



**A summary of the National Mixed Methods Study  
on the Knowledge, Attitude, Practice and Barriers  
on Maternal, Infant and Young Child Nutrition in  
Sierra Leone**

# Maternal Infant and Young Child Nutrition in Sierra Leone: Knowledge, Attitudes, Practices, and Barriers.

## What is the Purpose of this study?

This study's purpose is to help improving the nutrition of children and mothers in Sierra Leone. The specific purpose is helping the Ministry of Health and Sanitation to develop a Behavioural Change Communication strategy about maternal infant and young child nutrition. This summary document provides insight in the findings of the study and has recommendations about what to include in such a Behavioural Change Communication strategy.

## How was the study designed?

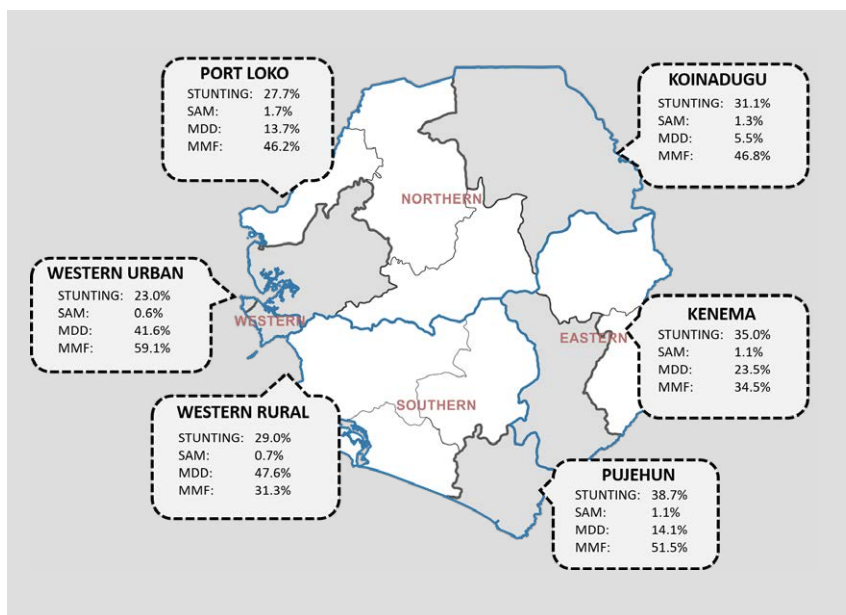
The basis to create understanding on men and women's knowledge, attitudes and practices towards children's development and wellbeing is a mixed-method study, using both quantitative and qualitative research methods. For the qualitative study data collection in six districts, in different regions in Sierra Leone was done. For the quantitative part of the study re-analysis of the Multi Indicator Cluster Survey 2017 in Sierra Leone was done for certain issues related to nutrition, and water and sanitation. This quantitative part of the study concentrated on finding more information about subgroups of children under the age of 5, who are most vulnerable to all forms of malnutrition, or to suffer from poor feeding practices.

In the six districts where the qualitative data collection was done (Figure 1) the authors discussed experiences of maternal infant and young child nutrition with a large group of stakeholders.

**FIGURE 1**

The six districts where the qualitative part of the study was performed including the nutrition indicators used for the selection:

Stunting, Severe Acute Malnutrition (SAM), Minimal Diet Diversity (MDD), and Minimal Meal Frequency (MMF).



<sup>1</sup> This qualitative research method has been developed by Pam Baatsen, a KIT advisor with a background in cultural anthropology and one of the authors of this report

The qualitative part of the study was done through a new developed approach, the ‘Synthesized Narrative Exploration.’<sup>1</sup> In this approach summarized findings from an extensive literature review were explored during focus-group discussions and in-depth interviews (Table 1).

During those interviews and discussions respondents agreed or disagreed with the information obtained from scientific literature and project reports. Further the participants elaborated extensively about their own realities, experiences, opportunities, and challenges with maternal infant and young child nutrition.

