

A photograph of a woman in the foreground carrying a baby in a blue and green patterned sling. The baby is wearing a pink hat with a cartoon character. In the background, another woman is carrying a baby in a white sling. The scene appears to be outdoors with other people blurred in the background.

**ANALYSIS OF BARRIERS  
AFFECTING CHILDREN & MOTHERS'  
NUTRITION & HEALTH STATUS**

**Analysis of Barriers Affecting  
Children and Mothers' Nutrition and Health Status**

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**April 2021: Shillong**

**ISSN:**

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*A publication created under the REC Funded Project*

**“NO ONE SHALL BE LEFT BEHIND” INITIATIVE**



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## Introduction

Proper nutrition of a mother and a child during the first 1000 days, i.e. between a woman's pregnancy and a child's second birthday, has a tremendous positive impact on the child's health and overall development. The first 1000 days is a significant stage in a child's life. It is during this period that a child must get the right nutrition in order to prevent from various diseases that a child may acquire. One of the prevalent diseases during this period is malnutrition, despite the many steps taken by the government to tackle this problem. Malnutrition in the first 1000 days can cause lifelong damage to children's brain and their physical growth, provoking a reduced capacity to learn, poorer performance in school, greater susceptibility to infection and diseases, and lower learning potential. It even increases the risk of developing illnesses like heart disease, diabetes and certain types of cancers later in life. The impact of poor nutrition early in life has lasting effects that can be trans-generational and can manifest themselves throughout the world. Malnourished women give birth to malnourished daughters who grow up and become malnourished mothers, perpetuating the cycle. But by improving nutrition during the crucial first 1000 days, much of the serious and irreparable problems caused by hunger and malnutrition can be prevented (Bellieni, 2016).

1000 days is an advocacy focusing on improving nutrition during the critical period of 1000 days between a woman's pregnancy and a child's second birthday as a way to achieve long term progress in global health and development, and to ensure that women and children are healthier in the first 1000 days.

Early care must emphasize links to family, home culture, and home language by uniquely caring for each child. Children who lack sufficient nurturing, nutrition, interaction with a parent or caregiver, and stimulus during this crucial period may be left with developmental deficits. Children must receive attention and affection to develop in a healthy manner. According to UNICEF, a child's brain is built and not born. The process begins well before birth and is influenced by a pregnant woman's health, nutrition and environment and is shaped by experiences and environment, a combination of nature and nurture. This process is fuelled by adequate nutrition, protection from harm and responsive stimulation including early learning opportunities. Unfortunately, millions of children around the world are deprived of the ingredients that foster optimal brain development. They do not have access to nutritious food or health care, they are not protected from violence, extreme stress, pollution and conflict, they are starved of responsive stimulation from a caring adult, and they miss out



on opportunities to learn. For example, exposure to violence, abuse and neglect can produce toxic stress, which when prolonged and extreme, can interfere with the development of neural connections. Therefore, it is necessary to look at the father's involvement and influence on the child's growth and development in order to ensure that children receive attention and affection to develop in a healthy manner (UNICEF, 2017).

## **Status of children and women in Meghalaya**

Examining the status of children and women in Meghalaya, the scenario is not very promising. According to the National Family Health Survey 2015-2016 (NFHS-4) Meghalaya, it shows that children's nutrition of those who are underweight is 29%, stunting is 44 %, wasting is 15% and severe is 7%.

*Infant feeding:* In terms of infant feeding, it is shown that children between the ages of 6-23 months receiving adequate diets are only 24%. Non-breastfeeding children aged 6-23 months receiving an adequate diet is 20% and breastfeeding children aged 6-23 months receiving an adequate diet is 24%. Children aged 6-8 months receiving solid and semi-solid foods and breast milk is 67 %. Although breastfeeding is nearly universal in Meghalaya, only 36 percent of children under 6 months are exclusively breastfed, as the World Health Organization (WHO) recommends and only 61% of the children fewer than 3 years started breastfeeding in the first hour of life. Moreover, children between the ages of 6 and 59 months, 41% of children are anaemic.

*Vaccination of children:* It was found that 62% of children aged 12-23 months received all basic vaccinations against six major childhood illnesses (tuberculosis, diphtheria, pertussis, tetanus, polio, and measles). Of these, 92% of the children aged 12-23 months have received most of the vaccinations in public health facilities and the remaining received the vaccinations in private health facilities.

In terms of Vitamin A intake, children aged 9-59 months who received a Vitamin A dose in the last 6 months are only 54%. It was found that 2.49% children below 5 years of age had clinical Vitamin A deficiency in Pynursla Block of East Khasi Hills, Meghalaya (Nongrum & Kharkongor, 2015).

## **Women**

According to the NFHS-4, 52% of women in Meghalaya have anaemia whereby 52% are non-pregnant women and 50% are pregnant women. Among the pregnant women, just over 53% had antenatal check-up in the first trimester as recommended, and 50% had at least 4 antenatal care visits. Only half of the mothers in Meghalaya have at least four antenatal care visits for their last birth. Urban women are more likely to receive four or more compared to rural women. In addition, a mother whose last birth was protected against neonatal tetanus is 79% and 36% who consumed iron folic acid for 100 days or more when they were pregnant. However, mothers who had full antenatal care are only 24%, but the registered pregnancies for which the mother received Mother and Child Protection (MCP) card is 94%. The mothers who received postnatal care from doctor/nurse/LHV/ANM/midwife/other health personnel within 2 days of delivery are 48%. Yet, mothers who received financial assistance under Janani Suraksha Yojana (JSY) for births delivered in an institution are only 28% (Health, 2015).

An analysis of the status of children and women has highlighted the fact that despite health schemes implemented in the villages, yet women and children are faced with malnutrition or anaemia among other problems. Hence, prior to advocating 1000 days of proper nutrition for mothers and children, it is important to understand the factors inhibiting the intake of proper nutrition for good health of both mother and child.

## Literature Review

Barrier Analysis is a method for identifying and assessing behaviour and determinants of behaviour in order to plan for more effective communications and other improvement. It is an assessment tool that can be used in community health and community development projects to identify determinants associated with a particular behaviour. Barrier analysis can be used in the beginning of the project in order to determine the activities for interventions (Change & Programs, 2004).

### Steps in Barrier Analysis

- i. Define the goal, behaviour and target group.
- ii. Develop the behaviour question.
- iii. Develop questions about determinants.
- iv. Organize the analysis sessions.
- v. Collect field data results.
- vi. Organize and analyze the results.
- vii. Use the results.



## Objectives of the Study

1. To assess the child rearing practices in rural areas of Meghalaya;
2. To determine the barriers that affect pregnant women and children's nutritional intake and health;
3. To identify mothers who do not have malnourished children in the same context;
4. To understand the fathers' involvement in and influence on the health and development of their children

## Methodology

**Research design:** Research design adopted for the study was the Descriptive Research.

**Sampling method:** Purposive Sampling: The research participants were purposely selected based on the criteria, availability and willingness to participate in the study (Kittle, 2013).

### Study Area:

Five Districts of Meghalaya which include East Khasi Hills, West Khasi Hills, Ri-Bhoi, West Garo Hills, and West Jaintia Hills. Twelve villages have been drawn from five Districts. The villages are:

- a) Laitsohpliah, Laitkroh Block, East Khasi Hills.
- b) Dombah, Mawthadraishan Block, West Khasi Hills.
- c) Nohron, Mawkynrew Block, East Khasi Hills.
- d) Nongmawlong, Mawshynrut Block, West Khasi Hills.
- e) Mustoh, Shella Block, East Khasi Hills.
- f) Mawhiang, Mawsynram Block, East Khasi Hills.
- g) Selbalgre, Rongram Block, West Garo Hills.
- h) Tosekgre, Rongram Block, West Garo Hills.
- i) Madanrtiang, Umsning Block, Ri-Bhoi.
- j) Marmain, Umling Block, Ri-Bhoi.
- k) Mupyut, Amlarem Block, West jaintia Hills.
- l) Mulum, Laskein, West Jaintia Hills.

### Sample unit:

1. **Mothers:** 120 mothers have been selected for the study which includes the mothers of children below 5 years, pregnant mothers, lactating mothers.
2. **Grandmothers:** 39 grandmothers were selected of those who are staying with the children below 5 years.
3. **Fathers:** 53 fathers of children below 5 years were chosen for this study.
4. **Grandfathers:** 28 grandfathers staying with the children below 5 years were chosen for the study.

5. **Adolescents girls:** 255 adolescent girls, 5 adolescent girls from each village except from one village there was no data of the adolescent girls.
6. **Accredited Social Health Activist (ASHA):** 12 Accredited Social Health Activist (ASHAs).
7. **Anganwadi workers (AWWs):** 12 Anganwadi workers.
8. **Auxiliary Mid-Wife (ANM):** 3 Auxiliary Nurse Midwifery (ANMs).

**Tool for data collection:** Individual Interview and home visit using a structured Interview Schedule

## Results and Discussion

The present study intends to analyze the barriers affecting children and mothers' nutrition and health status. As mentioned in the previous chapter, the researcher selected 522 research participants from 12 villages, 11 Blocks fall under the 5 Districts of Meghalaya. With this representative sample the study attempts to determine the barriers that affect pregnant women and children's nutritional intake and health. An individual interview schedule was used to collect data for the study. The interview schedule comprise of the demographic profile, socio-economic status background, nutritional intake by mothers in 1000 days, antenatal care, feeding practices of children below 6 months, complementary feeding practices, vaccination of children below 5 years old, influence of grandmothers in child rearing practices, father's involvement in and influence on the health and development of their children and others which included both closed and open ended questions. The results obtained are put through statistical analysis; the results and discussions are presented in this chapter. For better understanding the results are presented into the following sections:

### Demographic profile

Majority of the mothers who were interviewed belonged to the 25-35 age categories, i.e., all are adults (see table 1). It is only in Marmain and Nohron that young mothers are found. In fact, the majority of the mothers interviewed in these villages are quite young. From the interview with all the above categories, it is realized that young mothers are easier to approach and to convince compared to the older mothers having children below 5 years.

**Table 1: Age group distribution in the study area**

Villages	Age						Total
	Less than 25	25 to 30	30 to 35	35 to 40	45 to 50	6.00	
Dombah	0.0%	50.0%	40.0%	0.0%	10.0%	0.0%	100.0%
Laitsohpliah	30.0%	50.0%	0.0%	10.0%	10.0%	0.0%	100.0%
Madanrtiang	0.0%	70.0%	20.0%	10.0%	0.0%	0.0%	100.0%
Marmain	40.0%	20.0%	20.0%	10.0%	10.0%	0.0%	100.0%
Mawhiang	0.0%	60.0%	30.0%	10.0%	0.0%	0.0%	100.0%
Mulum	20.0%	40.0%	40.0%	0.0%	0.0%	0.0%	100.0%
Mupyut	10.0%	30.0%	10.0%	20.0%	20.0%	10.0%	100.0%
Mustoh	10.0%	20.0%	40.0%	10.0%	10.0%	10.0%	100.0%
Nohron	40.0%	20.0%	10.0%	20.0%	10.0%	0.0%	100.0%
Nongmawlong	0.0%	60.0%	40.0%	0.0%	0.0%	0.0%	100.0%
Selbalgre	20.0%	30.0%	40.0%	0.0%	10.0%	0.0%	100.0%
Tosekgre	20.0%	50.0%	30.0%	0.0%	0.0%	0.0%	100.0%
Total	15.8%	41.7%	26.7%	7.5%	6.7%	1.7%	100.0%

All of the mothers that were interviewed are married, while only some in Laitsohpliah, Mulum, Mustoh and Tosekgre are single parents, and some in Dombah who are separated with their husbands. The rest are staying with their spouses.

**Table 2: Categories of mothers in the study area**

Villages	Categories			Total
	Pregnant mother	Lactating mother	Mother having children under five	
Dombah	20.0%	50.0%	30.0%	100.0%
Laitsohpliah	30.0%	40.0%	30.0%	100.0%
Madanrtiang	30.0%	40.0%	30.0%	100.0%
Marmain	50.0%	10.0%	40.0%	100.0%
Mawhiang	50.0%	30.0%	20.0%	100.0%
Mulum	30.0%	20.0%	50.0%	100.0%
Mupyut	30.0%	50.0%	20.0%	100.0%
Mustoh	30.0%	20.0%	50.0%	100.0%
Nohron	30.0%	70.0%	0.0%	100.0%
Nongmawlong	20.0%	30.0%	50.0%	100.0%
Selbalgre	20.0%	40.0%	40.0%	100.0%
Tosekgre	40.0%	20.0%	40.0%	100.0%
Total	31.7%	35.0%	33.3%	100.0%

Except Nohron that had no mothers of children under five years old, mothers from the remaining villages had a good representation across all the categories, viz., pregnant mother, lactating mother and mothers having children of under five years old (see table 2). Still, majority of the mothers from the villages of Marmain, Mawhiang and Tosekgre were pregnant mothers. Dombah, Laitsohpliah, Madanrtiang, Mupyut, and Nohron, however, had more lactating mothers and most from Mulum, Mustoh, Selbalgre and Tosekgre were mothers who had a child of under five years age.

**Table 3: Level of schooling of mothers in the study area**

Villages	Schooling						Total
	No response	Nursery	Primary	Secondary	Higher secondary	Graduate	
Dombah	0.0%	20.0%	50.0%	30.0%	0.0%	0.0%	100.0%
Laitsohpliah	0.0%	0.0%	60.0%	30.0%	10.0%	0.0%	100.0%
Madanrtiang	0.0%	10.0%	60.0%	20.0%	0.0%	10.0%	100.0%
Marmain	0.0%	0.0%	40.0%	60.0%	0.0%	0.0%	100.0%
Mawhiang	0.0%	20.0%	50.0%	30.0%	0.0%	0.0%	100.0%
Mulum	0.0%	20.0%	20.0%	50.0%	10.0%	0.0%	100.0%
Mupyut	10.0%	40.0%	10.0%	30.0%	0.0%	10.0%	100.0%
Mustoh	0.0%	0.0%	10.0%	60.0%	20.0%	10.0%	100.0%
Nohron	10.0%	20.0%	40.0%	20.0%	10.0%	0.0%	100.0%
Nongmawlong	0.0%	30.0%	50.0%	20.0%	0.0%	0.0%	100.0%
Selbalgre	0.0%	0.0%	70.0%	30.0%	0.0%	0.0%	100.0%
Tosekgre	0.0%	0.0%	20.0%	70.0%	10.0%	0.0%	100.0%
Total	1.7%	13.3%	40.0%	37.5%	5.0%	2.5%	100.0%

Majority of the mothers had attained primary or secondary education suggesting that they are not highly educated (see table 3). Mustoh and Mupyut had some graduates.

Therefore, it can be said that in terms of the demographic profile, the mothers have similar characteristics across all the villages.

**Table 4: Average number of children per mothers in the study area**

Village	Mean
Dombah	4.2000
Laitsohpiah	2.7000
Madanrtiang	2.0000
Marmain	2.1000
Mawhiang	2.9000
Mulum	2.0000
Mupyut	3.3000
Mustoh	2.4000
Nohron	3.7000
Nongmawlong	3.4000
Selbalgre	3.2000
Tosekgre	1.3000
Total	2.7667

There is greater variation compared to the number of children a single mother has (see table 4). On average, a mother has around 2 children. Mothers in Dombah, Mupyut, Nohron, Nongmawlong and Selbalgre, though had more children; more than 3 per mother. Except Nohron, the majority of the mothers from these villages are more than 30 years old, which could explain the higher number of children. But with the majority of the mothers in Nohron being less than 30 years old, this is a worrying sign for the village. More children could mean more burdens on the family. However, Tosekgre has one single child per mother, which is very low. Since most of the mothers in this village are pregnant this number will go up soon in the near future and it will then match the general picture. But since most of the mothers in general are still quite young, the average number of children could go higher.

### **Socio-economic profile**

The occupation of the mothers in the study area is neatly divided between being a homemaker and a farmer (see table 5). Majority of mothers in half of the villages are farmers while the majority in the other half are homemakers. The villages that fall in the first category are Dombah, Laitsohpiah, Marmain, Nongmawlong, Selbalgre and Tosekgre with the remaining falling in the second category. These two categories are not mutually exclusive with mothers performing both the duties simultaneously.

For the fathers in the study area daily wage labour is reported to be the main occupation. In only three villages is this not the case. These villages are Marmain, Nongmawlong and

Tosekgre where farming or other occupations are more important. Similarly, the earnings from daily wage are again very similar with an overwhelming majority, Rs. 300-500. This is around the minimum wage prescribed by the state and therefore would imply fair earnings. However daily wage earnings in Mupyut is low, less than Rs. 300. Considering that the main occupation for 80% of the fathers in this village is daily wage, it is a point of concern. Low wages could mean fewer households spending which could drastically affect the health and well being of the family.

**Table 5: Occupation of the mother in the study area**

Villages	Occupation of the mother					Total
	Farmer	Home maker	Daily wage labourer	Government employee	Other	
Dombah	80.0%	20.0%	0.0%	0.0%	0.0%	100.0%
Laitsohpliah	50.0%	30.0%	20.0%	0.0%	0.0%	100.0%
Madanrtiang	10.0%	70.0%	10.0%	10.0%	0.0%	100.0%
Marmain	70.0%	30.0%	0.0%	0.0%	0.0%	100.0%
Mawhiang	30.0%	50.0%	20.0%	0.0%	0.0%	100.0%
Mulum	10.0%	50.0%	20.0%	10.0%	10.0%	100.0%
Mupyut	30.0%	40.0%	0.0%	10.0%	20.0%	100.0%
Mustoh	10.0%	90.0%	0.0%	0.0%	0.0%	100.0%
Nohron	0.0%	80.0%	20.0%	0.0%	0.0%	100.0%
Nongmawlong	80.0%	20.0%	0.0%	0.0%	0.0%	100.0%
Selbalgre	90.0%	10.0%	0.0%	0.0%	0.0%	100.0%
Tosekgre	60.0%	10.0%	0.0%	10.0%	20.0%	100.0%
Total	43.3%	41.7%	7.5%	3.3%	4.2%	100.0%

When taking into consideration the fact that the majority of the families in Mupyut considered daily wage labour as the main source, it points to a dire situation for the families in this village. Marmain also has a high number of families who earn a daily wage of less than Rs. 300. But it was revealed that unlike the majority of the families in the study area, in Marmain the main source of income for the family is not daily wage labour but farming. This means that they can compensate for the low daily wage with returns from farming based activities. This is the same with Dombah as well. However, barring these two villages, the majority of the families in the study area depend on daily wage labour as their main source of income.

In terms of fulfilling all the needs of the family, this will not be sufficient. An alternative source of income becomes essential. However, an overwhelming majority of the families do not have any other alternative, except families in Mulum and Tosekgre. But even in these villages, a high number of families don't have an alternative source of income. The families in the study, therefore, are still vulnerable to economic hardships, which can affect other aspects of the family. What is slightly reassuring is that the majority of the families in



the study area have some savings in the bank. In times of hardship, this could be very critical. However, families in Mupyut and Tosekgre reported having no savings.

