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Rajasthan Nutrition Project: Integrating Financial, Agricultural, Nutrition Services and Gender

Baseline Report

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Table of Contents

Executive Summary 1
Introduction 4
Background 6
Methods 7
Theory of Change 7
Participants and Sampling 8
Survey Instrument 9
Research Team 9
Data Analysis 9
Results 10
Demographics 10
Poverty & Food Security Status 10
Dietary Diversity 11
Coping Strategies 12
Use of Integrated Child Development Services (ICDS) Scheme Benefits 13
Water and Sanitation 13
Diarrhea 14
Treatment-Seeking Behaviors and Perceptions 14
Household Decision-making, Communication, and Mobility 15
Savings 16
Breastfeeding 16
Attitudes and Domestic Violence 18
Discussion 18
Conclusion 19
Acknowledgements 19
Appendix: Baseline Survey Instrument 21
Endnotes 35

EXECUTIVE SUMMARY

Freedom from Hunger, together with its Indian affiliate organization Freedom from Hunger India Trust, and its Indian implementing non-governmental organization (NGO) partners, Voluntary Association of Agricultural General Development Health and Reconstruction Alliance (VAAGDHARA) and Professional Assistance for Development Action (PRADAN), are currently collaborating to improve household nutrition in the Rajasthan districts of Banswara and Sirohi through the Rajasthan Nutrition Program (RNP). Tribal communities of these two districts suffer from high rates of stunting, wasting, infant mortality and maternal mortality, with an especially heavy burden among the disadvantaged tribal and scheduled castes.

The Rajasthan Nutrition Project is a cross-sectoral project designed to build on the existing women's self-help group (SHG) movement to supplement standard savings and agricultural livelihood activities with key nutrition-related interventions to reach at least 8,000 SHG members and their households (an additional 28,000 family members) in Banswara and Sirohi.

In a baseline assessment, 403 women belonging to SHGs were interviewed across Banswara and Sirohi districts to assess their poverty and food security levels; the coping mechanisms they employ when food is scarce; the diversity of their diet; sanitation and safe water behaviors; their treatment-seeking behaviors; household decision-making behaviors; and breastfeeding and infant/child feeding knowledge and behaviors. A simple representative random sample, stratified to include at least 20 percent of currently pregnant women, was applied.

The baseline revealed that 36.7 percent of the sample population lives below the national poverty line and 94.2 percent live below the US$2.50 international poverty line. Seventy-nine percent of the respondents are food insecure. While respondents reported consuming an average of 4.5 food groups in the prior 24 hours, the makeup of these food groups consists primarily of wheat products; roots or tubers; beans, peas and lentils; and red palm products, suggesting low consumption of milk and dairy, vegetables, and meat.

Respondents were asked to reflect what they do when they lack enough money to purchase food. The majority of households relied on less-preferred foods, borrowed food from relatives and friends followed by consuming next year's seed stock, limiting portion sizes and reducing the number of meals per day. Households used on average four coping mechanisms.

The majority of participants (61%) indicated that they themselves, or someone in their family, had received benefits from the Integrated Child Development Services (ICDS) center in the last 12 months. Among participants who had received benefits, the most commonly received services were immunizations and supplementary food. Of those receiving supplementary food from the ICDS center, the majority received it monthly. The least commonly received services were breastfeeding support and education. A little less than one-half also indicated they had received nutrition messages from the ICDS center.

The main source of drinking water comes from tube wells or boreholes. A little more than one-half the households report treating their water; the majority of which are treating their water by straining it through a cloth. Ninety-seven of the households report not having a sanitation facility; all but four people (99%) reported defecating in the open during the prior day.

Of the 21 percent of children who suffered from diarrhea in the prior two weeks, only 7 percent of them were given more to drink and many fewer were given more food to eat. Fifty-eight (58) percent of all respondents had heard of oral rehydration solution (ORS); only 34 percent of those whose children had suffered from diarrhea in the prior two weeks had used ORS to treat diarrhea. Less than 19 percent reported having purchased ORS in the last year.