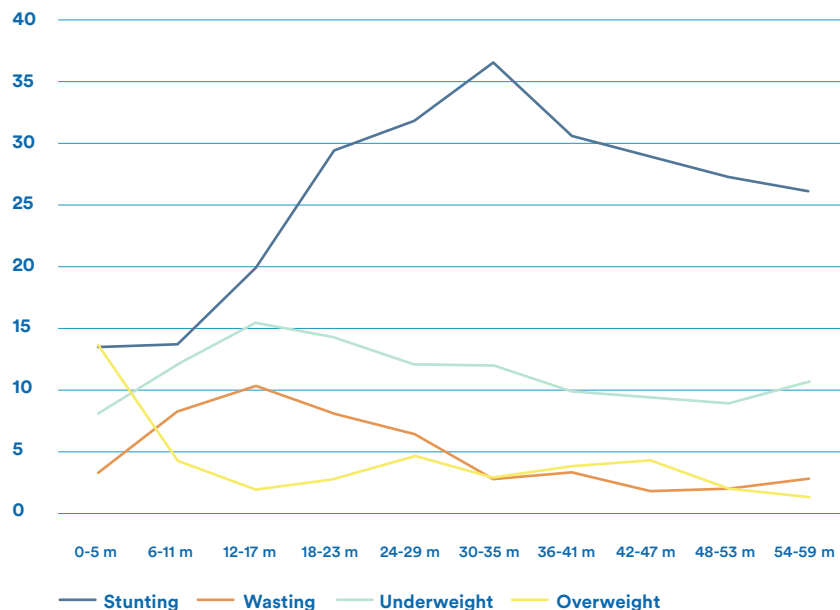
**TABLE 1**  
Number of Focus-Group Discussions and In-Depth Interviews performed

RESPONDENT GROUP	PERFORMED
Women with Children	30 FGD
Fathers with Children	15 FGD
Pregnant women	54 IDI
District Medical Officer	6 IDI
NGOs	6 IDI
District Nutrition Focal Person	6 IDI
Health worker	14 IDI
Representative of Mother Support Group	6 IDI
Grandmother	27 IDI

# Study Findings: Issues for the Behavioural Change Communication Strategy

Malnutrition and especially undernutrition is a serious health problem in Sierra Leone. Reaching the age of 2 years above 30% of the children are stunted (too short for their age), due to chronic undernutrition.

**FIGURE 2**  
Prevalence of stunting, wasting, underweight by age group, Sierra Leone MICS, 2017



## Solo parents, especially single fathers, often have a harder time providing adequate nutrition for children

Where and with whom children live influences their nutritional status, and the care settings for young children in Sierra Leone are very diverse. A considerable group of children do not live with their biological parents, which affects their food intake and the quality of care they receive.

Children living only with their mother, their father or without any parent have a higher risk of receiving fewer meals per day. This is especially the case for children living only with their father. They are less likely to receive enough meals (Minimal Meal Frequency) on a daily basis and are more often wasted (too low in weight for their height). Furthermore, children whose fathers have multiple wives are more likely to be stunted (short for their age).

Grandmothers play an important role in the care for young children and can have a large influence on a child's nutrition, by giving advice to parents of children, or caring for them when parents are at work or absent.

*“Children living away from their biological parents are never given the same privilege as those living with their actual parents. Even if the person has money, he can’t sacrifice for another person’s child.”*

**Health worker, Pujehun**

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## **Many women face challenges with breastfeeding**

The majority of respondents are aware of the benefits of (exclusive) breastfeeding, but women face several challenges to adhere to it. The most common challenge for exclusive and prolonged breastfeeding is the belief that breastmilk becomes spoiled by having sex (although no scientific ground for this exists).

Nevertheless, women reported feeling stressed between the (false) choice of sex and risking the health of their baby, or, refusing sex with their husband and increasing the risk that he will have sexual affairs, and may leave her.

*“They should advise mothers to stop harassing their husbands not to go out, because if they don’t allow their husbands to go out, obviously that man will ask for sex. But having sex while breastfeeding will disturb the child. The time when I was having my (earlier) children, my husband and I never slept in the same room because I don’t want him to disturb me while breastfeeding my child.”*

**Pregnant woman, Koinadugu**

Other key challenges for breastfeeding are the lack of food for breastfeeding women themselves, and the difficulty with combining jobs, farming and other tasks with breastfeeding. Young (school attending) girls face many challenges to (exclusively) breastfeed their babies. Combining school and breastfeeding is difficult. Often grandparents will take care of the babies during the day and other (supplementary) fluids such as warm water will be given to the baby. Some girls return to school two weeks after delivery.