**Table 6: List of assets of the families in the study area**

Village	List of Assets					Total
	Land	House	Land and house	Land, House, Mobile phone	All of the above	
Dombah	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Laitsohpliah	10.0%	0.0%	80.0%	10.0%	0.0%	100.0%
Madanrtiang	0.0%	0.0%	30.0%	60.0%	10.0%	100.0%
Marmain	0.0%	10.0%	0.0%	80.0%	10.0%	100.0%
Mawhiang	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Mulum	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Mupyut	0.0%	20.0%	40.0%	10.0%	30.0%	100.0%
Mustoh	0.0%	10.0%	0.0%	90.0%	0.0%	100.0%
Nohron	0.0%	40.0%	60.0%	0.0%	0.0%	100.0%
Nongmawlong	0.0%	10.0%	20.0%	70.0%	0.0%	100.0%
Selbalgre	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Tosekgre	10.0%	0.0%	0.0%	70.0%	20.0%	100.0%
Total	1.7%	7.5%	27.5%	57.5%	5.8%	100.0%

In terms of assets (see table 6), a majority of the families have a land, house, and a mobile phone. Following this group are families who have land and house. Land and house are the most common assets families have in the study area. The land owned by the families can be both homesteads as well as cultivable land (see table 7). The majority of the families in the study area have both. In Mawhiang, Mulum and Mustoh, majority have only homestead and no cultivable land. This could have important implications for their household food security. But when it comes to house type, more than three-fourth of the families are living in kutchra (tin roof/ Assam type houses) or semi-pucca houses suggesting similar living conditions (see table 8).

**Table 7: Type of land owned by the families in the study area**

Villages	Type of Land Owned				Total
	No Response	Homestead	Cultivable Land	Both	
Dombah	0.0%	0.0%	0.0%	100.0%	100.0%
Laitsohpliah	0.0%	0.0%	0.0%	100.0%	100.0%
Madanrtiang	0.0%	40.0%	10.0%	50.0%	100.0%
Marmain	0.0%	0.0%	30.0%	70.0%	100.0%
Mawhiang	0.0%	50.0%	0.0%	50.0%	100.0%
Mulum	0.0%	50.0%	0.0%	50.0%	100.0%
Mupyut	10.0%	20.0%	0.0%	70.0%	100.0%
Mustoh	0.0%	50.0%	10.0%	40.0%	100.0%
Nohron	10.0%	40.0%	10.0%	40.0%	100.0%
Nongmawlong	0.0%	10.0%	0.0%	90.0%	100.0%
Selbalgre	0.0%	0.0%	0.0%	100.0%	100.0%
Tosekgre	0.0%	20.0%	10.0%	70.0%	100.0%
Total	1.7%	23.3%	5.8%	69.2%	100.0%

**Table 8: Type of house of the family in the study area**

Village	Type Of House			Total
	Kutchha	Pucca	Semi-Pucca	
Dombah	80.0%	0.0%	20.0%	100.0%
Laitsohpliah	80.0%	20.0%	0.0%	100.0%
Madanrtiang	40.0%	30.0%	30.0%	100.0%
Marmain	40.0%	20.0%	40.0%	100.0%
Mawhiang	10.0%	30.0%	60.0%	100.0%
Mulum	20.0%	30.0%	50.0%	100.0%
Mupyut	0.0%	30.0%	70.0%	100.0%
Mustoh	10.0%	30.0%	60.0%	100.0%
Nohron	50.0%	30.0%	20.0%	100.0%
Nongmawlong	70.0%	0.0%	30.0%	100.0%
Selbalgre	80.0%	0.0%	20.0%	100.0%
Tosekgre	70.0%	10.0%	20.0%	100.0%
Total	45.8%	19.2%	35.0%	100.0%

Regarding bad habits among the fathers in the study, it is found that the majority of them smokes, consumes alcohol, or do both (see table 9). It is only in Marmain that a significant number of them do neither. In general, though bad habits are common in the study area and this could have important consequences in terms of the health of the father and the family.

**Table 9: Bad habits of the father in the study area**

Village	Does The Father Engage In Any Bad Habit					Total
	No Response	Alcohol	Smoking	Both	None	
Dombah	10.0%	0.0%	10.0%	70.0%	10.0%	100.0%
Laitsohpliah	10.0%	0.0%	20.0%	60.0%	10.0%	100.0%
Madanrtiang	0.0%	20.0%	20.0%	40.0%	20.0%	100.0%
Marmain	0.0%	20.0%	20.0%	30.0%	30.0%	100.0%
Mawhiang	0.0%	0.0%	30.0%	60.0%	10.0%	100.0%
Mulum	10.0%	0.0%	40.0%	50.0%	0.0%	100.0%
Mupyut	20.0%	0.0%	20.0%	40.0%	20.0%	100.0%
Mustoh	10.0%	0.0%	60.0%	30.0%	0.0%	100.0%
Nohron	20.0%	10.0%	40.0%	30.0%	0.0%	100.0%
Nongmawlong	0.0%	0.0%	20.0%	80.0%	0.0%	100.0%
Selbalgre	0.0%	10.0%	0.0%	90.0%	0.0%	100.0%
Tosekgre	10.0%		30.0%	40.0%	20.0%	100.0%
Total	7.5%	5.0%	25.8%	51.7%	10.0%	100.0%

It is thus clear that the families in the study area are highly vulnerable to various economic hardships. Combined with the prevalence of bad habits among fathers, this could have grave effects on the nutrition and health of mother and the child.

### **Nutritional intake by mothers in 1000 days**

An overwhelming majority of the mothers have access to information relating to pregnancy. There are though five villages where almost half or half of the mothers reported of having no access to such information. These villages include Laitsohpliah, Mupyut, Mulum and

Nohron. There is a chance that mothers in these villages could be highly susceptible to various pregnancy related problems.

**Table 10: Source of information related to pregnancy among the mothers in the study area**

Villages	Source Of Information							Total
	No Response	Doctors	Nutritionist	ANM	ASHA	AWW	Others	
Dombah	20.0%	20.0%	0.0%	30.0%	0.0%	10.0%	20.0%	100.0%
Laitsohpiah	20.0%	0.0%	0.0%	40.0%	0.0%	40.0%	0.0%	100.0%
Madanrtiang	20.0%	10.0%	10.0%	0.0%	10.0%	40.0%	10.0%	100.0%
Marmain	0.0%	0.0%	0.0%	30.0%	40.0%	0.0%	30.0%	100.0%
Mawhiang	20.0%	0.0%	0.0%	0.0%	10.0%	70.0%	0.0%	100.0%
Mulum	10.0%	20.0%	0.0%	60.0%	0.0%	0.0%	10.0%	100.0%
Mupyut	50.0%	40.0%	10.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Mustoh	40.0%	30.0%	0.0%	30.0%	0.0%	0.0%	0.0%	100.0%
Nohron	50.0%	0.0%	0.0%	30.0%	20.0%	0.0%	0.0%	100.0%
Nongmawlong	40.0%	0.0%	0.0%	0.0%	0.0%	60.0%	0.0%	100.0%
Selbalgre	0.0%	0.0%	0.0%	30.0%	60.0%	0.0%	10.0%	100.0%
Tosekgre	10.0%	0.0%	0.0%	10.0%	60.0%	20.0%	0.0%	100.0%
Total	23.3%	10.0%	1.7%	21.7%	16.7%	20.0%	6.7%	100.0%

As for the source of pregnancy related information, Auxiliary nurse midwife (ANM), Accredited Social Health Activist (ASHA) and Anganwadi Worker (AWW) are the main agencies through which such information is distributed (see table 10). This in turn is an indication of the efficient functioning of these institutions in the villages. The only exception here is Mupyut, where no mother received information from them. Instead most of them get information from doctors during their visits to the clinic or at hospitals. In the same manner, this suggests weak functioning of ANM, ASHA and AWW in Mupyut which is a case of concern.

**Table 11: Consumption of supplements among the mothers in the study area**

Village	Consumption of Supplements			Total
	No Response	Yes	No	
Dombah	0.0%	30.0%	70.0%	100.0%
Laitsohpiah	50.0%	50.0%	0.0%	100.0%
Madanrtiang	20.0%	30.0%	50.0%	100.0%
Marmain	0.0%	60.0%	40.0%	100.0%
Mawhiang	0.0%	50.0%	50.0%	100.0%
Mulum	0.0%	20.0%	80.0%	100.0%
Mupyut	10.0%	20.0%	70.0%	100.0%
Mustoh	0.0%	60.0%	40.0%	100.0%
Nohron	0.0%	40.0%	60.0%	100.0%
Nongmawlong	0.0%	30.0%	70.0%	100.0%
Selbalgre	0.0%	10.0%	90.0%	100.0%
Tosekgre	0.0%	20.0%	80.0%	100.0%
Total	6.7%	35.0%	58.3%	100.0%

Though access to information related to pregnancy is generally good, consumption of supplements was found to be low in the study area (see table 11). Only in Marmain and Mustoh, the majority of the mothers consume supplements. Laitsohpiah and Mawhiang also

have half of their mothers consuming supplements, but the other half don't at all. Thus in general, mothers don't consume any supplements, except when they know about their pregnancy.

This prevalence of lack of consumption of supplements is a big worry, especially because of poor nutrition in many rural areas. The same is the case in this particular study area as well as diets are not very rich. This has the potential to impact mother and child health in a very adverse manner. This is all the more critical for Laitsohpliah where the child weight during birth was less than the recommended benchmark, which suggested that lack of information and supplement consumption could have had a role to play in that.

**Table 12: Pattern of Food consumption in the study area**

Groups	Items	High Consumption (% of villages)	Moderate (% of villages)	Low (% of villages)
Breakfast	Rice, Tea And Vegetables	83.33	8.33	8.33
	Tea And Biscuits	33.33	33.33	33.33
	Bread	0.00	0.00	100.00
	Egg	0.00	25.00	75.00
	Banana	0.00	16.67	83.33
Lunch	Rice	100.00	0.00	0.00
	Dal	41.67	41.67	16.67
	Green Leafy Vegetables	91.67	8.33	0.00
	Roti	0.00	16.67	83.33
	Meat	0.00	25.00	75.00
	Egg	0.00	25.00	75.00
Evening Snacks	Biscuits And Tea	0.00	75.00	25.00
	Rice, Tea And Vegetables	75.00	25.00	0.00
	Roti	0.00	16.67	83.33
	Bread	0.00	16.67	83.33
	Noddles	0.00	0.00	100.00
Dinner	Rice	100.00	0.00	0.00
	Dal	50.00	50.00	0.00
	Green Leafy Vegetables	100.00	8.33	0.00
	Roti	0.00	0.00	100.00
	Meat	0.00	58.33	41.67
	Egg	0.00	41.67	58.33
Wild Edibles	Jamyrdoh	80.00	20.00	0.00
	Jyllang	50.00	50.00	0.00
	Jaud	60.00	20.00	20.00
	Jatira	40.00	50.00	10.00
	Sohlyndung	10.00	0.00	90.00
	Jalynniar	10.00	20.00	70.00
	Jajew	20.00	30.00	50.00
	Jaiaw	0.00	10.00	90.00
	Kynchiang	0.00	0.00	100.00
	Jalynsiar	10.00	10.00	80.00
	Jamahek	20.00	0.00	80.00
	Jakyrwiang	10.00	0.00	90.00
Green Leafy Vegetables	Mustard	58.33	41.67	0.00
	Spinach	0.00	16.67	83.33
	Cabbage	16.67	41.67	41.67
	Coriander Leaves	8.33	41.67	50.00
	Lettuce	33.33	41.67	66.67
Other	Pumpkin Leaves	16.67	50.00	33.33
	French Bean	16.67	50.00	33.33

Vegetables	Bitter Gourd	0.00	25.00	75.00
	Brinjal	0.00	50.00	50.00
	Cauliflower	0.00	25.00	75.00
	Cucumber	25.00	41.67	33.33
	Capsicum	0.00	16.67	83.33
	Tomato	8.33	41.67	50.00
	Lady Finger	0.00	16.67	83.33
	Bottle Gourd	0.00	8.33	91.67
	Ridge Gourd	0.00	25.00	75.00
Roots And Tubers	Squash	0.00	41.67	58.33
	Carrot	16.67	33.33	50.00
	Potato	91.67	8.33	0.00
	Radish	8.33	41.67	50.00
	Turnip	0.00	0.00	100.00
	Yam	16.67	41.67	41.67
Fruits	Sweet Potato	16.67	33.33	50.00
	Apple	0.00	0.00	100.00
	Banana	0.00	50.00	50.00
	Water Melon	0.00	0.00	100.00
	Orange	8.33	16.67	75.00
	Pear	8.33	8.33	83.33
	Lemon	0.00	50.00	50.00
	Guava	0.00	16.67	83.33
	Peach	0.00	8.33	91.67
	Blackberry	0.00	0.00	100.00
	Pineapple	0.00	8.33	91.67
	Litchi	0.00	8.33	91.67
Protein	Grapes	0.00	0.00	100.00
	Meat	0.00	16.67	83.33
	Pulses	0.00	58.33	41.67
	Aquatic Food	0.00	33.33	66.67
	Beans	0.00	41.67	58.33
	Yogurt	0.00	0.00	100.00
	Nuts	0.00	0.00	100.00
Egg	0.00	25.00	75.00	

**NB:** If in a village, more than half of the households have consumed a particular food everyday it is categorised in the high consumption category;

If in a village, more than half of the households have consumed a particular food twice a week it is categorised in the moderate consumption category;

If in a village, more than half of the households have consumed a particular food once a week or less it is categorised in the low consumption category;

Rice, tea and vegetables are the most common items consumed by the mothers during breakfast. Consumption of bread, egg and banana, however, is very less, only once a week or less. As for lunch, rice, dal and green leafy vegetables have high consumption. Mothers in the majority of the villages consume these items every day. Some have mushrooms as part of their diet during lunch. In the evening snacks, it is only rice, tea and vegetables that have high consumption. Other items like roti, bread and noodles are hardly consumed. Some mothers consume sticky rice, tapioca, taro and local snacks like *pumaloi*, *putharo*, *pudoh* also as part of evening snacks. Like in lunch, the main items in the menu during dinner are rice, dal and green leafy vegetables. Meat and egg, an important source of protein, has moderate

consumption of twice a week. Among the wild edibles *jamyrdoh*, *jyllang* and *jaud* are consumed regularly, i.e., everyday with the rest having very low consumption (see table 12).

**Table 13: Vulnerable villages in terms of Food consumption in the study area**

Groups	Vulnerable Villages	Percentage of food items	Total number of food items
Breakfast	Mawhiang, Mustoh, Nohron, Nongmawlong, Tosekgre	66.67	5
Lunch	Nongmawlong	66.67	6
Evening Snacks	Marmain, Nongmawlong	80.03	6
Dinner	Mulum, Nohron, Nongmawlong, Selbalgre, Tosekgre	50.00	6
Wild Edibles	Mustoh, Nohron	75.00	13
Green Leafy Vegetables	Nongmawlong	83.33	7
Other Vegetables	Mustoh	100.00	11
Root And Tubers	Mustoh, Nohron, Nongmawlong	66.67	6
Fruits	Mawhiang, Mustoh, Nohron	100.00	12
Protein	Dombah, Nongmawlong	100.00	7

Although green leafy vegetables are a regular part of the diet of the mothers in the study area, they are restricted to only a few wild edibles. Diversity is not present in the diet. This is further confirmed by the fact that consumption of other vegetables like french bean, bitter gourd, brinjal, cauliflower, cucumber, capsicum, tomato, lady finger, bottle gourd, ridge gourd, squash is either moderate or (in most cases) low. Similarly, among roots and tubers, only potato is consumed everyday with other items having low consumption except yam which is consumed twice a week, i.e., moderate consumption. Fruits and sources of protein which include meat, pulses, beans, nuts, yogurt, milk, egg and aquatic food again have moderate to low consumption. From the Khasi region, certain local fruits were mentioned like *sohphoh khasi*, *sohphie*, *sohpieng*, *sohbah*, *soglyngdkhur* were mentioned. But like the rest, consumption was low. Similarly, muskmelon, jackfruits, mango, jambura, chinara, tepatang, tekring were part of the local diet but have low consumption. All this suggests that the diet of mothers in the study area is not very diverse indicating poor nutrition which could have adverse effects on both their health and the child's. Within this general trend there are some villages that are particularly more vulnerable.

Different villages have vulnerabilities in different groups (see table 13). Highest vulnerability is found during breakfast and dinner when more than half of the villages from the study area, viz., Mawhiang, Mustoh, Nohron, Nongmawlong, Tosekgre, Mulum, Selbalgre report low consumption of more than half of the items listed in these categories. Lunch, green leafy vegetables and other vegetables have only one village each which shows low consumption. But even so, the villages in this category have low consumption in more than 2/3rd of the items given in these groups. In Mustoh especially, none of the mothers have even moderate consumption of other vegetables. Among all the villages, Mustoh, Nohron and

Nongmawlong are the most vulnerable. They are found to have low consumption in more than 50% of the food groups. Thus while in general, mother's nutrition is a concern, mothers in these three villages are in a dire situation than others. There is however no particular food which mothers avoid when they are pregnant. No specific taboos were reported by the mothers during pregnancy. Thus this food consumption pattern will remain the same during pregnancy as well for normal times.

### **Antenatal Care (ANC)**

Except for Nongmawlong, Selbalgre and Mawhiang, the nearest health centre for the mothers in the study area are the sub-centres. These are health centres which have a catchment population of 3000-5000 people. For Nongmawlong and Selbalgre, Primary Health Centre (serving 20000 to 30000 people) are closer while for Mawhiang, the Community Health Centre (serving 80,000 to 1.2 lakh people) is the nearest. As for pregnancy registration, mothers from all the villages go to the Primary Health Centres.

**Table 14: Frequency of antenatal care check up among mothers in the study area**

Village	Mean
Dombah	1.7000
Laitsohplich	1.9000
Madanrtiang	1.5000
Marmain	1.9000
Mawhiang	2.0000
Mulum	1.8000
Mupyut	1.6000
Mustoh	1.9000
Nohron	.9000
Nongmawlong	1.4000
Selbalgre	1.7000
Tosekgre	1.7000
Total	1.6667

An overwhelming majority of the mothers in the study area received their antenatal care check up. The most common reason for their visit to the health centre for ANC was reported to be on advice of the ASHA worker. In Mupyut, Nongmawlong and Selbalgre, majority of the mothers decided to go on their own as part of their decision to start a regular health check-up. Still the important role that ASHA workers play in providing information about the ANC is very significant in the study area .

Most of the mothers go more than once for their ANC (see table 14). The highest number of times mothers go is two. This is found among mothers from Mawhiang. On the other hand, the lowest is recorded from Nohron where mothers only go around once for their



ANC. In fact almost one-third of the mothers from this village never got their ANC. Mothers' health during pregnancy could be an issue in Nohron. Those who go for ANC check up in the study area mostly go to the sub-centre (see table 15). In Mawhiang, however, half of the mothers go to private practitioners while mothers in Nongmawlong and Selbalgre go to the Primary Health centre for their check-up. In general though, Sub-Centre is the most important health facility for ANC. Except in Nohron and Nongmawlong, the majority of mothers from other villages have completed their ANC. Status of mothers in terms of ANC is thus quite positive. However Nongmawlong and Nohron are a cause of concern.

