children. He gives the food to be cooked for the whole extended family to the woman whose "turn" it is (GA, HG). • Women almost never go to the market; men go. If men give money then it is too little to buy any quality food (Hamani 2013) • Seasonal food deficits (Hamani 2013) See seasonal calendar collected for Guidan Roumdji (Annex 5) • Lack of cooperation in extended households becomes particularly important when men are absent on exode (labour migration) (Hampshire et al. 2009)	their babies while they are on the field, or other ways to ensure the babies eat while mothers are out.
Continue frequent on-demand breastfeeding until 24 months of age	• On average, a child in Maradi is breastfed for 19.7 months (INS	**Barriers**: • The most common reason for	**Enablers**: • Mostly there is a village norm	Explain that breast milk is still good when the mother is

[26] e.g. dried tomato (cowda), dried pepper (tattassey), dried tamarind (tsamia), dried fish, dried okra, dried hibiscus leaves (yakua), dried fruits like dried goruba

[23] Pate (*touwo*): Ground cereal boiled into a sticky mass.

[25] This is a common belief which stems from the idea that children who consume delicious high quality foods will insist on having them regularly and develop sly behaviors to attain them, including demanding food – which is considered to be disrespectful and a bad behavior.

Ideal Behavior	Current Behavior	Household Enablers/Barriers	Environmental Enablers/Barriers	Recommendations for the Video
or older	2012) • Weaning is woman's business, the mother decides to wean and informs her husband (Hamani 2013)	cessation of breastfeeding is subsequent pregnancy (Hampshire et al. 2009) • The breastfeeding child is believed to be "stealing" milk from its unborn sibling, or a pregnant woman's milk is perceived as "hot" and potentially harmful to a breastfeeding child, causing illness and even death. Many mothers recognized that abrupt weaning could be harmful, and so introduced supplemental foods early in case they became pregnant again (Hampshire et al. 2009) • Frequently, ill infants are taken as an indication of "bad milk" and withdrawn from the breast at a particularly vulnerable time (Hampshire et al. 2009)	which decides when children must be weaned and women in the village who do not follow it will be laughed at by the other women (Hamani 2013) • Women said that the Imam decides on the village norm (GA) • A man said that weaning age depends on the health status of the child and how old the child is but normally it is around 18 months (GA) • Women and men: women can breastfeed even longer than 24 months if needed (GA) • In HG there were no such village norms **Barriers**: • Subsequent pregnancy – the woman weans the young child	pregnant. Also explain that the woman should increase her caloric intake when she is pregnant or breastfeeding or simultaneously pregnant and breastfeeding.
Using preventative health services for children (vaccinations, weighing)	• 54.1 percent of children age 12–24 months received all recommended vaccines (TB, Tdap, polio and measles)	**Enablers**: • Presence of food distributions (Hamani 2013)	**Barriers**: • Distance, long waiting time, HWs disrespectful attitude (Hamani 2013) • Responsible staff of small health centers (only one assigned) are very often absent in training or in vaccination campaigns (Hamani 2013) • Belief that children born in a health center should not be vaccinated (personal conversations with staff)	Many of the barriers are external and are not related to the behavior itself. This behavior is not recommended as a key behavior for video.

Ideal Behavior	Current Behavior	Household Enablers/Barriers	Environmental Enablers/Barriers	Recommendations for the Video
Recognizing danger signs and seeking prompt treatment at the health center Continuing to feed during illness: - increasing fluids - offering favorite foods Feeding more after illness	• Children are rarely taken to a health center for illnesses considered to be commonplace (i.e. fever, diarrhea, respiratory infections) (Hampshire et al. 2009) • Parents continue to feed sick children, but no special foods are given. There is no extra encouragement given to sick children (all) • Some parents withhold food and liquid to stop the diarrhea (discussions with staff)	**Enablers**: • No food taboos for sick children (all) **Barriers**: • Auto-medication is the first treatment option for many, it is a fast, cheap, nearby and efficient solution (Page et al. 2011, Hampshire et al. 2009) • Parents rarely distinguished discrete episodes of these illnesses, seeing them instead as chronic and often intrinsic to a child (Hampshire et al. 2009) • Sick children are not usually given special foods (high quality or easy to digest); cultural practices of food distribution make it very difficult for parents to single out a child for special treatment (Hampshire et al. 2009) • Money necessary for a sick child must be offset against the need to maintain productive capital, especially livestock and land (Hampshire et al. 2009)	**Barriers**: • Because of the free services, many HC are out of medicines (Hamani 2013) • Accessibility: long distance to HC (Page et al. 2011) • Not enough money to pay for care (Page et al. 2011) • Confirmed that even the health care that should be free is sometimes charged for (FP counseling and contraceptives; consultations and medicines for children 0–5 years; all prenatal consultations and medicines; and caesarian sections should be free although if special medicines necessary they have to pay) • Belief that giving and then suddenly withdrawing high quality foods, especially milk, can cause *anugu* (fever and rash) (Hampshire et al. 2009) • Belief that illness "comes like that," without a cause. Often they explain disease from the magical-religious angle: Islamic (God) or animist (spirits) (LAHIA 2013) • Parents sense that any child may suddenly become ill and die at any time (Hampshire et al. 2009) • One man showed a powder he had in his pocket that would	