*“On one of our visits to hospitals one of the health workers said maternity leave is not long enough, and a friendly place for health workers in hospitals should be introduced to take a break and have time to practice breastfeeding if they are breastfeeding mothers. All of these are not available in hospitals. Even at the Youyi building where we have different ministries there is no private place for breastfeeding. I don’t think even UNICEF have made such provisions and these could be the enabling environments. Not just education but the enabling environment is key.”*

**Health worker, national level**

## Study Findings: Issues for the Behavioural Change Communication Strategy

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### Feeding infants (beyond breastfeeding) still starts too early

Despite increased awareness about the need to avoid supplementary feeding in the first six months of a child's life, and introducing complementary food later, this is still often done. This can be because of practical reasons like sleep, or the mother not being available (at work, at school). However, misunderstandings about development such as a child being considered small for its age and food being necessary can be a factor.

Providing not enough food after the age of six months happens as well for several reasons: a child refusing to eat, or not having enough money to buy food can also influence this.

*"I actually followed the advice from an old woman because when I gave birth the baby was very tiny. According to them solid food will help the baby to grow fat and strong. These are "age-able" people with experience when you talk about the act of bringing up a child, so whatever they said we have to comply with it, and we have seen it working for other people."*

**Mothers, FGD, Western Urban**

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### Knowledge of malnutrition is lacking among many parents and care- givers

Knowledge, understanding and beliefs vary widely concerning (mal)nutrition, what it causes, and its developmental impact on the health of young children. Many respondents recognize inappropriate feeding practices as a cause of malnutrition, while others hold more traditional beliefs accountable for malnutrition. Nutrition practices are regularly influenced by taboos on certain foods that should not be consumed by pregnant women and children. However, across the country these traditional beliefs and practices are changing as result of health promotion through (community) health and nutrition workers, radio and other channels.

Knowledge and awareness about the impact of chronic under-nutrition in young children is insufficient across the country. This is even the case among health professionals, who sometimes describe 'being short' as a solely genetic trait.



*“Presently, there are a lot of new understandings coming into our town. When we were growing up in this community, these were based exactly on the experiences of our mothers. When a child is sick or malnourished, it was ascribed to witchcraft. Most of the time the mother would wake up during the night and begin to insult and rain curses on the neighbours—accusing them of being responsible for the sickness of their children. Today it is quite different. With the sensitization of our nurse and other health staff, the situation has greatly improved”*

**Mother, FGD, Koinadugu**

Obesity or being overweight is increasing in urban areas. Some people recognize that this is caused by fast food and decreasing physical exercise, but it is not seen as a (health) problem by all.

*“Being overweight or small, it is nature and depends on what the body system can give you...because some people give birth to children that are exactly like them: if you are tall you may give birth to a taller child, if you are short there is a tendency of you giving birth to a short child.”*

**Health worker, Koinadugu**

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## **Food diversity and frequency of meals are often insufficient because of low-incomes and time constraints**

Men are generally responsible for providing food for women and children. However, a lack of financial resources limits the food intake and diversity for many households. The analysis of Multi Indicator Cluster Survey 2017 data shows that children in rural areas are less likely to receive the daily minimal meal frequency, as well as children living with their father or mother only. This Multi Indicator Cluster Survey 2017 further shows that a particularly vulnerable group to malnutrition are children between 18 and 23 months old who often get too few meals per day.

*“Yes they don’t feed them frequently due to poverty, you have to prepare every meal, and you cannot afford to cook in the morning or provide food in the afternoon when you have five thousand Leone only.”*

**Father, FGD, Port Loko**

Many households do not have access to fast food. But those who can afford it say that fast food helps their child to get big and energetic. Working mothers often provide fast food to the person who provides care for their children, resulting in inappropriate nutrition and developmental problems.