**Table 15: Centre for antenatal care check up among mothers in the study area**

Villages	Centre For ANC					Total
	No Response	Private	Primary	Sub-Centre	Community Health Centre	
Dombah	10.0%	0.0%	10.0%	80.0%	0.0%	100.0%
Laitsohpliah	0.0%	0.0%	40.0%	60.0%	0.0%	100.0%
Madanrtiang	10.0%	0.0%	0.0%	90.0%	0.0%	100.0%
Marmain	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Mawhiang	0.0%	50.0%	0.0%	50.0%	0.0%	100.0%
Mulum	0.0%	0.0%	0.0%	90.0%	10.0%	100.0%
Muppyut	0.0%	0.0%	20.0%	80.0%	0.0%	100.0%
Mustoh	0.0%	10.0%	20.0%	60.0%	10.0%	100.0%
Nohron	30.0%	10.0%	10.0%	30.0%	20.0%	100.0%
Nongmawlong	20.0%	0.0%	60.0%	20.0%	0.0%	100.0%
Selbalgre	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Tosekgre	10.0%	0.0%	0.0%	70.0%	20.0%	100.0%
Total	6.7%	5.8%	21.7%	60.8%	5.0%	100.0%

Most of the mothers complete their antenatal care check-ups. However, Nohron and Nongmawlong have higher numbers of the mothers who did not complete their ANC check-ups. The most important reason for going to a particular centre for ANC is because of proximity. This was the case for the majority of mothers from all villages except Mawhiang. In this village, good quality of service is the main reason for going to a particular centre. Some also mentioned about the cost being an important determining factor. But that is very less and only in Selbalgre.

As for the services available during pregnancy check, viz., tetanus injection, iron tablets/syrup, weight check, blood/urine test, blood pressure examination, physical examination and provision of calcium tablets, has been availed by the majority of the mothers from all villages (see table 16). Those mothers who get their ANC also get all these services. The centres that have these tests facilities, thus, are very efficient in providing the services for mothers.

**Table 16: Services for the mothers during pregnancy check up in the study area**

Village	Tetanus injection	Iron tablets/syrup	Weight checked	Blood/urine test	Blood pressure examination	Physical examination	Calcium tablets
Dombah	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%
Laitsohplich	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Madanrtiang	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%
Marmain	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%
Mawhiang	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Mulum	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Mupyut	90.0%	80.0%	90.0%	80.0%	90.0%	90.0%	70.0%
Mustoh	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Nohron	70.0%	70.0%	80.0%	80.0%	70.0%	80.0%	80.0%
Nongmawlong	80.0%	80.0%	90.0%	90.0%	90.0%	90.0%	90.0%
Selbalgre	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Tosekgre	90.0%	90.0%	100.0%	90.0%	90.0%	90.0%	90.0%
<b>Total</b>	<b>91.7%</b>	<b>90.8%</b>	<b>94.2%</b>	<b>92.5%</b>	<b>92.5%</b>	<b>93.3%</b>	<b>91.7%</b>

The health infrastructure thus seems to be functioning in a good state. The only thing that remains to be done is to ensure that mothers in villages who recorded a low ANC in Nongmawlong and especially Nohron should not be in the same condition. The role of the ASHA is going to be very crucial in this.

### **Feeding practises of children below 6 months**

It was heartening to record from an overwhelming majority of the mothers (more than 80%) that they were aware of breastfeeding. However, there are villages like Marmain, Mawhiang, Mulum and Nongmawlong in which more than 20% to 50% of the mothers were ignorant about the practise. The lack of awareness about these best practices could have implications on child health. Those who were aware of the practise again responded that it is to be practised for a period of 6 months. Some from Dombah, Laitsohplich and Madanrtiang are of the opinion that it should be done for a whole year.

In general, the majority of mothers feel that breastfeeding should begin within the first half or one hour of a child's birth, and the baby should be fed as demanded. There is no strict timing of frequency of feeding that has to be followed. When the child is hungry, he/she will demand for food and that's when feeding should happen.

As it was with awareness regarding breastfeeding, a significant number of mothers from Marmain, Mulum, Mawhiang and Nongmawlong are not aware of colostrums (see table 17). In this they are joined by almost half of the mothers from Selbalgre and Tosekgre. Except for these villages, more than 80% of the mothers in other villages have knowledge of

colostrums. They are aware that it is the first milk secreted by the mother to be fed to the recently born child. Feeding of colostrums is very important for the child. So it is reassuring that most of the others had this information. It is a bit worrying that some in Tosekgre feel that colostrums should be discarded instead of being fed to the child. This is the same village where a high number of mothers lacked awareness about the substance.

**Table 17: Awareness of colostrums among mothers in the study area**

Village	Awareness of colostrum			Total
	No Response	Yes	No	
Dombah	0.0%	90.0%	10.0%	100.0%
Laitsohpliah	0.0%	80.0%	20.0%	100.0%
Madanrtiang	0.0%	100.0%	0.0%	100.0%
Marmain	10.0%	70.0%	20.0%	100.0%
Mawhiang	0.0%	90.0%	10.0%	100.0%
Mulum	10.0%	70.0%	20.0%	100.0%
Mupyut	0.0%	80.0%	20.0%	100.0%
Mustoh	0.0%	90.0%	10.0%	100.0%
Nohron	0.0%	90.0%	10.0%	100.0%
Nongmawlong	0.0%	60.0%	40.0%	100.0%
Selbalgre	0.0%	60.0%	40.0%	100.0%
Tosekgre	0.0%	50.0%	50.0%	100.0%
Total	1.7%	77.5%	20.8%	100.0%

**Table 18: Initiation of child receiving colostrums in the study area**

Village	Initiation of feeding colostrums to child					Total
	No Response	Within 1 Hour	Within 6 Hour	Within 24 Hours	Right Away	
Dombah	10.0%	90.0%	0.0%	0.0%	0.0%	100.0%
Laitsohpliah	10.0%	70.0%	10.0%	10.0%	0.0%	100.0%
Madanrtiang	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Marmain	20.0%	70.0%	0.0%	10.0%	0.0%	100.0%
Mawhiang	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Mulum	20.0%	80.0%	0.0%	0.0%	0.0%	100.0%
Mupyut	20.0%	80.0%	0.0%	0.0%	0.0%	100.0%
Mustoh	10.0%	80.0%	0.0%	0.0%	10.0%	100.0%
Nohron	10.0%	60.0%	20.0%	0.0%	10.0%	100.0%
Nongmawlong	10.0%	70.0%	0.0%	20.0%	0.0%	100.0%
Selbalgre	20.0%	60.0%	0.0%	20.0%	0.0%	100.0%
Tosekgre	20.0%	50.0%	0.0%	10.0%	20.0%	100.0%
Total	12.5%	75.8%	2.5%	5.8%	3.3%	100.0%

When further probed upon whether colostrums should be discarded or not, a high number of mothers in Selbalgre stated in the affirmative. Though the overwhelming majority of mothers in the remaining villages believe it should not be discarded, the situation in Selbalgre and Tosekgre is not very ideal. This could have an impact on child health when combined with lack of awareness about colostrums. The vulnerability of children from Marmain, Mulum, Nongmawlong, Selbalgre and Tosekgre is again confirmed when some mothers in the village reported not feeding colostrums to their children. Furthermore, some

mothers who feed their child colostrums in Marmain, Selbalgre, Tosekgre and Nongmawlong, do it within a day rather than in the first hour as most of the mothers from the other villages do (see table 18).

**Table 19: Introduction of weaning food to the child according to the mothers in the study area**

Village	Introduction of weaning food for the child					Total
	No Response	2 Hours	4 Hours	6 Hours	1 Year	
Dombah	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Laitsohpliah	10.0%	10.0%	0.0%	60.0%	20.0%	100.0%
Madanrtiang	0.0%	0.0%	10.0%	60.0%	30.0%	100.0%
Marmain	30.0%	0.0%	0.0%	60.0%	10.0%	100.0%
Mawhiang	0.0%	0.0%	10.0%	90.0%	0.0%	100.0%
Mulum	40.0%	10.0%	10.0%	40.0%	0.0%	100.0%
Mupyut	20.0%	40.0%	0.0%	40.0%	0.0%	100.0%
Mustoh	10.0%	20.0%	0.0%	70.0%	0.0%	100.0%
Nohron	10.0%	20.0%	20.0%	40.0%	10.0%	100.0%
Nongmawlong	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Selbalgre	10.0%	0.0%	0.0%	90.0%	0.0%	100.0%
Tosekgre	20.0%	0.0%	20.0%	60.0%	0.0%	100.0%
Total	10.8%	8.3%	5.8%	67.5%	5.8%	100.0%

However, there seems to be a lack of convergence between knowledge and practise. Even when the majority of the mothers are aware of exclusive breastfeeding, they introduced weaning within the first six hours (see table 19). It is only in Laitsohpliah, Madanrtiang, Marmain and Nohron that mothers introduce weaning food after one year. But almost one third of the mothers in Marmain could not give any response that means that they are not sure about the best practises. Therefore, it would seem that only Laitsohpliah, Madanrtiang and Nohron, follow the recommended practise.

**Table 20: Duration of breastfeeding according to the mothers in the study area**

Village	For how many months do you breastfeed your child					Total
	No response	6 months	9 months	One year	More than one year	
Dombah	0.0%	0.0%	0.0%	70.0%	30.0%	100.0%
Laitsohpliah	10.0%	0.0%	0.0%	10.0%	80.0%	100.0%
Madanrtiang	0.0%	10.0%	0.0%	0.0%	90.0%	100.0%
Marmain	30.0%	0.0%	0.0%	70.0%	0.0%	100.0%
Mawhiang	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Mulum	20.0%	0.0%	0.0%	80.0%	0.0%	100.0%
Mupyut	20.0%	0.0%	20.0%	40.0%	20.0%	100.0%
Mustoh	20.0%	0.0%	0.0%	80.0%	0.0%	100.0%
Nohron		0.0%	0.0%	10.0%	90.0%	100.0%
Nongmawlong	10.0%	0.0%	0.0%	90.0%	0.0%	100.0%
Selbalgre	10.0%	0.0%	0.0%	90.0%	0.0%	100.0%
Tosekgre	30.0%	0.0%	0.0%	70.0%	0.0%	100.0%
Total	12.5%	0.8%	1.7%	59.2%	25.8%	100.0%

The same villages, Laitsohpliah, Madanrtiang and Nohron, again responded that they breastfeed their children for more than a year (see table 20). It appears that these three

villages have good practises regarding breastfeeding among mothers. In general though, the majority of the mothers from other villages are also already breastfeeding their children for one year. So in terms of the duration of breastfeeding, the practises are quite good. But the fast introduction of weaning food means that it is combined with a practise that may not be very helpful.

**Table 21: Type of weaning according to the mothers in the study area**

Village	Type of weaning food					Total
	No response	Homemade	Commercially made	Both	None of the above	
Dombah	0.0%	50.0%	30.0%	20.0%	0.0%	100.0%
Laitsohpliah	10.0%	60.0%	10.0%	20.0%	0.0%	100.0%
Madanrtiang	0.0%	50.0%	20.0%	30.0%	0.0%	100.0%
Marmain	30.0%	40.0%	10.0%	20.0%	0.0%	100.0%
Mawhiang	0.0%	40.0%	0.0%	60.0%	0.0%	100.0%
Mulum	20.0%	60.0%	0.0%	20.0%	0.0%	100.0%
Mupyut	20.0%	80.0%	0.0%	0.0%	0.0%	100.0%
Mustoh	20.0%	50.0%	20.0%	10.0%	0.0%	100.0%
Nohron	0.0%	30.0%	30.0%	20.0%	20.0%	100.0%
Nongmawlong	10.0%	70.0%	0.0%	20.0%	0.0%	100.0%
Selbalgre	10.0%	20.0%	0.0%	70.0%	0.0%	100.0%
Tosekgre	30.0%	20.0%	10.0%	40.0%	0.0%	100.0%
Total	12.5%	47.5%	10.8%	27.5%	1.7%	100.0%

The most common type of weaning food is homemade (see table 21). Some mothers also provide weaning food bought from the market. In fact, the majority of the mothers in Madanrtiang, Mawhiang, Nohron and Selbalgre either give commercial or both commercial and homemade weaning foods to their children. This is important information because Selbalgre and Nohron, along with Nongmawlong, have reported indigestion when weaning food is introduced to the children. A few mothers from Laitsohpliah, Mawhiang and Nohrong have also reported cases of diarrhoea when weaning food is introduced. In general, the majority of the mothers in the study area report no problems when weaning food is introduced. Introduction of weaning food is considered to be very important for the health of the children. Except for some of the mothers in Mupyut, Mulum, Nohron, Selbalgre and Toskegre, who shared of having no information on the adverse impact of delayed introduction of weaning food, majority of the mothers in the study area expressed that delayed introduction of weaning food can lead to problems of malnutrition and growth problem in the child.

### **Complementary feeding of children after 6 months**

Though the majority of mothers are aware of exclusive breastfeeding, they also give weaning food at a very early stage. These foods are given to children of different age groups. In the

study area, mothers from only three villages, viz., Laitsohplich, Mupyut and Mustoh had children who were below four months old. Except for Mupyut, where children are fed 1-3 times a day, most of the children below four months were given complementary feeding 3 to 6 times a day (see table 22). The diet includes soft rice mixed with vegetables. Banana and sugar are also given to children.

**Table 22: Complementary feeding for children according to the mothers in the study area**

Village	Frequency of feeding for below four months children				Total
	No Response	1 To 3 Times A Day	3 To 6 Times A Day	More Than 6 Times A Day	
Dambah	100.0%	0.0%	0.0%	0.0%	100.0%
Laitsohplich	50.0%	0.0%	50.0%	0.0%	100.0%
Madanrtiang	100.0%	0.0%	0.0%	0.0%	100.0%
Marmain	100.0%	0.0%	0.0%	0.0%	100.0%
Mawhiang	100.0%	0.0%	0.0%	0.0%	100.0%
Mulum	100.0%	0.0%	0.0%	0.0%	100.0%
Mupyut	60.0%	30.0%	10.0%	0.0%	100.0%
Mustoh	90.0%	0.0%	10.0%	0.0%	100.0%
Nohron	100.0%	0.0%	0.0%	0.0%	100.0%
Nongmawlong	100.0%	0.0%	0.0%	0.0%	100.0%
Selbalgre	100.0%	0.0%	0.0%	0.0%	100.0%
Tosekgre	100.0%	0.0%	0.0%	0.0%	100.0%
Total	91.7%	2.5%	5.8%	0.0%	100.0%
Frequency of feeding for four to six months children					
Dambah	100.0%	0.0%	0.0%	0.0%	100.0%
Laitsohplich	100.0%	0.0%	0.0%	0.0%	100.0%
Madanrtiang	70.0%	0.0%	30.0%	0.0%	100.0%
Marmain	100.0%	0.0%	0.0%	0.0%	100.0%
Mawhiang	70.0%	0.0%	20.0%	10.0%	100.0%
Mulum	90.0%	0.0%	10.0%	0.0%	100.0%
Mupyut	90.0%	0.0%	10.0%	0.0%	100.0%
Mustoh	80.0%	10.0%	10.0%	0.0%	100.0%
Nohron	100.0%	0.0%	0.0%	0.0%	100.0%
Nongmawlong	90.0%	0.0%	10.0%	0.0%	100.0%
Selbalgre	100.0%	0.0%	0.0%	0.0%	100.0%
Tosekgre	90.0%	0.0%	10.0%	0.0%	100.0%
Total	90.0%	0.8%	8.3%	0.8%	100.0%
Frequency of feeding For Six To Nine Months children					
Dambah	0.0%	80.0%	20.0%	0.0%	100.0%
Laitsohplich	100.0%	0.0%	0.0%	0.0%	100.0%
Madanrtiang	50.0%	30.0%	20.0%	0.0%	100.0%
Marmain	30.0%	30.0%	40.0%	0.0%	100.0%
Mawhiang	50.0%	0.0%	30.0%	20.0%	100.0%
Mulum	50.0%	20.0%	30.0%	0.0%	100.0%
Mupyut	60.0%	0.0%	40.0%	0.0%	100.0%
Mustoh	50.0%	0.0%	30.0%	20.0%	100.0%
Nohron	90.0%	10.0%	0.0%	0.0%	100.0%
Nongmawlong	20.0%	40.0%	40.0%	0.0%	100.0%
Selbalgre	10.0%	10.0%	80.0%	0.0%	100.0%
Tosekgre	40.0%	20.0%	40.0%	0.0%	100.0%
Total	45.8%	20.0%	30.8%	3.3%	100.0%
Frequency of feeding for nine to twelve months children					
Dambah	100.0%	0.0%	0.0%	0.0%	100.0%
Laitsohplich	100.0%	0.0%	0.0%	0.0%	100.0%
Madanrtiang	80.0%	20.0%	0.0%	0.0%	100.0%
Marmain	100.0%	0.0%	0.0%	0.0%	100.0%

Mawhiang	90.0%	0.0%	10.0%	0.0%	100.0%
Mulum	100.0%	0.0%	0.0%	0.0%	100.0%
Mupyut	100.0%	0.0%	0.0%	0.0%	100.0%
Mustoh	100.0%	0.0%	0.0%	0.0%	100.0%
Nohron	100.0%	0.0%	0.0%	0.0%	100.0%
Nongmawlong	100.0%	0.0%	0.0%	0.0%	100.0%
Selbalgre	100.0%	0.0%	0.0%	0.0%	100.0%
Tosekgre	100.0%	0.0%	0.0%	0.0%	100.0%
Total	97.5%	1.7%	0.8%	0.0%	100.0%
Frequency Of Feeding For Twelve To Eighteen Months Children					
Dambah	100.0%	0.0%	0.0%	0.0%	100.0%
Laitsohpliah	80.0%	0.0%	20.0%	0.0%	100.0%
Madanrtiang	100.0%	0.0%	0.0%	0.0%	100.0%
Marmain	100.0%	0.0%	0.0%	0.0%	100.0%
Mawhiang	80.0%	0.0%	20.0%	0.0%	100.0%
Mulum	80.0%	0.0%	20.0%	0.0%	100.0%
Mupyut	100.0%	0.0%	0.0%	0.0%	100.0%
Mustoh	100.0%	0.0%	0.0%	0.0%	100.0%
Nohron	100.0%	0.0%	0.0%	0.0%	100.0%
Nongmawlong	100.0%	0.0%	0.0%	0.0%	100.0%
Selbalgre	100.0%	0.0%	0.0%	0.0%	100.0%
Tosekgre	100.0%	0.0%	0.0%	0.0%	100.0%
Total	95.0%	0.0%	5.0%	0.0%	100.0%

Compared to children below four months old, mothers had more children between four to six months. Mothers in Marmain, Mawhiang, Mulum, Mupyut, Mustoh, Nohron, Nongmawlong and Selbalgre have children who are between four to six months. For children of this age group, complementary feeding is done 3 to 6 times a day. In Mawhiang, some mothers reported doing it more than 6 times a day. The diet consists of soft rice, mashed vegetables and boiled potato. Processed foods like biscuits soaked in milk/water and cerelac brought from the market are also fed to the children.