Ideal Behavior	Current Behavior	Household Enablers/Barriers	Environmental Enablers/Barriers	Recommendations for the Video
			chase spirits away when put on the hot coals (HG) • All said that health worker cannot heal diseases from spirits. People say to first consult a HW, as they are not able to tell if it is a spirit or a disease; the HW will decide what to do. One man knew of a health worker working together with a traditional healer, but most FGD participants said that the two cannot work together (HG, GA) • Grandmothers claimed that some health workers actually send their patients to the traditional healer for some diseases (GA)	
Diarrhea: treating promptly at the health center	• 10.7 percent children under 5 years old experienced diarrhea during the two weeks preceding the survey, of which 46.9 percent saw a healthcare provider (INS 2012)	**Enablers**: • Knowledge that diarrhea is caused by lack of hygiene (Hamani 2013) • Parents do continue to feed children with diarrhea; there are no taboos around that (all) **Barriers**: • Sick children are not usually given special foods (high quality or easy to digest), cultural practices of food distribution make it very difficult for parents to single out a child for special treatment (Hampshire et al. 2009) • People do not have the reflex	**Barriers**: • People distinguish between different types of diarrhea, the dangerous ones and the less dangerous ones (see Hamani 2013 for details) • Belief that diarrhea is necessary during certain developmental steps: teething, crawling, and distinguishing people (LAHIA 2013) • Belief that diarrhea can also be caused by bad breast milk: when women work a lot or when they wait long between feedings (changes composition or becomes hot) (LAHIA 2013)	Stress that when children under 2 years of age have diarrhea, they lose weight, which has a big impact on their development, even if it is not a dangerous diarrhea. The video could say something like "any diarrhea needs a consultation at the HC;also go to the HC when the child is teething or when it has diarrhea due to wind." The prevention of fecal-oral infection in children should be stressed, showing a household where animal and human lives are separated.

Ideal Behavior	Current Behavior	Household Enablers/Barriers	Environmental Enablers/Barriers	Recommendations for the Video
		to take their children to the HC as soon as the first symptoms of diarrhea appear (Hamani 2013) • In some villages people said that it depends on the age of the child whether or not they take them (Hamani 2013)	• Belief that diarrhea is also caused by eating the first harvest, too much, or certain foods or things your body is not used to (LAHIA 2013) • Humans and animals live together; all courtyards have animals running around on them (observations)	The video should stress increased feeding, including breastfeeding and liquid intake during and after bouts of diarrhea.
Malaria: treating promptly at the health center	• 10.3 percent of children under 5 years old had a fever within the two weeks preceding the survey. Of them, 50.1 percent saw a healthcare provider (INS 2012) • 18.2 percent of children under 5 years old have slept underneath an insecticide treated bed net the night before the survey (INS 2012)	**Enablers**: • The majority of mothers link malaria to mosquitos (Hamani 2013) **Barriers**: • Children less than a year old are taken to the HC. Children older than 12 months are first given auto-medication, but parents know paracetamol is not a definitive treatment and only has a calming effect. Only if the child is not better after a couple of days do parents go to the HC (Hamani 2013) • Confirmed during FR. Some children die because the malaria was not promptly treated (GA, HG)	**Barriers**: • The widespread belief that malaria is caused by eating the new harvest (Hamani 2013) • The belief that convulsions are caused by spirits (Hamani 2013)	Explain the danger of auto-medication, maybe by using witnesses who lost their children and a health worker who explains.
Acute respiratory infections: treating promptly at the health center	• 3.9 percent of children under 5 years old had symptoms of acute respiratory infection during the two weeks preceding the survey. Treatment was sought for 42 percent of them. (INS 2012)	**Barriers**: • Traditional health workers are consulted to "catch the ribs" in case of acute respiratory infections (Hamani 2013) • Auto-medication is the first treatment (Hamani 2013)	**Barriers**: Because of the free health care, often the medicines are not available in the health center (Hamani 2013)	