## Study Findings: Issues for the Behavioural Change Communication Strategy

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### Chronic malnutrition, access to health services and low-income are intimately linked

Lack of financial resources for food and underutilization of public health services are mentioned as reasons for malnutrition. Children in poorer families have an increased risk of suffering from stunting and being underweight.

*“We pray to God that our children will be able to eat two or three times a day. It is the urban areas that a child will be able to eat two, three to four times a day... there is no money and no jobs in the village... The economic power is not the same and the earning power is not the same.”*

**Father, FGD, Koinadugu**

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### Fathers influence children and mothers' food intake, and can positively or negatively change nutrition

Fathers play an important role in the feeding practices of their pregnant wives and their children by providing food, influencing food distribution within the household and by stimulating or asking women to stop breastfeeding.

The father is very much seen as a provider and decision maker, and much less as having a caring parenting role. Food taboos for children are sometimes reinforced by husbands, according to women as men want the food for themselves.

*“Every decision that has to do with food in the household is being done by my husband and when he is not around I make the decisions.”*

**Pregnant woman, Western Rural**

*“The fathers are the ones who eat all the nutritious foods in the home while the children are left out. You can see a father and his child eating and he tells the child not to touch the fish and the meat. They don't even know that the child should be the one to eat these foods because it will make them grow well.”*

**Mother, FGD, Pujehun**

Although men are decision takers on nutrition practices within the family they are regularly not targeted with health promotion activities around feeding practices for women and children. It was mentioned regularly that men lack knowledge about the importance of sufficient food and a diverse diet for pregnant women, and on infant and child feeding. One of the most frequently mentioned suggestions by the various respondents was that men should be informed about the importance of exclusive breastfeeding.



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## The eating environment at meal-times can affect young children's nutrition and development

The environment in which children eat depends on a lot of factors including social traditions, such as eating from a communal bowl or the child being served last (after the father, mother and older children). It often occurs that young children do not receive the food they need during a meal as they do not have the opportunity to take the most nutritious foods from the bowl. This can happen for various reasons, including bullying of young children when they take the best part of the meal, and taboos.

*“I have observed that families who eat together have the tendency to deny the child to eat the meat in the food. They often remarked that nowadays children don't live longer because they have bad eating manners. They often bully the children from eating the meat or fish in the food.”*

**Father, FGD, Western Urban**

However beliefs and practices are changing though, and fathers no longer always get preferential treatment.

*“Well before the rebel war, that is how some of us were raised by our parents. But after a lot of sensitization about the rights of women and children, I think that has drastically changed if not been abolished. After preparing meals, every child has access to his or her plate.”*

**Mother Support Group representative, Pujehun**

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## Misunderstandings about causes and preventions of diarrhoea are common

There is a strong belief all over the country that ‘bad breastmilk’ causes diarrhoea. As mentioned earlier, this is a strong reason to stop breastfeeding. People face difficulties in preventing diarrhoea in children. One common complaint is an inability to supervise the children during the day and prevent children from picking up dirty items and putting them in their mouths.

A wide variety of treatments of varying efficacy are provided for diarrhoea: people use public health services, traditional healers, medicine (red and yellow/tetracycline) and Oral Rehydration Salts.

*“The idea of not having sex while you are breastfeeding — that belief is wide spread here. So, the moment the child starts having a running stomach, people will quickly attribute it to sex.”*

**Pregnant woman, Kenema City**

## Study Findings: Issues for the Behavioural Change Communication Strategy

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### Women's health during pregnancy is still affected by a lack of iron, folic acid, and sufficient nutrition

Most women are aware of the importance of iron and folic acid. However, many women have problems taking iron and folic acid tablets because of the bad smell and prefer the syrup. Teenagers who keep their pregnancies hidden have challenges timely accessing iron and folic acid supplementation.

*"The other cause is that most of the impregnated teenagers stay away from their parents and prefer to keep pregnancy a secret, until their guardian comes to notice it. Then the guardian gets angry with them and perhaps shouts at them, and some may prefer to keep to themselves and even go without food (hunger starvation) for quite a long time."*

Father, FGD, Kenema City

Not all women consistently use bed nets to prevent malaria due to insufficient number of bed nets, heat or because they do not believe they are effective.