**Table 23: Consumption of milk other than mothers' among children according to the mothers in the study area**

Village	Milk consumption			Total
	No Response	Yes	No	
Dambah	0.0%	70.0%	30.0%	100.0%
Laitsohpliah	20.0%	80.0%	0.0%	100.0%
Madanrtiang	10.0%	60.0%	30.0%	100.0%
Marmain	20.0%	50.0%	30.0%	100.0%
Mawhiang	10.0%	40.0%	50.0%	100.0%
Mulum	20.0%	50.0%	30.0%	100.0%
Mupyut	20.0%	30.0%	50.0%	100.0%
Mustoh	20.0%	70.0%	10.0%	100.0%
Nohron	0.0%	30.0%	70.0%	100.0%
Nongmawlong	10.0%	10.0%	80.0%	100.0%
Selbalgre	10.0%	90.0%	0.0%	100.0%
Tosekgre	30.0%	70.0%	0.0%	100.0%
Total	14.2%	54.2%	31.7%	100.0%

Mothers from all the villages except Laitsohpliah have at least one child which is between 6 to 9 months. Mothers from Marmain, Mawhiang, Mulum, Mupyut, Selbalgre and Tosekgre mostly give complementary feeding to their children 3 to 6 times a day. Some in



Mawhiang and Mustoh even feed more than 6 times a day. Mothers from remaining villages (except Laitsohpliah) give complementary feeding only 1 to 3 times. Because this is the most prevalent age group among the children, there is a great diversity of food items as well. The main complementary feeds like soft rice, lentils, mashed vegetables, soup and fruits like bananas. Meat is also given to these children as part of their complementary diet. Processed food like biscuits in milk are also part of the diet, which are bought from the market. The diet of children in this group is thus highly varied. During this whole time breastfeeding also goes on.

Only a few mothers in Madanrtiang and Mawhiang had children who were 9 to 12 months old. Complementary feeding in Madanrtiang is 1 to 3 times a day and 3 to 6 times a day in Mawhiang. Any soft food together with breastfeeding is the diet given to these children by the mothers. Lastly, only a few mothers in Laitsohpliah, Mawhiang and Mulum had children who are between 12 to 18 months. Complementary feeding for them is 3 to 6 times a day with no mother reporting feeding them either 1 to 3 times a day or more than 6 times a day. The food given is similar to the ones described; soft food with mashed vegetables and some processed foods like biscuits.

**Table 24: Type of milk other than mothers' given to children according to the mothers in the study area**

Village	Type Of Milk				Total
	No Response	Cow	Tin	Powdered	
Dombah	30.0%	10.0%	0.0%	60.0%	100.0%
Laitsohpliah	20.0%	10.0%	0.0%	70.0%	100.0%
Madanrtiang	40.0%	0.0%	10.0%	50.0%	100.0%
Marmain	50.0%	0.0%	30.0%	20.0%	100.0%
Mawhiang	60.0%	0.0%	0.0%	40.0%	100.0%
Mulum	50.0%	0.0%	10.0%	40.0%	100.0%
Mupyut	70.0%	0.0%	10.0%	20.0%	100.0%
Mustoh	30.0%	0.0%	10.0%	60.0%	100.0%
Nohron	60.0%	0.0%	10.0%	30.0%	100.0%
Nongmawlong	80.0%	10.0%	0.0%	10.0%	100.0%
Selbalgre	10.0%	70.0%	0.0%	20.0%	100.0%
Tosekgre	30.0%	70.0%	0.0%	0.0%	100.0%
Total	44.2%	14.2%	6.7%	34.2%	100.0%

In general, children are fed 3 to 6 times in a day. During this time they are fed soft rice, mashed vegetables, some fruits and processed foods like milk, biscuit, cerelac. Some mothers feed meat as well to their children. This complementary feeding is supplemented by breastfeeding which goes simultaneously. Thus, though awareness on exclusive breastfeeding is common in the study area, complementary foods start early and are given to children from below four months to around 18 months as well.

More than half of the mothers in the study area give milk, other than their own, as complementary food to the children (see table 23). This is true for all villages except Mawhiang, Mupyut, Nohron and Nongmawlong where the majority of the mothers do not give milk other than their own. In the other villages, however, powdered milk is the most common complementary food given to the child (see table 24). In Marmain, around one third of the mothers give condensed milk as well. Among all the villages, Selbalgre and Tosekgre stand apart due to the fact that almost three-fourth of the mothers in these two villages give cow milk to their children. This suggests the presence of animal husbandry in these two villages. In the other villages either condensed or powdered milk from the market is given.

**Table 25: Type of services available from ICDS according to the mothers in the study area**

Village	Type of services from ICDS				Total
	No response	Supplementary nutrition	Immunisation	All of above	
Dambah	0.0%	30.0%	0.0%	70.0%	100.0%
Laitsohpliah	10.0%	10.0%	0.0%	80.0%	100.0%
Madanrtiang	0.0%	10.0%	0.0%	90.0%	100.0%
Marmain	10.0%	0.0%	0.0%	90.0%	100.0%
Mawhiang	0.0%	10.0%	0.0%	90.0%	100.0%
Mulum	0.0%	20.0%	0.0%	80.0%	100.0%
Mupyut	0.0%	40.0%	0.0%	60.0%	100.0%
Mustoh	0.0%	0.0%	0.0%	100.0%	100.0%
Nohron	0.0%	50.0%	10.0%	40.0%	100.0%
Nongmawlong	10.0%	0.0%	0.0%	90.0%	100.0%
Selbalgre	0.0%	0.0%	0.0%	100.0%	100.0%
Tosekgre	10.0%	20.0%	0.0%	70.0%	100.0%
Total	3.3%	15.8%	0.8%	80.0%	100.0%

Almost all the mothers avail the services provided by ICDS (see table 25). These services are supplementary nutrition as well as immunisation. On another note, almost half of the mothers in Mupyut and Nohron reported that supplementary nutrition is the only service they receive from their ICDS. In the remaining villages, both the services are available and availed by the mothers.

### **Vaccination of a child below 5 years**

The status regarding immunisation of children is very good in the study area. Only a few households in Madanrtiang and Nohron have categorically stated that they have not given any immunisation to their children. The number is small but still very significant as it can have an adverse impact on the child's present and future health prospects. The reasons for not doing so include personal beliefs, religious beliefs and safety concerns. Though mothers in Dambah and Marmain have reported getting immunisation for their children, they still considered

personal beliefs as an important reason for refusing immunisation. This means that there is still a danger of these mothers changing their stance in the future.

The few mothers from Madanrtiang and Nohron who took no immunisation did not follow the immunisation routine, unlike the mothers from the remaining villages. The mothers who opted for immunisation also have the vaccination card and maintained it properly. As expected, the few mothers from Madanrtiang and Nohron did not agree that immunisation is important. The situation in Nohron is direr as almost half of the mothers from the village are not sure of the benefits of immunisation. This means that although the mothers give immunisation to their children, they are unsure of the reasons. This group could be persuaded to not go for immunisation in the future by an appeal to any of the reasons described above for not taking immunisation. Dombah also has a few households who are unsure of the benefits of immunisation and they need to be monitored.

Though in general the status regarding immunisation is quite good in the study area, there are some villages that are of concern. These are the villages of Nohron and Madanrtiang. The status of mothers in Nohron especially is very concerning since though many mothers may have given immunisation to their children, they may change it in the future.

### **Grandmothers**

All the grandmothers interviewed in the study stated that they have traditional child rearing practises. According to them the child must be breastfeed within an hour of birth (see table 26). This is essential for the child's health. Only in two villages were a high number of grandmothers who disagreed with that. In Mawhiang almost half of the grandmothers in the village were of the opinion that breastfeeding does not have to take place immediately but can happen anytime within the first 24 hours. In Selbalgre for almost 2/3<sup>rd</sup> of the grandmothers it should happen within the first 6 hours. In these villages, thus, breastfeeding is slightly delayed.

But in terms of introduction of complementary it takes place earlier than normal, particularly for Mawhiang (see table 27). Alongside those from Marmain, Mupyut and Mustoh, grandmothers from Mawhiang believe that complementary food can be introduced within the first 2 months of the child's birth. For the other villages, including Selbalgre, this should happen between 4 to 6 months. This is very close to the recommended 6 months of

exclusive breastfeeding by mother. In Nongmawlong, though, grandmothers recommend complementary feeding after 8 months. In general, grandmothers seem to have a good understanding of the appropriate time to introduce complementary.

**Table 26: Breastfeeding of child after birth according to grandmothers in the study area**

Village	Breastfeeding After Birth				Total
	Within 1 Hour	Within 6 Hours	Within 24 Hours	Other	
Dombah	75.0%	25.0%	0.0%	0.0%	100.0%
Laitsohpliah	75.0%	25.0%	0.0%	0.0%	100.0%
Madanrtiang	100.0%	0.0%	0.0%	0.0%	100.0%
Marmain	100.0%	0.0%	0.0%	0.0%	100.0%
Mawhiang	57.1%	0.0%	42.9%	0.0%	100.0%
Mulum	100.0%	0.0%	0.0%	0.0%	100.0%
Mupyut	100.0%	0.0%	0.0%	0.0%	100.0%
Mustoh	100.0%	0.0%	0.0%	0.0%	100.0%
Nohron	50.0%	0.0%	25.0%	25.0%	100.0%
Nongmawlong	100.0%	0.0%	0.0%	0.0%	100.0%
Selbalgre	20.0%	60.0%	20.0%	0.0%	100.0%
Tosekgre	100.0%	0.0%	0.0%	0.0%	100.0%
Total	74.4%	11.6%	11.6%	2.3%	100.0%

**Table 27: Best time to introduce complementary food according to grandmothers in the study area**

Village	Best Time To Introduce Complementary Food To A Child					Total
	2 Months	4 To 6 Months	8 Months	1 Year	Other	
Dombah	0.0%	75.0%	25.0%	0.0%	0.0%	100.0%
Laitsohpliah	0.0%	75.0%	25.0%	0.0%	0.0%	100.0%
Madanrtiang	0.0%	66.7%	0.0%	33.3%	0.0%	100.0%
Marmain	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Mawhiang	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Mulum	25.0%	75.0%	0.0%	0.0%	0.0%	100.0%
Mupyut	50.0%	0.0%	0.0%	0.0%	50.0%	100.0%
Mustoh	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Nohron	0.0%	50.0%	25.0%	25.0%	0.0%	100.0%
Nongmawlong	33.3%	0.0%	33.3%	33.3%	0.0%	100.0%
Selbalgre	20.0%	80.0%	0.0%	0.0%	0.0%	100.0%
Tosekgre		100.0%	0.0%	0.0%	0.0%	100.0%
Total	37.2%	44.2%	9.3%	7.0%	2.3%	100.0%

**Table 28: Awareness of colostrums among grandmother in the study area**

Village	Awareness About Colostrums		Total
	Yes	No	
Dombah	100.0%	0.0%	100.0%
Laitsohpliah	100.0%	0.0%	100.0%
Madanrtiang	66.7%	33.3%	100.0%
Marmain	50.0%	50.0%	100.0%
Mawhiang	0.0%	100.0%	100.0%
Mulum	50.0%	50.0%	100.0%
Mupyut	50.0%	50.0%	100.0%
Mustoh	66.7%	33.3%	100.0%
Nohron	25.0%	75.0%	100.0%
Nongmawlong	100.0%	0.0%	100.0%
Selbalgre	20.0%	80.0%	100.0%
Tosekgre	100.0%	0.0%	100.0%
Total	53.5%	46.5%	100.0%

But when it comes to knowledge about colostrums, an equal number of grandmothers in the study area fall on either side: half know and half don't know about colostrums (see table 28). Majority of the grandmothers in Marmain, Mulum, Mupyut, Nohron and Selbalgre don't have knowledge about colostrums. In Mawhiang, in fact, none of them had knowledge about the substance. But from among the villages where the majority of the grandmothers had reported having knowledge of colostrums only grandmothers from Dombah and Nongmawlong knew that colostrums should not be discarded (see table 29). In the rest of the villages grandmothers stated that colostrums should either be discarded or were unsure.

**Table 29: Discarding of colostrums according to grandmothers in the study area**

Village	Discard Colostrums			Total
	Yes	No	Don't Know	
Dombah	25.0%	75.0%	0.0%	100.0%
Laitsohpliah	50.0%	50.0%	0.0%	100.0%
Madanrtiang	33.3%	33.3%	33.3%	100.0%
Marmain	0.0%	50.0%	50.0%	100.0%
Mawhiang	0.0%	14.3%	85.7%	100.0%
Mulum	0.0%	50.0%	50.0%	100.0%
Mupyut	50.0%	50.0%	0.0%	100.0%
Mustoh	66.7%	0.0%	33.3%	100.0%
Nohron	50.0%	50.0%	0.0%	100.0%
Nongmawlong	0.0%	100.0%	0.0%	100.0%
Selbalgre	0.0%	0.0%	100.0%	100.0%
Tosekgre	0.0%	50.0%	50.0%	100.0%
Total	20.9%	39.5%	39.5%	100.0%

This means that the knowledge about colostrums is incomplete even among grandmothers who knew about it. As for Dombah and Nongmawlong, it was therefore not surprising that all the grandmothers from these two villages were of the opinion that it is important for the health of the children. In this they were joined by grandmothers from Laitsohpliah, Mawhiang and Mulum. The rest had no response or thought that colostrums are not necessary for the child (see table 30).

Since breastfeeding is the best way to feed a child, according to almost three-fourth of the grandmothers in the study area, it should be done till the child refuses. They didn't give any specific time period when breastfeeding should be stopped but believe that it depends on the child itself. As long as its demands the child should be breastfed. Only in Laitsohpliah, Nohron and Selbalgre a high number of grandmothers were able to give a specific duration for breastfeeding. In Laitsohpliah and Nohron majority of the grandmothers believe that breastfeeding should continue only for two years.

In Selbalgre, after a period of one year, the mother stops breastfeeding her child. There seems to exist a customary practice of breastfeeding their children only up to a certain period in these three villages. In other villages, there seems to be no such practise available with mothers making their own individual decisions about the duration of breastfeeding. Here the reluctance of the child to continue with being breastfed as being the defining criterion.

**Table 30: Necessity of colostrums for children according to grandmothers in the study area**

Village	Necessity Of Colostrums To The Baby			Total
	Yes	No	Don't Know	
Dombah	100.0%	0.0%	0.0%	100.0%
Laitsohplich	100.0%	0.0%	0.0%	100.0%
Madanrtiang	33.3%	33.3%	33.3%	100.0%
Marmain	50.0%	0.0%	50.0%	100.0%
Mawhiang	57.1%	0.0%	42.9%	100.0%
Mulum	75.0%	0.0%	25.0%	100.0%
Mupyut	0.0%	0.0%	100.0%	100.0%
Mustoh	0.0%	33.3%	66.7%	100.0%
Nohron	50.0%	50.0%	0.0%	100.0%
Nongmawlong	100.0%	0.0%	0.0%	100.0%
Selbalgre	0.0%	20.0%	80.0%	100.0%
Tosekgre	0.0%	0.0%	100.0%	100.0%
Total	51.2%	11.6%	37.2%	100.0%

**Table 31: Best food for children right after birth according to grandmothers in the study area**

Village	Best food for the Child right after birth			Total
	Colostrums	Warm Water And Sugar	Others	
Dombah	75.0%	25.0%	0.0%	100.0%
Laitsohplich	100.0%	0.0%	0.0%	100.0%
Madanrtiang	66.7%	33.3%	0.0%	100.0%
Marmain	100.0%	0.0%	0.0%	100.0%
Mawhiang	0.0%	100.0%	0.0%	100.0%
Mulum	75.0%	25.0%	0.0%	100.0%
Mupyut	0.0%	100.0%	0.0%	100.0%
Mustoh	33.3%	66.7%	0.0%	100.0%
Nohron	50.0%	25.0%	25.0%	100.0%
Nongmawlong	100.0%	0.0%	0.0%	100.0%
Selbalgre	60.0%	40.0%	0.0%	100.0%
Tosekgre	100.0%	0.0%	0.0%	100.0%
Total	58.1%	39.5%	2.3%	100.0%

In spite of the knowledge being incomplete, the majority of the grandmothers in the study area consider colostrums to be the best food after they are born (see table 31). Grandmothers from Mawhiang, Mupyut and Mustoh however disagree with that. According to them, warm water and sugar is the most important food. But in terms of mode of feeding, along with the majority of the grandmothers in the study area, they agree that breastfeeding is the best way to feed the child right after birth. Only grandmothers from Mupyut had no

response when asked. In general, almost everyone agrees that breastfeeding is the best way to feed the child. A small number of grandmothers from Mustoh, Nohron and Selbalgre consider the combination of bottle and breast to be the best way to feed the child.

When asked about the desirability of breastfeeding a child while the mother is sick, no consensus was found among the grandmothers (see table 32). Almost half of them thought that it is not a problem for a mother to breastfeed her child when she is sick. At the same time, the others are either against it or have no opinion. Only among grandmothers in Laitsohpliah, Mupyut, Mustoh and Nongmawlong were of the opinion that breastfeeding a child when mother is sick is not a problem. In the rest, it was either no response or in the negative. Thus it appears that except a few villages in general, grandmothers would advise their daughters to avoid breastfeeding their children during illness. This is not because they know about the ill effects of the practise but because they are not sure. Incomplete knowledge, again, is a very important feature among grandmothers.

**Table 32: Desirability of breastfeeding when mother is sick according to grandmothers in the study area**

Village	Good to breastfeed the child when the mother is sick			Total
	Yes	No	Don't know	
Dombah	25.0%	25.0%	50.0%	100.0%
Laitsohpliah	75.0%	25.0%	0.0%	100.0%
Madanrtiang	33.3%	33.3%	33.3%	100.0%
Marmain	0.0%	0.0%	100.0%	100.0%
Mawhiang	42.9%	0.0%	57.1%	100.0%
Mulum	50.0%	0.0%	50.0%	100.0%
Mupyut	100.0%	0.0%	0.0%	100.0%
Mustoh	66.7%	33.3%	0.0%	100.0%
Nohron	50.0%	50.0%	0.0%	100.0%
Nongmawlong	66.7%	0.0%	33.3%	100.0%
Selbalgre	40.0%	0.0%	60.0%	100.0%
Tosekgre	0.0%	0.0%	100.0%	100.0%
Total	46.5%	14.0%	39.5%	100.0%

It is very heartening to observe that an overwhelming majority of mother in the study area agree that vaccination is necessary for the children. But what is really disturbing is that three-fourth of the grandmothers in Nohron stated that vaccination is not important for the children. This matches well with the response of some mothers in the village that they have not given any vaccination to their children. It seems that the lack of trust on vaccination has continued to the next generation in Nohron. This is a worrying finding but, at the same time, shows how deeply entrenched some beliefs are among some families. It is very important to ensure that this lack of trust on a very important health intervention should be tackled at the earnest. The lack of trust on health interventions seems to have permeated to health

institutions as well. More than two-third of the grandmothers in Nohron and Mustoh do not encourage their children to seek nutritious food provided by the ICDS. As already seen from the discussion above, incomplete knowledge is a very common pattern in the study area. Strong awareness programs are highly imperative in such villages.

**Table 33: Encouragement of children to follow traditional practises according to grandmothers in the study area**

Village	Encouragement Of Children To Follow Traditional Practises		Total
	Yes	No	
Dombah	100.0%	0.0%	100.0%
Laitsohpliah	75.0%	25.0%	100.0%
Madanrtiang	33.3%	66.7%	100.0%
Marmain	50.0%	50.0%	100.0%
Mawhiang	57.1%	42.9%	100.0%
Mulum	100.0%	0.0%	100.0%
Mupyut	50.0%	50.0%	100.0%
Mustoh	66.7%	33.3%	100.0%
Nohron	50.0%	50.0%	100.0%
Nongmawlong	100.0%	0.0%	100.0%
Selbalgre	20.0%	80.0%	100.0%
Tosekgre	50.0%	50.0%	100.0%
Total	62.8%	37.2%	100.0%

At the same time this should be complemented by good traditional practises. Except for Madanrtiang and Selbalgre, grandmothers from the different villages encourage their children and grandchildren to follow traditional practises (see table 33). Such practises are part of the culture and it would be very wrong to completely do away with all of them at once. The best ones should be continued and the ones not useful should gradually be replaced. It is only with the combination of modern and traditional practises that real improvement in maternal and child health can be observed.