Ideal Behavior	Current Behavior	Household Enablers/Barriers	Environmental Enablers/Barriers	Recommendations for the Video
	• Acute respiratory infections are most frequent during the cold months, between November and February (see details for types of cold in Hamani 2013)			
Using family planning (FP) methods to space children and delaying the age of the first pregnancy	• Percentage of females age 15–49 who use some method of contraception: 11.2 percent (6.9 percent report using a modern method and 4.3 percent use a traditional method) • Total Fertility Rate of women age 15–49 for the three years preceding the survey was 8.4, compared to average ideal number of children for all women aged 15–49, which was 7.1	**Enablers**: • Adolescents asked for access to FP methods (GA) • Adolescents expressed desire to space children 2 to 3 years apart (GA) • Adolescents openly spoke about their boyfriends who helped them avoid getting pregnant (GA) • Adolescents saw the link between woman's health and birth spacing (GA) **Barriers**: • Low knowledge of methods and fertility (Camber Collective 2014) • Short birth intervals become more likely because of early supplementation of breast milk with other foods (Hampshire et al. 2009) • Significant variation in demand for FP across the population (Camber Collective 2014) • Parents' fear of having a daughter with an undesirable pregnancy makes them choose for an early and mostly forced marriage (Bationo 2013)	**Enablers**: • Men interviewed accept that people use family planning with the purpose of spacing births. They claimed things are changing these days and grandmothers said they would agree (One man: "Having too many children does not make you rich but tired") • Men were favorable but their wives were not using FP; only the Imam's wife was (GA) • Men said their wives do use modern FP, even though there are side effects (HG) • In both villages, people said FP is a subject that is discussed by all adults in the concession – all wives, the husband, and the mother-in-law – although one man said "it's the decision of the woman, we men we cannot know if they are using FP" (HG) • "I take my wife for FP until the last child is three years old" (HG) • First intercourse of adolescent girls is delayed until she is ready, mostly decided with mother-in-law (HG, GA)	Do not talk about limiting children but talk about spacing pregnancies. Show couple communication on planning a family and positive deviant couples. Have a woman talk about side effects and changing her FP method. All couples shown in films should have well-spaced children. Mention EBF in the first 6 months as a FP method (LAM). Mention FP in the "1000 days" video. Illustrate that a man's wealth and status are often perceived by how well his children are faring.

Ideal Behavior	Current Behavior	Household Enablers/Barriers	Environmental Enablers/Barriers	Recommendations for the Video
		• Men almost never go to HC although they are the decision makers (Bationo 2013)	**Barriers**: • A mother's status is based on considerations like reproductive success, family background, and perceived sexual desirability (Hampshire et al. 2009) • The attitude of "the more children, the more chances that at least one will succeed" (Banque Mondiale 2014) • Wives compete by having more children (Camber Collective 2014) • Children are seen as "riches" (Banque Mondiale 2014), social prestige (Bationo 2013) • Reluctance of men (Bationo 2013); Especially older men are resistant (GA, HG) • Stigmatization of women who use FP, they talk badly of users (Bationo 2013) Confirmed • Women think that FP use will lead to sterility (Bationo 2013, Camber Collective 2014) Confirmed: There is the perception that after FP, it is difficult to have more children • Belief that FP is about limiting the number of children (Bationo 2013, Camber Collective 2014) Confirmed in FR: Fear of being considered by co-villagers as "one who decided to stop producing" (GA)	