Finally, many pregnant and lactating women do not have access to enough and diverse food.

*"Some are even praying just to have ordinary cooked rice with palm oil and pepper on top just to survive for that particular day."*

Mother, FGD, Koinadugu

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### There is insufficient access to and use of nutrition services, despite a desire for them; health workers are seen as trusted sources of information

Respondents use modern health services in combination with traditional services and services from drug sellers. Payment for services, health workers' attitudes and large traveling distances negatively influence the use of modern services.

However, nutrition services are appreciated and health workers are seen as trusted informants. When community involvement is included in nutrition services (for example through Mother Support Groups, Community Health Workers, Traditional Birth Attendants) this is appreciated by the community. But in urban areas these community stakeholders are often not involved in nutrition programmes and promotion. That leads to less access to information on nutrition, especially in Western Urban.

*“We would want to be getting this information from the doctors and community health workers. They are the only people we trust when it comes to health issues because they know best. Here not everybody that has access to radio so we don’t rely too much on radio stations to get information.”*

**Pregnant woman, Koinadugu**

Children are screened by health workers and community health workers. However caregivers are not always informed about the outcome of the screening or advised about a child’s nutritional status.

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## **People cannot follow the advice of nutrition services due to low-incomes**

Most respondents mention poverty as the main reason that children and pregnant women do not receive enough meals. Respondents mention that they cannot follow the advice of health workers on quantity and diversity of food because of limited financial power to buy the recommended types of food. This includes as well complementary foods for children below two years. This finding of the qualitative study is confirmed by the analysis of the Multi Indicator Cluster Survey 2017 that shows that children in the poorest quintiles receive fewer meals.

*“Children receive less food per day because some parents cannot afford the money to prepare or buy food for them. They prefer giving hot water to their children uncountable times a day instead of giving them food that can make them grow.”*

**Mother, FGD, Pujehun**

The choice to use iodized salt is as well mostly guided by the price. Respondents are aware about the two types of salt available in the market (local, non-iodized and imported iodized salt), but unaware of the importance of iodized salt. Sensitization of men is perceived as important as they have a large say in which type of salt is bought and their decision is guided by the costs.

Also young mothers are not always following the advice of (community) health workers. These girls are often unhappy with the fact they will have a child. A special approach is needed to sensitize these young women about their (nutritional) needs and that of their babies.

*“Yes, it is true. They are young and ignorant. Some might even want to commit abortion for fear of their parents or other challenges that they may encounter. Elderly women must advice and encourage them because even though some will decide to give birth, the pressure of them becoming mothers will be too much for some to endure.”*

**Grandmother, Western Urban**

## Study Findings: Issues for the Behavioural Change Communication Strategy

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### People know what will help them to change behaviour for better nutrition

Respondents had many suggestions to stimulate behavioral change to improve nutrition. These include: intensified health promotion by health workers, through campaigns and the radio; including men as a target group for sensitization activities; and, involving community leaders to motivate people to change. Food distribution (or subsidizing this) for pregnant women and children who cannot afford to purchase this, was also frequently brought up. In Kenema (Gaura) a pregnant woman mentioned that when the husbands do not provide food to a pregnant woman, they go to the chief: *“who will talk to the husband and say that he cannot keep a wife at home that he cannot feed.”*

Another key suggestion which came up often was the provision of friendly environments for women at work and school-attending girls to breastfeed their children.

*“The school authorities should allow mothers to breast feed children at school because that is the only way children will be in good health condition.”*

**Grandmother, Kenema**

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### Improved water sanitation and hygiene appear to improve the nutritional status of children

Respondents confirmed that a part of their community members do not consistently practice handwashing at ‘the three critical points’, nor is the connection between diarrhoea and hand washing always made. Additionally, the importance of using clean water to wash utensils is not always obvious.