### **Fathers and Grandfathers**

Except for Marmain, Mulum and Nohron, the majority of the respondents interviewed were grandfathers. Despite this difference, all of them were present during the birth of the child. It was only in Mupyut and Nohron that more than two-third of the grandfathers/fathers were not present on the occasion. Such a high number is very surprising and could mean that they must have been engaged in the main livelihood occupation, i.e., daily wage labour. In the remaining villages almost all of them were present, and when the birth was taking place, they were engaged in helping with the household chores.



After the birth of the child, an overwhelming majority of the grandfathers/fathers would spend quality time with their child (see table 34). For most, it was during morning and night. This is understandable since they have to go to the fields or the workplace during the day time. Grandfathers/fathers in Dombah, Marmain, Mupyut and Mustoh, though had no fixed timings. They stated that they would spend time with the children whenever they are free. It indicates that the working hours for these parents/grandparents are a little flexible. As a result, they are also flexible in the timings they have regarding spending time with the children. Selbalgre is one village where almost half of the grandfathers/fathers hardly get any time to spend with the children. Since most of them are either daily wage labourers or farmers, it means that their workplace (fields or other location) is very far. Travelling to and fro must take a lot of time and therefore they hardly get time to spend with the children.

**Table 34: Time spent by father and grandfather with child in the study area**

Village	Time Spent In A Day					Total
	No Response	Whenever Free	Morning And Night	Hardly Get Time	Only At Night	
Dombah	0.0%	83.3%	16.7%	0.0%	0.0%	100.0%
Laitsohpliah	0.0%	0.0%	83.3%	0.0%	16.7%	100.0%
Madanrtiang	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Marmain	0.0%	57.1%	28.6%	14.3%	0.0%	100.0%
Mawhiang	0.0%	12.5%	87.5%	0.0%	0.0%	100.0%
Mulum	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Mupyut	0.0%	57.1%	28.6%	14.3%	0.0%	100.0%
Mustoh	0.0%	83.3%	16.7%	0.0%	0.0%	100.0%
Nohron	33.3%	33.3%	33.3%	0.0%	0.0%	100.0%
Nongmawlong	0.0%	37.5%	37.5%	25.0%	0.0%	100.0%
Selbalgre	0.0%	20.0%	40.0%	40.0%	0.0%	100.0%
Tosekgre	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Total	2.5%	30.9%	58.0%	7.4%	1.2%	100.0%

One of the important activities that grandfathers/fathers do with the child is bathing them. Majority of them, do indeed, take part in it and this is one of the children's bonding exercises. A high number of the grandfathers/fathers in Mulum, Mupyut and Nohron do not take part in this activity. Some of them (a comparatively lower number of 14% compared to almost 60% in this case) in Mupyut revealed that they hardly get any time to spend with the child. But this is not the case with grandfathers/fathers from Mulum and Nohron. This suggests that family roles of the male members in the households could be very different in this village. Therefore they do not take part in this activity and must have left it for the women in the family. This is confirmed for Nohron and Mupyut where the grandfathers/fathers again do not take part in feeding the children. In the other villages, an overwhelming majority of these male members of the family feed the children.

In terms of going on outings with the children, the grandfathers/fathers of Nohron and Mupyut villages are in agreement with other villages. Almost all of them like going out with their children. During such occasions, they help the children in exploring and learning new things about the surroundings. This is true for almost all villages except Nohron again. Although the grandfathers/fathers do go on outings with the children they do not engage in teaching the children. This means when they go during such outings they are usually with other members of the family, particularly females who take more responsibility in this regard. The pattern here would suggest that the male members of Nohron are not very engaged in child rearing.

**Table 35: Helping of child with homework by father and grandfather in the study area**

Village	Help Child In Doing Their Home Work			Total
	No Response	Yes	No	
Dambah	0.0%	83.3%	16.7%	100.0%
Laitsohpliah	0.0%	66.7%	33.3%	100.0%
Madanrtiang	0.0%	100.0%	0.0%	100.0%
Marmain	0.0%	85.7%	14.3%	100.0%
Mawhiang	0.0%	75.0%	25.0%	100.0%
Mulum	0.0%	85.7%	14.3%	100.0%
Mupyut	0.0%	14.3%	85.7%	100.0%
Mustoh	0.0%	100.0%	0.0%	100.0%
Nohron	16.7%	16.7%	66.7%	100.0%
Nongmawlong	0.0%	62.5%	37.5%	100.0%
Selbalgre	0.0%	40.0%	60.0%	100.0%
Tosekgre	0.0%	83.3%	16.7%	100.0%
Total	1.2%	69.1%	29.6%	100.0%

This lack of interest among the male members of the family in child rearing becomes all the more certain when it is revealed that they do not help the children with their homework at home (see table 35). Inability to help because of low educational qualification could be a factor but others in villages other than Nohron, Mupyut and Nongmawlong do spend time with the child during the homework. Again grandfathers/fathers in Nohron and Nongmawlong do not spend time with the children in telling them stories and playing with them. This reflects an apathetic attitude of the male members of the family towards child rearing.

When the grandfathers/fathers were asked about the main person responsible for nurturing the child, almost all of them identified both the mother and the father, i.e., both male and female members of the family, as having the primary responsibility (see table 36). However despite this, the lack of participation of grandfathers/fathers in Mupyut, Nongmawlong and especially Nohron is very disappointing. In fact when asked the

importance of the involvement of fathers/grandfathers in nurturing children in the family in the study area almost one-fifth couldn't give any reply.

This betrays a lack of interest from male members of the family in this village towards child rearing. This can have the effect of increasing the burden on the female members and weaken the bond between the child and their father/grandfather. For the full psychological and emotional development of the child, this is not a good situation. To be fair, the fathers/grandfathers in this village are fully aware of it as well. When asked to rate their communication and relationship with the child, half either had no response or gave them low points. More than one-fourth of the parents in Mupyut and Nongmawlong were unsure about their performance with regard to communication with the child. On the other hand, in general, around two-third of the parents gave themselves average ratings (see table 37).

**Table 36: Primary role in nurturing child in the family in the study area**

Village	Primary Role In Nurturing The Children In The Family				Total
	No Response	Father	Mother And Father	All Of Above	
Dombah	0.0%	16.7%	50.0%	33.3%	100.0%
Laitsohpliah	0.0%	0.0%	66.7%	33.3%	100.0%
Madanrtiang	0.0%	0.0%	77.8%	22.2%	100.0%
Marmain	0.0%	0.0%	57.1%	42.9%	100.0%
Mawhiang	0.0%	0.0%	87.5%	12.5%	100.0%
Mulum	0.0%	0.0%	57.1%	42.9%	100.0%
Mupyut	0.0%	0.0%	71.4%	28.6%	100.0%
Mustoh	0.0%	0.0%	66.7%	33.3%	100.0%
Nohron	16.7%	0.0%	33.3%	50.0%	100.0%
Nongmawlong	0.0%	12.5%	62.5%	25.0%	100.0%
Selbalgre	0.0%	0.0%	40.0%	60.0%	100.0%
Tosekgre	0.0%	0.0%	100.0%	0.0%	100.0%
Total	1.2%	2.5%	65.4%	30.9%	100.0%

**Table 37: Rating of the communication and relationship with child of father and grandfather in the study area**

Village	Rating Of Communication And Relationship With Child					Total
	No Response	Low	Average	High	Not Sure	
Dombah	0.0%	0.0%	83.3%	16.7%	0.0%	100.0%
Laitsohpliah	0.0%	0.0%	83.3%	16.7%	0.0%	100.0%
Madanrtiang	0.0%	22.2%	77.8%		0.0%	100.0%
Marmain	0.0%	28.6%	57.1%	14.3%	0.0%	100.0%
Mawhiang	0.0%	0.0%	62.5%	37.5%	0.0%	100.0%
Mulum	0.0%	28.6%	71.4%	0.0%	0.0%	100.0%
Mupyut	0.0%	0.0%	57.1%	14.3%	28.6%	100.0%
Mustoh	0.0%	16.7%	50.0%	33.3%	0.0%	100.0%
Nohron	16.7%	16.7%	50.0%	0.0%	16.7%	100.0%
Nongmawlong	0.0%	12.5%	62.5%	0.0%	25.0%	100.0%
Selbalgre	0.0%	0.0%	60.0%	40.0%	0.0%	100.0%
Tosekgre	0.0%	0.0%	83.3%	16.7%	0.0%	100.0%
Total	1.2%	11.1%	66.7%	14.8%	6.2%	100.0%

Thus, when it comes to the involvement of the male members of the family, i.e., grandfathers/fathers, except in Mupyut, Nohron and Nongmawlong, it was quite good. The male members fed the child, gave them baths, went on outings and taught them about the world and helped in their homeworks as well. But in the aforementioned three villages, the situation is a little disappointing. Male members do not take part in many of the child bonding and child developing activities in the family. There could be many reasons for it but it is not a highly desirable situation. Correcting this is very important to make sure that children have a good start in life and have a healthy and developed growth.

### Adolescents

The majority of the adolescent respondents belonged to the age group 15 to 19 years followed by 13 to 15 years. Majority of the respondents from Dombah, Laitsohpliah, Mawhiang, Selbalgre, Tosekgre and Selbalgre are the oldest, while those from Nohron the youngest (10-13 years old) (see table 38) in the study area. In the remaining villages the respondents were between 13 to 15 years old. Almost half of the respondents from the study area had attended at least primary education with the other almost half attaining secondary education as well. While most had gained some level of education it was very distressing to note that more than 20% of the respondents in Dombah, Mupyut, Mustoh, Nohron and Selbalgre were school dropouts. The prospects of these adolescents who have decided to give up on their education early are not very encouraging. Though poverty is suspected of being the main reason behind this decision and it will only perpetuate the condition rather than alleviate it.

**Table 38: Ages of the adolescent respondents in the study area**

Village	Age Of Respondents				Total
	10 To 13	13 To 15	15 To 19	5.00	
Dombah	0.0%	20.0%	80.0%	0.0%	100.0%
Laitsohpliah	0.0%	20.0%	60.0%	20.0%	100.0%
Madanrtiang	40.0%	60.0%	0.0%	0.0%	100.0%
Marmain	40.0%	40.0%	20.0%	0.0%	100.0%
Mawhiang	20.0%	20.0%	60.0%	0.0%	100.0%
Mulum	40.0%	40.0%	20.0%	0.0%	100.0%
Mupyut	20.0%	40.0%	40.0%	0.0%	100.0%
Mustoh	0.0%	60.0%	40.0%	0.0%	100.0%
Nohron	60.0%	40.0%	0.0%	0.0%	100.0%
Selbalgre	20.0%	0.0%	80.0%	0.0%	100.0%
Tosekgre	0.0%	40.0%	60.0%	0.0%	100.0%
Total	21.8%	34.5%	41.8%	1.8%	100.0%

However, it is encouraging to note that many of the students from these villages along with others have attended nutrition programs in the past. Except for Madanrtiang, the majority of the adolescents in the study area have taken part in nutrition programs organised

by their schools. Only in Nohron, Marmain, Selbalgre and Tosekgre, ICDS had organised such programs in the past in which some of the adolescents took part. In general, such programs are organised by schools. The school organised other awareness programs like personal health and sanitation as well. These kinds of programs attracted the highest participation with almost all the students reported to have attended. Only a few students from Dombah, Laitsohpliah, Mulum, Mustoh and Nohron reported having not attended the programs. The rest attended the program in their schools. In some cases ICDS organised such programs in which some adolescents from Marmain, Mawhiang, Nohron, Selbalgre and Tosekgre took part. However in general it was schools which took the lead in organising such programs.

But even after having taken part in such programs, the awareness and knowledge regarding the different aspects of adolescent life is still relatively low. An equal number of the adolescents are either aware or unaware about the physical signs of adolescence (see table 39). Only adolescents from Marmain, Mulum, Mupyut, Selbalgre and Tosekgre are aware of the various physical signs of adolescence. In the other villages, the majority of the adolescents have no such knowledge.

**Table 39: Awareness of physical signs of adolescence among the adolescents in the study area**

Village	Awarenes Of Physical Signs Of Adolescence		Total
	Yes	No	
Dombah	40.0%	60.0%	100.0%
Laitsohpliah	40.0%	60.0%	100.0%
Madanrtiang	0.0%	100.0%	100.0%
Marmain	80.0%	20.0%	100.0%
Mawhiang	40.0%	60.0%	100.0%
Mulum	60.0%	40.0%	100.0%
Mupyut	100.0%	0.0%	100.0%
Mustoh	20.0%	80.0%	100.0%
Nohron	20.0%	80.0%	100.0%
Selbalgre	100.0%	0.0%	100.0%
Tosekgre	60.0%	40.0%	100.0%
Total	50.9%	49.1%	100.0%

Similarly, an equal number of adolescents are not aware of the need to have proper sleep, exercise, hygiene and nutrition for maintaining adolescent health (see table 40). While adolescents from Laitsohpliah, Marmain, Mulum, Mupyut, Nohron, Selbalgre and Tosekgre have knowledge of the good practises, adolescents from other villages do not. Thus, except in Marmain, Mulum, Mupyut, Selbalgre and Tosekgre, participation in various types of

awareness programs do not seem to have augmented the knowledge of adolescents regarding the various facets of adolescence and the practises required to be followed to care for it.

**Table 40: Awareness of the need for exercise, sleep and hygiene among the adolescents in the study area**

Village	Awareness Of Need For Adolescent Health (Nutrition, Exercise, Sleep And Hygiene)			
	No Response	Yes	No	11.00
Dombah	0.0%	40.0%	60.0%	0.0%
Laitsohpliah	0.0%	60.0%	40.0%	0.0%
Madanrtiang	0.0%	0.0%	100.0%	0.0%
Marmain	0.0%	60.0%	40.0%	0.0%
Mawhiang	0.0%	20.0%	80.0%	0.0%
Mulum	20.0%	60.0%	20.0%	0.0%
Mupyut	0.0%	80.0%	20.0%	0.0%
Mustoh	0.0%	0.0%	100.0%	0.0%
Nohron	0.0%	60.0%	40.0%	0.0%
Selbalgre	0.0%	80.0%	20.0%	20.0%
Tosekgre	0.0%	60.0%	40.0%	0.0%
Total	1.8%	47.3%	49.1%	1.8%

**Table 41: Awareness of legal age of marriage among the adolescents in the study area**

Village	Awareness Of Legal Age Of Marriage		Total
	Yes	No	
Dombah	100.0%	0.0%	100.0%
Laitsohpliah	100.0%	0.0%	100.0%
Madanrtiang	80.0%	20.0%	100.0%
Marmain	100.0%	0.0%	100.0%
Mawhiang	80.0%	20.0%	100.0%
Mulum	60.0%	40.0%	100.0%
Mupyut	60.0%	40.0%	100.0%
Mustoh	40.0%	60.0%	100.0%
Nohron	20.0%	80.0%	100.0%
Selbalgre	100.0%	0.0%	100.0%
Tosekgre	60.0%	40.0%	100.0%
Total	72.7%	27.3%	100.0%

The gap between awareness and practise becomes all the more critical for the adolescents in villages like Mustoh and Nohron; they are unaware about the legal age of marriage (see table 41), whereas the majority of the adolescents from the other villages are aware of this fact. Their problems are accentuated by the fact that they did not attend any program on reproductive health. In this, they are not alone. Except in Marmain, majority of the respondents have reported of not attending any program on reproductive health. This lack of participation could explain the lack of awareness regarding contraception in the study area as well. Except for those from Tosekgre, the majority of the adolescents from the study area have no knowledge of contraception. This can have severe repercussions on early pregnancy especially among adolescent girls with devastating consequences on the health of the mother and the child.

The danger to adolescents' health is further elevated by their lack of participation in sex education program. Only in Selbalgre and Tosekgre, majority of the adolescents have attended such programs, with schools being the source of this training. In the other villages, there is a general pattern of lack of participation in programs and knowledge about the reproductive health, contraception or sex education. This is a worrisome situation for the adolescents in the study area in general. The consequences on future health of mother and child are not very encouraging. This is especially unsettling in the context that the majority of the adolescents in the study area (except in Marmain) have not received any training by the Anganwadi (see table 42). Thus many of the adolescents in the study area are without training and knowledge, a potent combination for future problems, both theirs and their children.

**Table 42: Training from Anganwadi for the adolescents in the study area**

Village	Training From Anganwadi		Total
	Yes	No	
Dombah	20.0%	80.0%	100.0%
Laitsohpliah	20.0%	80.0%	100.0%
Madanrtiang	0.0%	100.0%	100.0%
Marmain	80.0%	20.0%	100.0%
Mawhiang	40.0%	60.0%	100.0%
Mulum	40.0%	60.0%	100.0%
Mupyut	20.0%	80.0%	100.0%
Mustoh	0.0%	100.0%	100.0%
Nohron	40.0%	60.0%	100.0%
Selbalgre	40.0%	60.0%	100.0%
Tosekgre	40.0%	60.0%	100.0%
Total	30.9%	69.1%	100.0%

This lack of knowledge and training is accompanied by poor nutrition (see table 43). Except for green leafy vegetables, consumption of fruits, roots and tubers, non green leafy vegetables, red and yellow coloured vegetables, cereals, pulses, egg, meat and juice is very low. These are consumed only occasionally, i.e., never to one to three times a week. In the case of green leafy vegetables, only Marmain, Mulum and Tosekgre show low consumption among adolescents. In other villages, adolescents consume them regularly, i.e. between 4-6 times to daily. In the study, adolescents from Marmain, Mulum, Nohron, Selbalgre and Tosekgre are the most vulnerable. Adolescents from these villages are found to be lacking in consumption in at least 10 out the 12 food groups that were mentioned. In fact, some Madanrtiang adolescents have low consumption in at least half of the food groups. Thus, in general nutritional status of the adolescents in the study area is quite low.