Ideal Behavior	Current Behavior	Household Enablers/Barriers	Environmental Enablers/Barriers	Recommendations for the Video
			• Fear of side effects of modern methods (Bationo 2013, Camber Collective 2014) • Accepting that it is God who decides (Bationo 2013). Confirmed: "Number of children is the decision of God" (GA, HG) (even a man in HG whose wife had died at child birth said this) • Divorced or widowed women are not "supposed" to be using FP (Bationo 2013) • Stock-outs of FP methods (Bationo 2013) • Insufficiency of counseling for the users (Bationo 2013) • Health center too far (Bationo 2013) • Family planning not yet widely accepted (Camber Collective 2014) – confirmed but open to it, people want to learn about it (GA, HG) • FP communication not tailored to women's needs (Camber Collective 2014)	
Handwashing with soap and running water at key moments: 1) After relieving	• 15.3 percent with cleansing agent and water available at handwashing station (USAID 2014) • 8.1 percent who know three of	**Enablers**: • People make the link between diseases and handwashing (Hamani 2013)	**Enablers**: • Men are very interested in handwashing with soap • Great interest in handwashing	Encourage families to tie a boulloire near places where handwashing needs to happen (e.g. kitchen, latrine). Encourage families to have soap

Ideal Behavior	Current Behavior	Household Enablers/Barriers	Environmental Enablers/Barriers	Recommendations for the Video
himself or herself 2) After cleaning a baby's bottom[27] 3) Before preparing food 4) Before eating	five critical moments (2 percent know all) for handwashing: - 16.3 percent after defecation - 12.7 percent after cleaning a child - 7.3 percent before cooking - 7.1 percent before feeding child - 89.5 percent before eating • Hands are rarely washed (Hampshire et al. 2009) • Adults wash their hands: with soap only before the main meal; sometime without soap after the child's bottom was cleaned; and not when they went to the bush to relieve themselves (GA, HG) • There is no special handwashing station (GA, HG) • The men are responsible for buying the soap for the family, although sometimes the women buy it. Utilization and conservation of soap are the woman's responsibility (Hamani 2013) • Most people use the bush as a toilet (even if they have a	• Knowledge about the need to wash hands but no practice (Hamani 2013) • Religion prescribes handwashing at least four times a day for prayers (not with soap) (Hamani 2013) • Religion requires one to shower before prayer, and before and after intercourse • All homes have a plastic pot for washing hands (boulloire, 700-1000 CFA) before prayer and at other times. The problem is that these pots are not always kept at the same place • If the man finds handwashing important, all family members will do it (Hamani 2013) • **Barriers**: • Forgetfulness • Laziness – they do not want to take the time (Hamani 2013) • Handwashing rules (all the steps) are complex and difficult to remember (Hamani 2013) • People wash their hands before eating their meals but not before eating snacks (Hamani 2013)	with Omo (cheaper) • Ashes accepted too but especially for very poor households or in GA women would use it to wash greasy dishes • Big interest in tippy taps and pierced bottle with liquid detergent to wash hands **Barriers**: • No tippy taps in the villages • If women are absent, or busy: no cleaning of baby's bottom or handwashing after (Hamani 2013) • The soap is hidden somewhere from children and animals and is expensive, precious – for washing clothes and body • Lavibel soap is most valued but only lasts for 3-7 days (Hamani 2013) • Cost of water: 10–15 CFA/gallon (HG); 25 CFA/gallon (GA): paid at the source (no borehole) • Cost of hard soap: 200 CFA • Cost of Omo:[28] small bag for 25 CFA • Men did not agree for their	near the boulloire, accessible for everyone. To protect soap from animals and to make soap cheaper, make liquid detergent from washing powder and put it in a pierced plastic water bottle, or put it in a soap dish made from a plastic bottle. All family members need to be involved, and especially men because they are interested in handwashing. Make men responsible in "ensuring handwashing happens" in their concession.

[27] Washing a baby's bottom is mostly a woman's thing: Men in GA said they would only clean a child's bottom if the mother is traveling. One man said he would also do it if the mother is preparing food. One man in GA even said he would call his wife if he would see a potty with poo in it. In HG, however, men said they have no problem cleaning a child's bottom; one man even said he would wash the dirty nappies.

[28] A brand of powdered washing soap which can be made into liquid detergent. It is cheaper than bar soap but can be caustic.

Ideal Behavior	Current Behavior	Household Enablers/Barriers	Environmental Enablers/Barriers	Recommendations for the Video
	latrine), and mostly do not have water there. Some people said to wash hands when they come back, even though this was not observed in handwashing stations (Hamani 2013)	• They say they also wash before snacks, but observations show they don't. • They want children to wash before main meal but often they do not control this • The men are responsible for buying the soap for the family (Hamani 2013)	wives to buy soap but they did agree to buy more for their children (GA, HG)