*“It is not easy to see people washing their hands in this community. When Ebola broke out in this country we were afraid and you saw people washing their hands frequently, now you hardly see them doing it.”*

**Pregnant woman, Port Loko**

According to the reanalysis of the Multi Indicator Cluster Survey 2017 the availability of soap and water seems to have a positive influence on the nutritional status of the children.

At the time of the survey children living in a household with available water and soap are 29% less likely to be underweight as compared to children living in a household where no handwashing place was available.

Urban settings have more access to latrines than rural settlements. In some cases, there is a lack of space in urban settings to build a latrine. But there are barriers in using the latrines: cleaning of (common) latrines is often not done; in rural areas people may feel embarrassed to use a public or neighbour's latrine and some people perceive having a higher risk of infection when using a latrine.

Availability of safe drinking water is seasonal and varies between respondents' communities. Respondents often know what has to be done to improve water quality but do not follow all these rules.

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## Differences between urban and rural lifestyles influence nutrition – health services need to be tailored

Nutrition practices such as exclusive breastfeeding, complementary feeding and the consumption of fast food, differ between rural and urban areas, especially in Freetown. Higher Minimal Meal Frequency and Minimum Dietary Diversity are observed in urban areas

In Western Urban there are no Mother Support Groups or Community Health Workers active, meaning less access to health and nutrition services. Furthermore, people tend to use private health care services more in this district. Due to this, they miss out on nutrition services.

*“In earlier days nurses engaged pregnant women during ante-natal visits and informed them about the type of food to eat for their health and their babies. Today it is completely lacking in the health facilities.”*

**Mother, FGD, Western Urban**

Furthermore, in both urban and rural areas, barriers to exclusive breastfeeding and adequate supervision of children are often linked to women having a job, and leaving their children during work hours. This is mostly the same for women in rural areas who have to farm, often leaving the children behind with a care taker at home.

# A wealth of information, how can it be used?

## What is recommended to be included in the behavioural change communication strategy?

### Overarching issues

- Strengthen awareness of the impact of stunting on the child's future and on society as a whole, and mobilize support to prevent stunting.
- Change attitudes towards the nutritional needs of all young children especially those between the age of 18 to 23 months.
- Motivate parents to provide more meals a day to young children and create a stimulating eating environment for them so that they receive the nutritious food they need.
- Create awareness amongst women AND men that sexual intercourse does not lead to spoiled breastmilk.
- Create awareness that maternal nutrition is not only important for the health of the mother but also for the (unborn) child.

### Strengthen the skills and motivation of nutrition and health workers to:

- Discuss harmful beliefs, traditions and practices of caretakers openly and discuss viable alternatives for these caretakers in a client-centred manner.
- Discuss with employed mothers what the best feeding options are for their children, especially during the first six months of life.
- Discuss with employed mothers how to guide the nutrition practices of care-givers for their children, especially grandmothers.
- Advise adolescent girls about how to best handle their pregnancy and motherhood in the interest of their own and their children's health and nutrition.

### Work with schools to:

- Sensitize schools/teachers about the important role they can play in supporting girls to manage their motherhood, and create opportunities to combine going to school with breastfeeding.
- Motivate schools to take on a pro-active attitude towards prevention of pregnancies amongst adolescents in school health programmes, e.g, by informing students about the needs of young children and the responsibilities of parenthood, combined with information about contraceptives.



**Include a strong focus on men:**

- Men should actively be targeted in all nutrition education activities related to the first 1000 days of a child's life.
- National campaigns covering all regions in Sierra Leone should be organized at all levels, using social media, radio and other means to stress the mutual responsibility of men and women in caring for their children. For this, men as role models could be used.

**Include community leaders:**

- Motivate community leaders to use their social influence to call upon men to take up the responsibility towards their families, execute their role as caregivers, and join activities organized by health workers.
- Motivate community leaders to use their social influence to assist and motivate community members to find solutions to improve the local food security.
- Motivate community leaders to use their social influence within their communities to ensure children at higher risk receive adequate food.

**Include attention for the policy environment:**

- Ensure attention to the creation of a strong policy environment that facilitates communities to access the necessary foods for the health of women and children.
- Promote a policy environment in which employers are stimulated to provide opportunities for mothers to opportunities for mothers to breastfeed their children.

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