**Table 43: Food consumption among the adolescents in the study area**

Food	Occasionally	Regularly
	Never To 1-3 Times A Week	4-6 Times A Week To daily
Fruits	Dombah, Laitsohpliah, Mulum, Mustoh, Nohron, Selbalgre, Tosekgre	Madanrtiang, Marmain, Mawhiang, Mupyut
Roots And Tubers	Marmain, Mulum, Mupyut, Mustoh, Nohron, Selbalgre, Tosekgre	Dombah, Laitsohpliah, Madanrtiang, Mawhiang
Green Leafy Vegetables	Marmain, Mulum, Tosekgre	Dombah, Laitsohpliah, Madanrtiang, Mawhiang, Mupyut, Mustoh, Nohron, Selbalgre
Non Green Leafy Vegetables	Marmain, Mulum, Mupyut, Mustoh, Nohron, Selbalgre, Tosekgre	Dombah, Laitsohpliah, Madanrtiang, Mawhiang
Red And Yellow Coloured Vegetables	Madanrtiang, Marmain, Mulum, Mupyut, Mustoh, Nohron, Selbalgre, Tosekgre	Dombah, Laitsohpliah, Mawhiang
Cereals	Laitsohpliah, Marmain, Mawhiang, Mulum, Mupyut, Mustoh, Nohron, Selbalgre, Tosekgre	Dombah, Madanrtiang
Pulses	Dombah, Laitsohpliah, Madanrtiang, Marmain, Nohron, Selbalgre, Tosekgre	Mawhiang, Mulum, Mupyut, Mustoh
Egg	Dombah, Laitsohpliah, Marmain, Mulum, Mupyut, Nohron, Selbalgre, Tosekgre	Madanrtiang, Mawhiang, Mustoh
Meat	Dombah, Laitsohpliah, Madanrtiang, Marmain, Mawhiang, Mulum, Mupyut, Nohron, Selbalgre, Tosekgre	Mustoh
Milk	Laitsohpliah, Madanrtiang, Mulum, Mupyut, Mustoh, Nohron, Selbalgre, Tosekgre	Dombah, Marmain, Mawhiang
Juice	Dombah, Laitsohpliah, Madanrtiang, Marmain, Mawhiang, Mulum, Mupyut, Mustoh, Nohron, Selbalgre, Tosekgre	
Wild Edibles	Marmain, Mawhiang, Mulum, Mustoh, Nohron, Selbalgre, Tosekgre	Dombah, Laitsohpliah, Madanrtiang, Mupyut
Fatty Or Fried Food	Dombah, Laitsohpliah, Marmain, Mawhiang, Mulum, Mustoh, Nohron, Selbalgre, Tosekgre	Madanrtiang, Mupyut
Salty	Dombah, Laitsohpliah, Madanrtiang, Mawhiang, Mulum, Mupyut, Mustoh, Nohron, Selbalgre, Tosekgre	Marmain
Fast Food	Madanrtiang, Marmain, Mawhiang, Mulum, Mupyut, Mustoh, Nohron, Selbalgre, Tosekgre	Dombah, Laitsohpliah

**NB:** If in a village more than half of the households have consumed a particular food daily to 4-6 times a week it is categorised in the high consumption category;

If in a village more than half of the households have consumed a particular food never to only 1-3 times a week it is categorised in the low consumption category;

At the same time, it is heartening to note that consumption of unhealthy processed food, viz., fatty or fried food, salty food and fast food is also low. Adolescents from Madanrtiang and Mupyut were found to consume fatty or fried food regularly but the rest had low consumption. Similarly, only adolescents from Marmain, Dombah and Laitsohpliah consume salty and fast food at regular intervals. Others have very limited consumption. So in terms of nutrition, everything is not in a bad situation with some desirable pattern also discernible. Improving nutrition, though, must be a priority if the present health of the adolescents and the future health of their child are important.



### **Anganwadi Workers (AWW)**

The Anganwadi workers perform a lot of services in the villages. Services like awareness on health issues, vaccination of young children, providing health and nutrition education and counselling on breastfeeding/ infant and young feeding practices to mothers, home visits, identifying target groups for the ANM is provided on a monthly basis in all villages. In the same manner, services like supplementary nutrition, pre-school non-formal education for children below 6 years are provided daily by the Anganwadi in all the villages.

However, there are great differences in regularity of service delivery for many. It is also mostly seen that services like nutrition and health education for women, health check-ups for children below 6 years, pregnant and lactating mother, checks for children's height and weight, checks for the weight of pregnant mothers, assisting PHC staff in implementing health programs, check-up, immunisation, antenatal and postnatal check-ups are provided on a monthly basis.

Referral services for children below 6 years, pregnant and lactating Mothers, and organizing supplementary nutrition feeding for pregnant and lactating Mothers is done by Anganwadi workers in all the villages on a weekly basis. Referring the case to the nearest PHC or District Disability Rehabilitation Centre is mostly done on a required basis, but in Laitsohpiah, it is done on a monthly basis. Guidance to ASHAs engaged under National Rural Health Mission in the delivery of health care services, and supplementary nutrition for children from 0 to 3 years is provided in Laitsohpiah on a daily basis but in the other villages it is on weekly basis respectively. As for immunisation, it is done on a weekly basis in Laitsohpiah and on a monthly basis in the rest of the villages. Thus it would seem that Anganwadi workers in all the 12 villages provide the same services for the community people, but there are differences in the frequency in some services provision.

### **Accredited Social Health Activist (ASHA)**

Most of the activities done by ASHA workers in the villages are done as required and on a monthly basis. These activities include awareness on nutrition, basic sanitation and hygienic practices, healthy living and working conditions, family welfare services, and existing healthy services. Mobilizing the community and facilitating them in accessing health and health related services available at the Anganwadi/sub-centre/primary health centers, such as immunisation, antenatal check-up (ANC), postnatal check-up, supplementary nutrition and

sanitation are also done on a monthly basis. Referral and escort services for Reproductive and Child Health are also done on a yearly basis but only in Marmain. As for providing drugs like Oral Rehydration Therapy (ORS), Iron Folic Acid Tablet (IFA), chloroquine, Disposable Delivery Kits (DDK), Oral Pills and Condoms, etc, is based on requirement basis. ASHA workers also provide counselling to pregnant mothers.

Unfortunately, at present all the ASHAs from the respective villages are not actively working due to their ongoing strike because the State government failed to release the pending incentives. However, from the interview they had with them their response was that as the responsible women in the society (not as the ASHAs) they cannot ignore the problems in their own communities. They have no choice but to help them but not in the capacity of an ASHA worker.

### **Auxiliary Nurse Midwife (ANM)**

The ANM plays an important role in providing effective health care in the communities. The services undertaken by the four ANMs that were interviewed are provided on a monthly and weekly basis. The activities include weekly/fortnightly meetings with the ASHAs, acting as a resource person along with Anganwadi Worker (AWW) for the training of ASHA, participating and guiding in organizing Health Days at Anganwadi Centre, informing ASHA about date and time of the outreach session and also guiding her to bring the prospective beneficiaries to the outreach session, taking help of ASHA in updating eligible couples register of the village concerned, collaborating with ASHA in motivating and guiding the pregnant women for coming to Sub-Centre for initial check-ups and for taking full course of iron folic acid (IFA) tablets and TT injections, etc. Additional activities include orienting ASHA on the dose schedule and side effects of oral pills, and educating them on the danger signs of pregnancy and labour so that she can timely identify and help beneficiary in getting further treatment, and informing ASHA about date, time and place for initial and periodic training schedule. ANM would also ensure that during the training, ASHA gets the compensation for performance and also TA/DA for attending the training.

From the findings, the frequency of provision of the services to the community are found to be similar in all the villages. Yet it is more frequent in those villages with the presence of the Sub centre in it i.e, Marmain, Mupyut, Nohron, Selbalgre and Tosekgre. Moreover, from the interviews with the ANMs it is revealed that the prevalent maternal

health issue in the villages is anaemia, and to some extent the malnutrition among children which is contradictory to the interview with the Anganwadi workers of the respective villages. In addition, when it comes to antenatal care and immunisation of the children it is still a challenge for the ANM, but with time the mindset of the people is changing and there is a positive outlook towards the services provided.

## Summary of findings:

The summary findings of the study as under:

1. According to the findings, the dominant age group of the mothers who were interviewed belonged to the 25-35 age categories. It is only in Marmain and Nohron, young mothers below 20 years old are found.
2. Overall, the mothers participating in the study had a good representation across all the categories, viz., pregnant mother, lactating mother and mothers having children under five years old.
3. Moreover, in terms of education, the majority of the mothers had attained Primary or Secondary education, which can be said that the educational status of the mother is low. Whereas Mustoh and Mupyut had some graduates. Therefore, it can be said that in terms of the demographic profile, the mothers have similar characteristics across all the villages.
4. Regarding the occupation of the mothers it is found out that the majority of mothers are farmers and homemakers. On the other hand, the majority of the husbands of the research participants are found to be engaging in daily wage labour as their main occupation with an earning of Rs 300-500 per day. Furthermore, it is revealed that the main sources of income in the families are farming and daily wage labour, and majority of the families do not have alternate sources of income. Whereby, from the study it is seen that most of the families are vulnerable to economic status. Yet, it is also a good thing to find that most of the families have savings in their own respective banks. When it comes to the assets owned by the research participants, the majority of the families have land, house and a mobile phone. The lands owned by the families are mostly both homestead as well as cultivable land.
5. In addition to the condition in the families it is found that among the fathers in the study area, the majority of them smoke, consume alcohol or do both. It is only in Marmain that a significant number of them do neither. In general, though bad habits

are common in the study area and this could have important consequences in terms of health of the father and the family.

6. According to the findings, though access to pregnancy related information is generally good, consumption of supplements was found to be low in the study area. Whereby, rice, tea and vegetables are the most common items consumed by the mothers during breakfast. Consumption of other food items is rarely seen. As for lunch, the dominant food items highly consumed by the mothers are rice, lentils and green leafy vegetables. For the evening snacks, only rice, tea and vegetables that have a high consumption. Other items like roti, bread and noodles are hardly consumed. Some mothers consume sticky rice, tapioca, taro and local snacks like *Pumaloi*, *Putharo*, *Pudoh* also as part of evening snacks. Like in lunch, during dinner the main items in the menu are rice, lentils and green leafy vegetables. Meat and egg, an important source of protein, has moderate consumption, twice a week. Among the wild edibles, jamyrdoh, jyllang and jaud are consumed regularly, i.e., everyday with the rest having very low consumption.
7. When it comes to antenatal check up, the study shows that the majority of the mothers is aware and have received it, mostly because of the advice by the ASHA and the Anganwadi workers, and the checkups are done in the PHC and in the Sub-Centre because of the proximity. However, there are cases where mothers are not able to complete their check ups because of financial problems, safety concerns and problems in communication/ transportation to the Sub-Centre/ PHC.
8. Furthermore, the majority of the mothers are aware of the exclusive breastfeeding and the importance of the colostrums, which are also considered crucial for the health of the new born baby. However, the finding also shows that the majority of the mothers introduced weaning food to their child within 6 months, which seems to be a lack of convergence between knowledge and practice. In addition, the weaning food items are both homemade and commercially prepared.
9. As discussed, the majority of the mothers are aware of exclusive breastfeeding and they also give weaning food at a very early stage, at the most between 4 to 6 months weaning food is introduced to the child. The diets given to the children include soft rice mixed with vegetables, boiled potato. Processed foods like biscuits soaked in milk/water and banana, sugar are also given to children at the early stage of one week. Powdered milk is another common complementary food given by most of the mothers

to their children. Also, all the mothers have access to the services provided under the ICDS.

10. The status regarding immunisation of children is very good in the study area. Only a few households in Madanrtiang and Nohron have categorically stated that they have not given any immunisation to their children. The reasons for not doing so include personal and religious beliefs and safety concerns.
11. Regarding the finding from the interview with the grandmothers, the study shows that all the grandmothers have their traditional practices in child rearing and child care right from the time the baby is born. A drop of warm water mixed with sugar is preferred to feed the newborn baby rather than the breast milk. Moreover, a dominant group of grandmothers consider colostrums as something dirty since it is the first milk. So, according to them, it is better to discard than to feed the newborn baby. When it comes to the awareness of grandmothers towards the colostrums, the majority of the grandmothers do not have such information/knowledge.
12. Looking at the involvement of the fathers and grandfathers in child care and development, it is found that the majority of them are always present when their wives are giving birth and their main task is to help in household chores. Despite their livelihood as farmers, daily wage labourers, they would spend quality time with their children in the morning and night whenever they are home. It is also seen that the majority of fathers and grandfathers support in feeding, bathing and other activities for their children.
13. Majority of the adolescent respondents belonged to the age group 15 to 19 years followed by 13 to 15 years. Almost half of the respondents from the study area had attended at least primary education with the other almost half attaining secondary education as well. While most had gained some level of education, it was very distressing to note that more than 20% of the respondents were dropouts. Regarding the awareness on nutrition and personal hygiene and sanitation, majority of the adolescents girls are responsive, whereas, looking towards the awareness of the physical signs of adolescence, the needs for adolescent's health, reproductive health, contraceptives and sex education, it is revealed that most of them are not aware.
14. Lastly, from the study it also found that Anganwadi workers, ASHA and ANM play an important role in their respective villages, whereby people, especially mothers approach them first for their antenatal checkup, immunisation, supplementary nutrition and general awareness on their health. The findings showed that AWW,

ASHA and the ANM are keenly providing the services on different bases such as daily, weekly, monthly, yearly and some as required.

## Conclusion

UNICEF stated that, early moments are critical for providing a strong foundation in a child's brain and body, these moments begin with the health and nutrition of a pregnant woman. Child rearing practices are very important in this regard.

It is found that grandmothers play an important role in child rearing in Meghalaya. When a child is born there is always a birth attendant who is a senior person in the village. The birth attendant would help the mothers in delivery, bathing the newborn baby and the mother for a few days. Furthermore, the grandmothers expressed that sugar and warm water would be fed to the child in order to prevent dryness of the child's throat. After two weeks they start feeding mashed banana to the newborn, whereas colostrums are considered dirty and in many cases are discarded. In addition, during the initial stage when the mother gives birth it is difficult to breastfeed the child because of the delay in lactation. Since breast milk is not enough for the child, mashed banana and rice gruel (*umshit ja*) would be fed to the newborn baby even as early as 2/3 days.

The study also identified some of the main barriers affecting pregnant women and children's nutritional intake and health. The identified barriers are poor child care, in many cases because of the short time span between the births of their children. Children from the ages of 7/8 years old are supposed to do household chores like cooking, preparing dinner for the whole family, fetching water from far distance, and look after the youngest sibling. The children who are in need of care and attention don't get to enjoy their childhood as they are forced to take up the above mentioned responsibilities. On the other hand, poor sanitation and hygiene is seen as one of the big barriers, whereby, the older children are usually neglected no one is there to look after their hygiene such as cutting of nails, bathing, wearing appropriate clothes, safe drinking water, hand wash, carelessness in using the utensils for feeding the child. Hygiene and sanitation is not the priority of the people, their main focus is to work in the field. One of the reasons for poor sanitation is also the water shortage.

Poor feeding practice is another barrier that is found from the study. Complementary foods are introduced at the early stage mostly when the child is 2 weeks. The child is fed with

warm water mixed with sugar right away after birth. It is mostly believed that it prevents the dryness of the child's throat and quenches the thirst of the newborn child. There are some who said that it cleanses the stomach of the newborn child. And there are many cases where children were not given colostrums after they were born. Inadequate diets and the lack of diversity in the diets of both mothers and children are seen as one of the barriers. The consumption of wild edibles, other vegetables, fruits and protein sources like meats and nuts was found to be comparatively lower compared to other food groups.

When it comes to the economic background, it is found that most of the respondents have low economic status and belonged to a poor family background, this could be a contributing factor for lack of access to adequate and proper diet. In addition, almost all the mothers are found to be low in their educational status, which is why mothers themselves are not healthy and have limited knowledge of balanced diet and nutritional intake. Many mothers are ignorant of child care as well as caring for themselves. At the same time, they are also not interested in listening and to practice what they know. According to the study, there are some of the mothers who never participated in any programme organized by the ANMs, Anganwadi workers and the ASHAs. In spite of the home visits and counseling done by the health workers, they still do not participate.

Furthermore, the study also shows that though most of the fathers and the grandfathers are involved in taking care of the children, a majority are also involved in smoking and drinking alcohol. So, most of the pregnant mothers and small children are exposed to their smoking and drinking family members which may affect their health physically and mentally. Looking at the awareness of the mother it is seen that the majority of the mothers are aware of the exclusive breastfeeding, complementary feeding, antenatal care but they are ignorant of the importance of these services. Some of the visible reasons of not giving importance are far distance to the health care centre, safety concerns; they are scared of the minor illnesses like fever of the child right after vaccination, and they have not been practicing earlier with the older children, so they don't take it seriously. Some mothers cited personal and religious reasons for their reluctance.

As mentioned above, grandmothers play an important role in child rearing practices, and they also have a great influence. The influence of the grandmothers is one of the main reasons for the early introduction of complementary food as it is often given at the advice of grandmothers. According to the study, the majority of the grandmothers have limited

knowledge of the colostrum, exclusive breastfeeding, and complementary feeding. Many grandmothers expressed that colostrum is not necessary to feed the newborn baby. From the interview with the grandmothers, it shows that in many cases the grandmothers' response towards vaccination of the child was that it is not necessary because in their times they don't receive any vaccination or antenatal care, practice exclusive breastfeeding. They introduced complementary feeding at the early stage of even right away after birth. In spite of not following any of this, they still had good health and were in fact healthier. They had a strong faith though, and believed that when God is there, they don't really need to access all these services.

Unfortunately, the constraint in the study was that during the data collection it was found out that there were no proper records maintained in the Anganwadi centres in almost all the villages. As a result, the study could not identify mothers who do not have malnourished children in the same context.

Lastly, when it comes to the father's involvement and their influence on the health and development of their children, it is evident from the study that most of the fathers and grandfathers would spend quality time with their children and family. It is mostly during the night and morning that they get to spend time with their children because of their work. It is also seen that most of the fathers are always present when their wives give birth, and their responsibility is to help in doing household chores. From the findings, it also shows that most of the fathers realized that it is their primary duty as parents to nurture their children. However, the study also showed that the majority of fathers are engaged in smoking and consuming alcohol, which has the possibility of affecting both the mother and child's health.

The good and positive aspects that were observed during the interactions was when the mother was a little more educated (even upper primary level), it seemed to make a difference in the understanding of child care, feeding practices and even cleanliness and hygiene. The younger mothers are more open to discussion as compared to an older mother having a young child. Community based organizations like the local Churches; especially the Women's wing (Seng Kynthei) can play an important role to enhance the understanding of good child care practices and women's health.



## Proposed Plan of Action

Community Programmes in the evening with the objective of enhancing the understanding of:

- a. Children through games, recreation and ABD walk. They will understand food groups and their importance.
- b. Young mothers, Mothers, Fathers and others – Street plays which will be included in a cultural programme to reduce misconceptions and also enhance participation in health programmes. This will also include screening of videos and documentaries.

Home Visits:

- a. Mothers – Awareness about the importance of local food consumption to achieve balanced diets.

Engagement of women's wing of the church:

- a. Engage with them so they understand their involvement in community activities.
- b. Support these groups to organize health related programmes.

Cooking demonstration:

- a. Pregnant and Lactating Mothers:  
Specific diets like Iron rich diets and calcium rich diets using local resources.
- b. Women in general:  
How to make local snacks rich in nutrients, which can be cooked at the local level.
- c. Cooks of Mid Day Meal and Aganwadi Worker  
How can they include local food such as green leafy vegetables in the meals?

WASH campaign:

- i. The WASH campaign has been started in schools and will continue to household levels.
- ii. Communication messages in the form of text (posters, calendars, paintings on walls etc.), songs, and videos to be sent to the community using technology such as mobile phones, radio and local television.
- iii. Develop a monitoring system.

## Annexure

### Annexure 1

Food	High Consumption (Everyday)	Moderate (Twice A Week)	Low To No Consumption (Once A Week Or Less)	Concern
Rice, Tea And Vegetables	Dombah, Laitsohpliah, Madanrtiang, Marmain, Mulum, Mawhiang, Mupyut, Mustoh, Nohron, Nongmawlong	Selbalgre	Tosekgre	Mawhiang, Mustoh, Nohron, Nongmawlong, Tosekgre (66.67% or 4 food items)
Tea And Biscuits	Mulum, Mupyut, Selbalgre, Tosekgre	Dombah, Laitsohpliah, Madanrtiang, Marmain	Mawhiang, Mustoh, Nohron, Nongmawlong	
Bread			Dombah, Laitsohpliah, Madanrtiang, Marmain, Mawhiang, Mulum, Mupyut, Mustoh, Nohron, Nongmawlong, Selbalgre, Tosekgre	
Egg		Madanrtiang, Mulum, Mupyut	Dombah, Laitsohpliah, Marmain, Mawhiang, Mustoh, Nohron, Nongmawlong, Selbalgre, Tosekgre	
Banana		Madanrtiang, Mulum	Dombah, Laitsohpliah, Marmain, Mawhiang, Mupyut, Mustoh, Nohron, Nongmawlong, Selbalgre, Tosekgre	

Lunch				
Food	High Consumption (Everyday)	Moderate (Twice A Week)	Low To No Consumption (Once A Week Or Less)	Concern
Rice	Dombah, Laitsohpliah, Madanrtiang, Marmain, Mawhiang, Mulum, Mupyut, Mustoh, Nohron, Nongmawlong, Selbalgre, Tosekgre			Nongmawlong (66.67 or 4 items)
Dal	Dombah, Laitsohpliah, Mawhiang, Mulum, Mupyut	Madanrtiang, Marmain, Mustoh, Selbalgre, Tosekgre	Nohron, Nongmawlong,	
Green Leafy Vegetables	Dombah, Laitsohpliah, Madanrtiang, Marmain, Mawhiang, Mulum, Mupyut, Mustoh, Nohron, Nongmawlong, Selbalgre, Tosekgre	Selbalgre		
Roti		Dombah, Laitsohpliah	Madanrtiang, Marmain, Mawhiang, Mulum, Mupyut, Mustoh, Nohron, Nongmawlong, Selbalgre, Tosekgre	
Meat		Dombah, Laitsohpliah, Mulum	Madanrtiang, Marmain, Mawhiang, Mupyut, Mustoh, Nohron, Nongmawlong, Selbalgre, Tosekgre	
Egg		Laitsohpliah, Madanrtiang, Nohron	Dombah, Marmain, Mawhiang, Mulum, Mupyut, Mustoh, Nongmawlong, Selbalgre, Tosekgre	

Evening snacks				
Food	High Consumption (Everyday)	Moderate (Twice A Week)	Low To No Consumption (Once A Week Or Less)	Concern
Biscuits and Tea	Mulum	Dombah, Latisohpliah, Madanrtiang, Marmain, Mupyut, Mustoh, Selbalgre, Tosekgre	Marmain, Nohron, Nongmawlong	Marmain, nongmawlong (80.0% or 4 items)
Rice, Tea And Vegetables	Dombah, Madanrtiang, Marmain, Mawhiang, Mulum, Mupyut, Mustoh, Nohron, Nongmawlong	Latisohpliah, Selbalgre, Tosekgre		
Roti		Latisohpliah, Mupyut	Dombah, Madanrtiang, Marmain, Mawhiang, Mulum, Mustoh, Nohron, Nongmawlong, Selbalgre, Tosekgre	
Bread		Mupyut, Nohron	Dombah, Latisohpliah, Madanrtiang, Marmain, Mawhiang, Mulum, Mustoh, Nongmawlong, Selbalgre, Tosekgre	
Noodles			Dombah, Latisohpliah, Madanrtiang, Marmain, Mawhiang, Mulum, Mupyut, Mustoh, Nohron, Nongmawlong, Selbalgre, Tosekgre	

Dinner				
Food	High Consumption (Everyday)	Moderate (Twice A Week)	Low To No Consumption (Once A Week Or Less)	Concern
Rice	Dombah, Latisohpliah, Madanrtiang, Marmain, Mawhiang, Mulum, Mupyut, Mustoh, Nohron, Nongmawlong, Selbalgre, Tosekgre			Mulum, nohron, nongmawlong, Selbalgre, tosekgre (50. % or 3 items)
Dal	Dombah, Latisohpliah, Mawhiang, Mulum, Mupyut, Mustoh	Madanrtiang, Marmain, Nohron, Nongmawlong, Selbalgre, Tosekgre		
Green Leafy Vegetables	Dombah, Latisohpliah, Madanrtiang, Marmain, Mawhiang, Mulum, Mupyut, Mustoh, Nohron, Nongmawlong, Selbalgre, Tosekgre	Tosekgre		
Roti			Dombah, Latisohpliah, Madanrtiang, Marmain, Mawhiang, Mulum, Mupyut, Mustoh, Nohron, Nongmawlong, Selbalgre, Tosekgre	
Meat		Dombah, Latisohpliah, Madanrtiang, Marmain, Mawhiang, Mupyut, Mustoh	Mulum, Nohron, Nongmawlong, Selbalgre, Tosekgre	

Egg		Dombah, Madanrtiang, Marmain, Mawhiang, Mupyut	Latisohpliah, Mulum, Mustoh, Nohron, Nongmawlong, Selbalgre, Tosekgre	
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Wild edibles				
Food	High Consumption (Everyday)	Moderate (Twice A Week)	Low To No Consumption (Once A Week Or Less)	Concern
Jamyrdoh	Dombah, Latisohpliah, Madanrtiang, Marmain, Mawhiang, Mulum, Mustoh, Nongmawlong	Mupyut, Mustoh		Mustoh, nohron (75.0% and 9 items)
Jyllang	Dombah, Madanrtiang, Marmain, Mulum, Nongmawlong	Latisohpliah, Mawhiang, Mupyut, Mustoh, Nohron		
Jaud	Dombah, Latisohpliah, Madanrtiang, Marmain, Mulum, Nongmawlong	Mawhiang, Mupyut	Mustoh, Nohron,	
Jatira	Latisohpliah, Madanrtiang, Mulum, Nongmawlong	Dombah, Mawhiang, Mupyut, Mustoh, Nohron	Marmain	
Sohlyndung	Madanrtiang		Dombah, Latisohpliah, Marmain, Mawhiang, Mulum, Mupyut, Mustoh, Nohron, Nongmawlong	
Jalynniar	Madanrtiang	Latisohpliah, Nongmawlong	Dombah, Marmain, Mawhiang, Mulum, Mupyut, Mustoh, Nohron	
Jajew	Madanrtiang, Marmain	Latisohpliah, Mulum, Nongmawlong	Dombah, Mawhiang, Mupyut, Mustoh, Nohron	
Jaiaw		Mulum	Dombah, Latisohpliah, Madanrtiang, Marmain, Mawhiang, Mupyut, Mustoh, Nohron, Nongmawlong	
Kynchiang			Dombah, Latisohpliah, Madanrtiang, Marmain, Mawhiang, Mulum, Mupyut, Mustoh, Nohron, Nongmawlong	
Jalynsiar	Madanrtiang	Dombah	Latisohpliah, Marmain, Mawhiang, Mulum, Mupyut, Mustoh, Nohron, Nongmawlong	
Jamahek	Madanrtiang, Marmain		Dombah, Latisohpliah, Mawhiang, Mulum, Mupyut, Mustoh, Nohron, Nongmawlong	
Jakyrwiang	Madanrtiang		Dombah, Latisohpliah, Marmain, Mawhiang, Mulum, Mupyut, Mustoh, Nohron, Nongmawlong	

Green leafy vegetables				
Food	High Consumption (Everyday)	Moderate (Twice A Week)	Low To No Consumption (Once A Week Or Less)	Concern
Mustard	Dombah, Latisohpliah, Madanrtiang, Mulum, Mupyut, Nohron, Nongmawlong	Marmain, Mawhiang, Mustoh, Selbalgre, Tosekgre		Nongmawlong (83.33% or 5 items)

Spinach		Mulum, Tosekgre	Dombah, Latisohpliah, Madanrtiang, Marmain, Mawhiang, Mupyut, Mustoh, Nohron, Nongmawlong, Selbalgre	
Cabbage	Dombah, Latisohpliah	Marmain, Mulum, Mupyut, Nohron, Tosekgre	Madanrtiang, Mawhiang, Mustoh, Nongmawlong, Selbalgre	
Coriander Leaves	Marmain	Dombah, Latisohpliah, Mawhiang, Mulum, Mupyut	Madanrtiang, Mustoh, Nohron, Nongmawlong, Selbalgre, Tosekgre	
Lettuce	Dombah, Latisohpliah, Madanrtiang, Nohron	Marmain, Mawhiang, Mulum, Mupyut, Mustoh	Nongmawlong, Selbalgre, Tosekgre	
Pumpkin Leaves	Dombah, Latisohpliah	Madanrtiang, Marmain, Mulum, Mupyut, Selbalgre, Tosekgre	Mawhiang, Mustoh, Nohron, Nongmawlong	

Other vegetables				
Food	High Consumption (Everyday)	Moderate (Twice A Week)	Low To No Consumption (Once A Week Or Less)	Concern
French Bean	Dombah, Latisohpliah	Madanrtiang, Mawhiang, Mulum, Mupyut, Selbalgre, Tosekgre	Marmain, Mustoh, Nohron, Nongmawlong	Mustoh (100% or 11 items)
Bitter Gourd		Latisohpliah, Madanrtiang, Selbalgre,	Dombah, Marmain, Mawhiang, Mulum, Mupyut, Mustoh, Nongmawlong, Tosekgre	
Brinjal		Madanrtiang, Mulum, Mupyut, Nongmawlong, Selbalgre, Tosekgre	Dombah, Latisohpliah, Marmain, Mawhiang, Mustoh, Nohron	
Cauliflower		Madanrtiang, Mulum, Mupyut	Dombah, Latisohpliah, Marmain, Mawhiang, Mustoh, Nohron, Nongmawlong, Selbalgre, Tosekgre	
Cucumber	Dombah, Latisohpliah, Nongmawlong	Madanrtiang, Marmain, Mulum, Mupyut, Tosekgre	Mawhiang, Mustoh, Nohron, Selbalgre	
Capsicum		Mulum, Mupyut	Dombah, Latisohpliah, Madanrtiang, Marmain, Mawhiang, Mustoh, Nohron, Nongmawlong, Selbalgre, Tosekgre	
Tomato	Latisohpliah	Dombah, Madanrtiang, Marmain, Mulum, Mupyut, Tosekgre	Mawhiang, Mustoh, Nohron, Nongmawlong, Selbalgre	
Lady Finger		Madanrtiang, Mupyut	Dombah, Latisohpliah, Marmain, Mawhiang, Mulum, Mustoh, Nohron, Nongmawlong, Selbalgre, Tosekgre	
Bottle Gourd		Mupyut	Dombah, Latisohpliah, Madanrtiang, Marmain, Mawhiang, Mulum, Mustoh, Nohron, Nongmawlong, Selbalgre, Tosekgre	
Ridge Gourd		Madanrtiang, Mulum, Mupyut	Dombah, Latisohpliah, Marmain, Mawhiang, Mustoh, Nohron, Nongmawlong, Selbalgre, Tosekgre	
Squash		Marmain, Mawhiang, Mulum, Mupyut, Tosekgre	Dombah, Latisohpliah, Madanrtiang, Mustoh, Nohron, Nongmawlong, Selbalgre	

Roots and Tubers				
Food	High Consumption (Everyday)	Moderate (Twice A Week)	Low To No Consumption (Once A Week Or Less)	Concern
Carrot	Dombah, Latisohpliah,	Madanrtiang, Marmain, Mawhiang, Mulum	Mustoh, Nohron, Nongmawlong, Selbalgre, Tosekgre	Mustoh, nohron, nongmawlong (66.67% or 4 items)
Potato	Dombah, Latisohpliah, Madanrtiang, Marmain, Mawhiang, Mupyut, Mustoh, Nohron, Nongmawlong, Selbalgre, Tosekgre	Mulum		
Radish	Latisohpliah	Dombah, Madanrtiang, Marmain, Mulum, Mupyut	Mawhiang, Mustoh, Nohron, Nongmawlong, Selbalgre, Tosekgre	
Turnip			Dombah, Latisohpliah, Madanrtiang, Marmain, Mawhiang, Mulum, Mupyut, Mustoh, Nohron, Nongmawlong, Selbalgre, Tosekgre	
Yam	Latisohpliah, Tosekgre	Dombah, Madanrtiang, Marmain, Mulum, Mupyut,	Mawhiang, Mustoh, Nohron, Nongmawlong, Selbalgre,	
Sweet Potato	Dombah, Latisohpliah,	Madanrtiang, Marmain, Mulum, Mupyut,	Mawhiang, Mustoh, Nohron, Nongmawlong, Selbalgre, Tosekgre	
Carrot	Dombah, Latisohpliah,	Madanrtiang, Marmain, Mawhiang, Mulum,	Mustoh, Nohron, Nongmawlong, Selbalgre, Tosekgre	

Fruits				
Food	High Consumption (Everyday)	Moderate (Twice A Week)	Low To No Consumption (Once A Week Or Less)	Concern
Apple			Dombah, Latisohpliah, Madanrtiang, Marmain, Mawhiang, Mulum, Mupyut, Mustoh, Nohron, Nongmawlong, Selbalgre, Tosekgre	Mawhiang, mustoh, nohron (100% or 12 items)
Banana		Madanrtiang, Marmain, Mulum, Mupyut, Nongmawlong, Tosekgre	Dombah, Latisohpliah, Mawhiang, Mustoh, Nohron, Selbalgre,	
Water Melon			Dombah, Latisohpliah, Madanrtiang, Marmain, Mawhiang, Mulum, Mupyut, Mustoh, Nohron, Nongmawlong, Selbalgre, Tosekgre	
Orange	Mulum,	Marmain, Tosekgre	Dombah, Latisohpliah, Madanrtiang, Mawhiang, Mupyut, Mustoh, Nohron, Nongmawlong, Selbalgre,	
Pear	Latisohpliah,	Dombah,	Madanrtiang, Mawhiang, Mulum, Mupyut, Mustoh, Nohron, Nongmawlong, Selbalgre, Tosekgre	
Lemon		Dombah, Latisohpliah, Madanrtiang, Marmain, Selbalgre, Tosekgre	Mawhiang, Mulum, Mupyut, Mustoh, Nohron, Nongmawlong,	

Guava		Madanrtiang, Tosekgre	Dombah, Latisohpliah, Mawhiang, Mulum, Mupyut, Mustoh, Nohron, Nongmawlong, Selbalgre,	
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<b>Protein</b>				
<b>Food</b>	<b>High Consumption (Everyday)</b>	<b>Moderate (Twice A Week)</b>	<b>Low To No Consumption (Once A Week Or Less)</b>	<b>Concern</b>
Meat		Latisohpliah, Mulum,	Dombah, Madanrtiang, Marmain, Mawhiang, Mupyut, Mustoh, Nohron, Nongmawlong, Selbalgre, Tosekgre	Dombah, Nongmawlong (100% or 7 items)
Pulses		Madanrtiang, Marmain, Mawhiang, Mulum, Mupyut, Selbalgre, Tosekgre	Dombah, Latisohpliah, Nohron, Nongmawlong,	
Aquatic Food		Madanrtiang, Marmain, Mulum, Mupyut,	Dombah, Latisohpliah, Mawhiang, Mustoh, Nohron, Nongmawlong, Selbalgre, Tosekgre	
Beans		Madanrtiang, Marmain, Mulum, Mupyut, Tosekgre	Dombah, Latisohpliah, Mawhiang, Mustoh, Nohron, Nongmawlong, Selbalgre,	
Yogurt			Dombah, Latisohpliah, Madanrtiang, Marmain, Mawhiang, Mulum, Mupyut, Mustoh, Nohron, Nongmawlong, Selbalgre, Tosekgre	
Nuts			Dombah, Latisohpliah, Madanrtiang, Marmain, Mawhiang, Mulum, Mupyut, Mustoh, Nohron, Nongmawlong, Selbalgre, Tosekgre	
Egg		Madanrtiang, Mupyut, Nohron,	Dombah, Latisohpliah, Marmain, Mawhiang, Mulum, Mustoh, Nongmawlong, Selbalgre, Tosekgre	

## Annexure 2

### Barrier Analysis Interview Schedule

#### Objectives of this study:

1. To assess the child rearing practices in rural areas of Meghalaya
2. To determine the barriers that affect pregnant women and children's nutritional intake and health
3. To identify mothers who do not have malnourished children in the same context
4. To understand the Fathers' involvement in and influence on the health and development of their children

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#### PART A

##### Section I: Demographic profile:

Group: MMC   
MWC

1. Name:
2. Age:  
(a) 20 to 25 (b) 25 to 30 (c) 30 to 35 (d) 35 to 40 (e) 40 to 45
3. Marital status:  
(a) Married (b) Unmarried (c) Separated (d) Divorce (e) Single parent
4. Village:
5. Categories:  
(a) Pregnant mother (b) Lactating mothers (c) Mother having children under 5 years
6. Level of schooling completed:  
(a) Nursery (b) Primary (c) Secondary (d) Higher Secondary (e) Graduate
7. Number of children:
8. Number of children below 5 years old?

Sl. no	Sex	Age	Weight	Height	Physical well being of a child: (a) Very good (b) Good, (c) Average (d) Low
1					
2					
3					
4					
5					

##### Section II: Socio-economic status of the respondent

1. Occupation:
  - i. Farmer
  - ii. Homemaker
  - iii. Daily wage labourer
  - iv. Government employee
  - v. Other \_\_\_\_\_



2. Occupation of the respondent's husband
  - i. Government employee
  - ii. Business
  - iii. Farmer
  - iv. Daily wage labourer
  - v. Others \_\_\_\_\_
  
3. Daily wage
 

i. 150<200	v. 350<400
ii. 200<250	vi. 400<450
iii. 250<300	vii. 450<500
iv. 300<350	viii. 500<more
  
4. What is your source of income?
  - i. Farming
  - ii. Daily wage labour
  - iii. Own business
  - iv. Others \_\_\_\_\_
  
5. Does anyone else in the household have other sources of income?
  - i. Yes
  - ii. No
  
6. If yes, what are they?
  - i.
  - ii.
  - iii.
  
7. Do you have savings in the bank?
  - i. Yes
  - ii. No
  
8. Lists of assets of your own
  - i. Land
  - ii. House
  - iii. Vehicle
  - iv. Mobile phone
  - v. Others \_\_\_\_\_
  
8. Type of house?
  - i. Kuccha
  - ii. Pucca
  - iii. Semi-pucca
  
9. Type of land you own?
  - i. Home state
  - ii. Cultivable land
  - iii. Both
  
10. Does the father of the children engage in any habit of
  - i. Alcohol
  - ii. Smoking
  - iii. Both i and ii

- iv. None

### Section III: Nutritional intake by mothers in 1000 days

1. Do you have access to information about nutrition during pregnancy?

- i. Yes  
ii. No

2. If yes, from where do you get access to the information?

- (i) Doctors (ii) Nutritionist (iii) ANM (iv) ASHA (v) AWW  
(vi) Others \_\_\_\_\_

3. Are you taking any vitamins or supplements at present?

- i. Yes  
ii. No

4. When did you start taking these supplements?

- i. Before this pregnancy  
ii. When I discovered I was pregnant  
iii. Within first trimester  
iv. After first trimester  
v. Do not know  
iii. No

5. Do you eat breakfast?

Sl. No	List of breakfast items	Everyday	Twice a week	Once a week	Twice in a month	Once in a month	Never	Remarks
1	Rice & Tea							
2	Biscuits & Tea							
3	Bread							
4	Egg							
5	Banana							
6	Others local item							

6. Can you please choose the food items you consumed for your lunch?

Sl. No	List of lunch items	Everyday	Twice a week	Once a week	Twice in a month	Once in a month	Never	Remarks
1	Rice							
2	Dal							
3	Green leafy vegetables							
4	Roti							

5	Meat							
6	Egg							
7	Local items							

7. Can you choose the items you take for evening snacks

Sl. No	List of evening snacks	Everyday	Once a week	Twice a week	Once a month	Twice a month	Never	Remarks
1	Biscuits & Tea							
2	Rice & Tea							
3	Roti							
4	Bread							
5	Noodles							
6	Pakora							
7	Others local items							

8. Can you please choose the food item you consumed for your dinner?

Sl. No	List of dinner items	Everyday	Twice a week	Once a week	Twice a month	Once a month	Never	Remarks
1	Rice							
2	Dal							
3	Green leafy vegetables							
4	Roti							
5	Meat							
6	Egg							
7	Other local items							

9. Do you consume wild edibles?

Sl. No	List of wild edibles consume	If seasonal (month)	Everyday	Twice a week	Once a week	Twice a month	Once a month	Never
1	Jamyrdoh							
2	Jyllang							
3	Jaud							
4	Jatira							
5	Sohlyndung							
6	Jalynniar							
7	Jajew							
8	Jaiaw							
9	Kynchiang							
10	Jalynshiar							
11	Jamahek							
12	Sohkyrweng							
13	Other local wild edibles							

10. What type of green leafy vegetables do you eat from the following:

Sl. no	List of items	If seasonal (month)	Everyday	Twice a week	Once a week	Twice a month	Once a month	Never
1	Mustard leaves							
2	Spinach							
3	Cabbage							
4	Coriander leaves							
6	Lettuce							
7	Pumpkin leaves							

11. Do you consume the other types of vegetables?

Sl. No	List of items	If seasonal (month)	Everyday	Twice a week	Once a week	Twice a month	Once a month	Never
1	French beans							
2	Bitter gourd							
3	Brinjal							
4	Cauliflower							

5	Cucumber							
6	Capsicum							
7	Tomato							
8	Ladies fingers							
9	Bottle gourd							
10	Ridge gourd (soh prew)							
11	Squash							
12	Other local items							

12. What type of roots and tubers do you eat from the following:

Sl. no	List of items	If seasonal (month)	Everyday	Twice a week	Once a week	Twice a month	Once a month	Never
1	Carrot							
2	Potato							
3	Radish							
4	Turnip							
5	Yam							
6	Sweet potato							
7	Local items							

13. Do you eat the following fruits?

Sl. No	List of items	If seasonal (month)	Everyday	Twice a week	Once a week	Twice a month	Once a month	Never
1	Apple							
2	Banana							
3	Water							

	melon							
4	Orange							
5	Pears							
6	Lemon							
7	Guava							
8	Peach							
9	Blackberry							
10	Pine apple							
11	Litchi							
12	Grapes							
13	Local fruits							

14. What types of food items that contain proteins do you usually eat?

Sl. No	List of food contain proteins	Everyday	Twice a week	Once a week	Twice a month	Once a month	Remark
1	Meat						
2	Pulses						
3	Seafood						
4	Beans						
5	Yogurt						
6	Nuts						
7	Egg						
8	Other items						

15. Do you avoid any food during pregnancy?

- i. Yes
- ii. No

16. If yes, what is the reason that you avoid it?

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#### Section IV: Ante-natal care

1. Which is the nearest healthcare facility from your house?
  - i. Private clinic
  - ii. Primary Health Centre
  - iii. Sub-centre
  - iv. Community health Centre

2. Did you register your pregnancy at the primary health centre?
  - i. Yes
  - ii. No

3. If no, why?
- 
- 

4. Did you receive Ante-Natal check-up during your pregnancy?
  - i. Yes
  - ii. No

5. If yes, why did you go for an ANC check-up?
  - i. I was sick
  - ii. Advised by the lady Health worker / ASHA worker
  - iii. Advised by my family members
  - iv. To start a regular check- up
  - v. Others

6. If no, why didn't you receive the ANC check-up?
- 
- 

7. Did you complete all your ANC?
  - i. Yes
  - ii. No

8. If no, why?
- 
- 

9. How many times did you receive antenatal care during your pregnancy?
- 

10. Where did you go for ANC?
  - ii. Private clinic
  - iii. Primary Health Centre
  - iv. Sub-centre
  - v. Community health Centre

10. Why did you go to the above health institution for a check up?
  - i. Close to my house

- ii. Inexpensive
- iii. Convenient timing
- iv. Good quality service
- v. Others

17. Did you receive the following services, at-least once, during your pregnancy check-ups ?

Check-ups	Yes	No
i. Tetanus injection on your arm		
ii. Iron tablets/ syrup		
iii. Weight checked		
iv. Blood /Urine tests conducted		
v. Blood pressure examined		
vi. Physical Examination		
vii. Calcium tablets		

18. If no, what is the reason for not receiving these check-ups?

- i.
- ii.
- iii.
- iv.

#### Section V: Feeding practices of children below 6 months

1. Are you aware about exclusive breastfeeding?

- i. Yes
- ii. No

2. If yes, exclusive breastfeeding is

- i. Feeding a baby at 6 months
- ii. Feeding a baby at 4 months
- iii. Feeding a baby at 8 months
- iv. Feeding a baby at 12 months

3. Breastfeeding should be initiated after birth

- i. Within half an hour
- ii. Within 1 hour
- iii. Within 2 hours
- iv. Within 3 hours

4. Feeding time for baby per day

- i. Feed the baby as demand
- ii. Feed the baby 6 times a day
- iii. Feed the baby 8 times a day
- iv. Feed the baby 12 times a day

5. Are you aware of the Colostrum?

- i. Yes
- ii. No

6. If yes, what do you know about the Colostrum?

- i. First milk secreted by mothers to be fed by new born baby



- ii. Milk
  - iii. First milk secreted after birth to be discarded
  - iv. Harmful to the new born baby
  - v. Others
7. Do you think Colostrum should be discarded?
- i. Agree
  - ii. Disagree
  - iii. Don't know
8. Did your child receive Colostrum?
- i. Yes
  - ii. No
9. If yes, how soon do you start breastfeed with Colostrum to your child?
- i. Within 1 hour
  - ii. Within 6 hours
  - iii. Within 24 hours
  - iv. Right away after birth
10. Weaning food can be introduced to your child when a he/she is
- i. 2 months
  - ii. 4 months
  - iii. 6 months
  - iv. 1 year
11. For how many months do you breastfeed your child?
- i. 6 months
  - ii. 9 months
  - iii. 1 year
  - iv. More than 1 year
12. Weaning food given to the child should be
- i. Homemade food
  - ii. Commercially prepared
  - iii. Both I and ii
  - iv. None of the above
13. Health problem face by the child when weaning food is introduced
- i. Indigestion
  - ii. Diarrhea
  - iii. Pain abdomen
  - iv. Skin rash (allergy)
  - v. None of the above
  - vi. All of the above
14. Delayed weaning leads to
- i. Malnutrition
  - ii. Growth failure
  - iii. Both I and ii
  - iv. None of the above

### Section VI: Complementary feeding to children after 6 months

15. Complementary feeding at different age

Sl. No	Age of a child	Complementary foods	Frequency	Remarks
1	Below 4 months	Grape juice, Biscuit soak in milk or tea, vegetables sops, mashed banana , mashed and boil potato , breastfeeding	3- 6 times per day	
2	4-6 months	Breastfeeding, Grape juice, Biscuit soak in milk or tea, vegetables sops, mash banana , mash and boil potato	3- 6 times per day	
3	6-9 months	Breastfeeding, Egg yolk, soft rice , daal, mashed fruits like banana, papaya, apple, bread or roti soak in milk/tea, bite of biscuit, piece of carrot and cucumber,	5-6 times per day	
4	9-12 months	Breastfeeding, New food items like fish, meat, chicken, food should soft and well cook	5-6 times per day	
5	12-18 months	Can take all cooked food, breast feeding to be continued especially at night	4-5 times according to child needs	

16. Do you give milk to your child?

- i. Yes
- ii. No

17. If yes, what types of milk do you feed your child?

- i. Cow milk
- ii. Tinned milk
- iii. Powdered milk
- iv. Other type of milk

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18. Are you availing the services from the ICDS?

- i. Yes
- ii. No

19. If yes, which are the services you are getting?

- i. Supplementary Nutrition
- ii. Pre-school non-formal education
- iii. Immunisation
- iv. Health check-up and
- v. Referral services
- vi. All of the above

### Section VII: Vaccinations of a child below 5 years

1. Do you give immunisations to your child?

- i. Yes
- ii. No

2. If no, can you explain what could be the reason for not giving immunisation?

- i. Personal beliefs

- ii. Religious reasons
- iii. Safety concerns
- iv. Limited knowledge about vaccination
- v. Others reasons

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3. Do you follow the immunisation routine provided to you?

- i. Yes
  - ii. No
- If no, why not?

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4. Do you have a card for vaccination?

- i. Yes
- ii. No

5. Do you maintain the immunisation card?

- i. Yes
- ii. No

6. It is important for a child to receive all the necessary vaccinations

- i. Agree
- ii. Disagree
- iii. Not sure

### PART B: Grandmother

1. Do you have any particular traditional practices in child rearing?

- i. Yes
- ii. No

If yes, can you share?

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2. How soon a baby should be breastfed after birth?

- i. Within 1 hour
- ii. Within 6 hours
- iii. Within 24 hours
- iv. Other\_\_\_\_\_

3. What is the best time to introduce complementary food to a child?

- i. 2 months
- ii. 4-6months
- iii. 8 months
- iv. 1 year
- v. Other\_\_\_\_\_

4. Are you aware about the colostrums?

- i. Yes

ii. No

5. Do you think colostrums should be discarded?

i. Yes

ii. No

If yes, why? \_\_\_\_\_

6. Is it necessary to give colostrums to the baby?

i. Yes

ii. No

If yes/no, specify? \_\_\_\_\_

7. What do you think is good for a child to feed right after he/she is born?

i. Colostrum

ii. Warm water

iii. Other \_\_\_\_\_

8. Best way to feed the baby?

i. Bottle-feeding

ii. Breastfeeding exclusively

iii. Bottle and breast combine

iv. None of the above

9. For how long is it best to breastfeed a child?

i. Within 6 months

ii. Within 1 year

iii. Within 2 years

iv. Till the baby refuse to be breastfed

10. Is it good to breastfeed the child when the mother is sick?

i. Yes

ii. No

If yes/no, specify \_\_\_\_\_

11. Is it important for a child to receive all the necessary vaccinations?

i. Yes

ii. No

If no, why? \_\_\_\_\_

12. Do you encourage your children to follow of what you have practice in your time?

i. Yes

ii. No

13. Do you encourage your children to utilize the nutritious food provided by the ICDS?

i. Yes

ii. No

If no, why? \_\_\_\_\_

**PART C: Father/Grandfather**

1. Were you there when your child was born?

- i. Yes
- ii. No

If no, why? \_\_\_\_\_

2. What was your involvement when your child came home/ was born?

\_\_\_\_\_  
\_\_\_\_\_

3. How much time do you spend with your children in a day?

\_\_\_\_\_  
\_\_\_\_\_

4. Do you bathe your child?

- i. Yes
- ii. No

5. Do you feed your child?

- i. Yes
- ii. No

6. Do you used to take your child for outings?

- i. Yes
- ii. No

7. Do you spend time with your child in teaching and exploring new things?

- i. Yes
- ii. No

8. Do you help your child in doing their homework?

- i. Yes
- ii. No

9. Do you spend time telling stories, playing with your child?

- i. Yes
- ii. No

10. Who do you think has the primary role in nurturing the children in the family?

- i. Mother
- ii. Father
- iii. Grandparents
- iv. Both i and ii
- v. All of the above

11. Do you think your involvement in nurturing your children contributes to the growth and development of a child?
  - i. Yes
  - ii. No
  
12. How would you rate your communication and relationship with your child?
  - i. Low
  - ii. Average
  - iii. High
  - iv. Not sure

**PART D: Anganwadi worker**

1. Lists of services under ICDS

Sl. No	Activities	Services provided by	How frequently
1	Supplementary nutrition for Children below 6 years, Pregnant & Lactating Mothers		
2	Pre-school non-formal education for children below 6 years		
3	Nutrition and health education for women between the age of 15-45 years		
4	Immunisation		
5	Health check-ups for children below 6 years, pregnant & Lactating Mothers		
6	Referral services for children below 6 years, Pregnant & Lactating Mothers		

2. Roles and responsibilities of the AWW

Sl.no	Activities	Yes/no	How frequently
1	Awareness on health issues		
2	Vaccination of young children		
3	Check for children's height and weight.		
4	Check the weight of pregnant mothers		
4	Organize supplementary nutrition feeding for children (0-6 years)		
5	Providing health and nutrition education and counseling on breastfeeding/ Infant & young feeding practices to mothers		
6	Assisting PHC staff in implementing health programs, check-up, immunisation, antenatal and postnatal check-ups		
7	Guide Accredited Social Health Activists (ASHA) engaged under National Rural Health Mission in the delivery of health care services		
8	Home visits		
9	Refer the case immediately to the nearest PHC or District Disability Rehabilitation Centre		
10	Identify target group for the ANM		

3. What are the types of supplementary nutrition that the government provides for the children?

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4. Does the government provide regular nutritional food for the children and pregnant mothers?  
i. Yes  
ii. No

5. Do you provide cooked food to the children?  
i. Yes  
ii. No

6. Amount of cooked food provided to the children per day?  
\_\_\_\_\_  
\_\_\_\_\_

7. Do you give daily supplementary nutrition to the children?  
i. Yes  
ii. No

8. Is there an up to date record of the pregnant mothers in the village?  
i. Yes  
ii. No

9. Do pregnant mothers visit the centre?  
i. Yes  
ii. No

10. If not, what is the reason?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

11. Lists of the services you provide for pregnant women?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

12. What types of supplementary nutrition do you provide to pregnant mothers?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

13. How many times in a week do you provide supplementary nutrition to the mothers?  
\_\_\_\_\_

14. Do you provide health and nutrition education to pregnant mothers?  
i. Yes  
ii. No

15. Are there counseling classes for pregnant mothers on breastfeeding and feeding practices for infants?  
i. Yes  
ii. No

If yes, how many times in a month? \_\_\_\_\_

16. Is malnutrition prevalent in your village?
- Yes
  - No
17. If yes, what could be the reason?
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
18. Do you organize programmes specifically for the adolescent (11-18 years)?
- Yes
  - No
19. Could you share what types of programmes you organize for adolescents?
- - 
  - 
  - 
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#### PART E: ASHA

Sl. No	Activities	Yes/no	How frequently
1	Referral and escort services for Reproductive & Child Health (RCH)		
2	Awareness <ul style="list-style-type: none"> <li>• Nutrition</li> <li>• Basic sanitation &amp; hygienic practices,</li> <li>• Healthy living and working conditions</li> <li>• Information on existing health services</li> <li>• Family welfare services</li> </ul>		
3	Mobilize the community and facilitate them in accessing health and health related services available at the Anganwadi/sub-centre/primary health centers, such as immunisation, Antenatal Check-up (ANC), Post Natal Check-up supplementary nutrition, sanitation and other services being provided by the government		
4	Depot holder for drug kits like Oral Rehydration Therapy (ORS), Iron Folic Acid Tablet(IFA), chloroquine, Disposable Delivery Kits (DDK), Oral Pills & Condoms, etc.		

2. Do you give counseling to pregnant mothers?

- Yes
- No

3. Are pregnant mothers going for the ANC?

- Yes
- No

If no, why not? \_\_\_\_\_



## PART F: Auxiliary Nurse Midwife

1. Roles and responsibilities of ASHA:

Sl. No	Activities	Yes/No	How frequently
1	Weekly/fortnightly Meetings with the ASHAs		
2	Acting as a resource person, along with Anganwadi Worker (AWW), for the training of ASHA.		
3	Participating and guiding in organizing Health Days at Anganwadi Centre		
4	Informing ASHA about date and time of the outreach session and also guiding her to bring the prospective beneficiaries to the outreach session		
5	Taking help of ASHA in updating eligible couples register of the village concerned.		
6	Utilizing ASHA in motivating the pregnant women for coming to Sub-Centre for initial check-ups		
7	Guiding ASHA in motivating pregnant women to take a full course of iron folic acid (IFA) tablets and TT injections, etc.		
8	Guiding ASHA in motivating pregnant women to take a full course of iron folic acid (IFA) tablets and TT injections, etc.		
9	Orienting ASHA on the dose schedule and side effects of oral pills		
10	Educating ASHA on danger signs of pregnancy and labour so that she can timely identify and help beneficiaries in getting further treatment.		
11	Informing ASHA about date, time and place for initial and periodic training schedule. ANM would also ensure that during the training ASHA gets the compensation for performance and also TA/DA for attending the training		

2. What maternal and child health issue is more prevalent in the community?

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3. What are the challenges faced as a grassroots health worker?

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4. What is the response from the mothers towards their ANC check-ups?

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5. How is the response of the parents towards the vaccinations of the children?

- i. Positive
- ii. Negative

## PART G: Adolescents

- Participant No:
- Age:
  - i. 10-13
  - ii. 13-15
  - iii. 15-19
- Level of schooling

- i. Primary
- ii. Secondary
- iii. Higher Secondary
- iv. Graduation
- v. Dropout

1. Have you received any programmes related to nutrition?

- i. Yes
- ii. No

2. From where did you receive it?

- i. School
- ii. ICDS
- iii. Health care institution
- iv. Workshops
- v. Others

3. Have you received any programmes related to hygiene and sanitation?

- i. Yes
- ii. No

4. Where did you receive it?

- i. School
- ii. ICDS
- iii. Health care institution
- iv. Others

5. Are you aware of the physical signs of adolescents?

- i. Yes
- ii. No

6. Are you aware of the needs for adolescent health (nutrition, exercise, sleep and hygiene)?

- i. Yes
- ii. No

7. Are you aware of the legal age for marriage?

- i. Yes
- ii. No

8. Have you attended any programme related to reproductive health?

- i. Yes
- ii. No

9. Are you aware of contraceptives?

- i. Yes
- ii. No

10. Have you attended any programme about sex education?

- i. Yes
- ii. No

11. If yes, from where did you receive it?

- i. Friends
- ii. Media
- iii. School
- iv. Others

12. Frequency of consumption of different food items in the last one week:

Sl. No	Food items	Occasionally		Regularly	
		Never	1-3 times	4-6 times	Daily
1	Fruits				
2	Roots and Tubers				
3	Green leafy vegetables				
4	Green non-leafy vegetables				
5	Red or yellow coloured vegetables				
6	Cereals				
7	Pulses				
8	Egg				
9	Meat				
10	Milk				
11	Juice				
12	Fatty or fried food				
13	Salty food				
14	Fast food				
15	Wild edibles				

13. Do you get any training from the Anganwadi worker?

- i. Yes
- ii. No

**Note: Only the mothers will be included in the Demographic Profile and the Socio-economic status.**

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