Slightly more than half of the respondents reported having delayed seeking treatment in the past year for their children due to cost. Sixty-two percent of respondents delayed treatment for themselves due to cost. When asked to share the factors that most often prevent them from seeking medical care, money for treatment was identified as the biggest problem (66 percent), followed by distance to the health center and concern that there might not be drugs or a health care provider available.

Less than half of women appear to have decision-making power when it comes to deciding the amount of food to serve family members (41%); husbands typically make the majority of decisions regarding food purchases, how money is spent generally, decisions on whether she will seek medical treatment for herself, and whether she can visit friends or family. While 70 percent of respondents have unrestricted access to income, less than 30 percent spend that money without receiving permission first. Seventy-one (71) percent of respondents reported having spoken to their husbands regarding food needs in the past six months. Less than 38 percent of the respondents can travel to any location within the village without permission; less than 12 percent can travel alone to another village without permission.

Sixty-two and 66 percent of the respondents report setting aside money for future food and health expenses, respectively. Between 75 and 76 percent of respondents reported having saved in grain or livestock for future food or health expenses, respectively.

A majority (72 percent) of the respondents know a child should be breastfed immediately or within the first hour of life; but of those with children 12 months or younger, only 47 percent of mothers reported having breastfed within first hour. When respondents were asked whether they gave the child something other than breastmilk in the first three days of life, they answered that over 50 percent of the children were given either milk (other than breastmilk) or water.

Only 28 percent of children 12 months or younger were breastfed exclusively for six months. Given 66 percent of respondents reportedly having given something other than breastmilk within first three days of life, reports of exclusive breastfeeding are likely overestimated. When asked whether the child was given anything other than breastmilk in the first six months, 75 percent of children were given water, 53 percent were given milk (other than breastmilk), 26 were given a wheat-based food product, such as bread or chapatti, and 12 percent were given infant formula.

Fifty-four (54) percent of respondents felt very or somewhat confident they can afford nutritious foods for all of their family members. The majority of respondents felt hopeful in the past year; 52 percent felt at least somewhat satisfied with the life they led. Ninety-three percent of respondents were either some or most of the time afraid of their husband or partner during the past year suggesting domestic violence may be highly prevalent. Only 20 percent felt that a husband was justified in hitting or beating his wife.

Four important impact areas are being tracked for the target population for the RNP:

1) Infants breastfed within first hour after birth and exclusively for six months
2) Use of ORS for treating diarrhea in children
3) Improved food security
4) Awareness of local nutrition services and feeding centers

These measures of behavior change, awareness, and food security are indicative indicators of anticipated long-term nutritional improvement, while at the same time are feasible to collect in the short term. The RNP aims to achieve a level of early breastfeeding that at least exceeds Rajasthan's average of 50.1 percent, which would indicate gains over current district averages of 31.5 percent for Banswara and 37.6 percent for Sirohi. We target improvements in use of ORS and increased fluids in treating diarrhea to exceed the level of Rajasthan overall (a significant improvement for Sirohi, which currently shows 58.8 percent against a Rajasthan average of 81.7 percent). For improved food security, our targets are to move all families up at least one point (on a four-point scale) on the food security scale and to realize a measurable overall reduction in the number of families experiencing seasonal and/or chronic food insecurity.

Per the low-baseline measures, there is an opportunity to make an important impact among agricultural households with the integration of nutrition and health education, linkages to local health and nutrition services, and financial services such as savings. Given the low baseline measures of decision-making and mobility among women, a focus on intra-household communication, including husbands and mothers-in-law will be important for building the agency of women to plan for and feed healthy foods to their families, as well as themselves.

INTRODUCTION

Freedom from Hunger, together with its Indian affiliate organization Freedom from Hunger India Trust, and its Indian implementing non-governmental organization (NGO) partners, Voluntary Association of Agricultural General Development Health (VAAGDHARA) and Professional Assistance for Development Action (PRADAN), are currently collaborating to improve household nutrition in the Rajasthan districts of Banswara and Sirohi.

Tribal communities of these two districts suffer from high rates of stunting, wasting, infant mortality and maternal mortality, with an especially heavy burden among the disadvantaged tribal and scheduled castes.

There is a critical window of opportunity to prevent under-nutrition by targeting children in the first two years of life, girls during adolescence and mothers during pregnancy and lactation—when proven nutrition interventions offer children the best chance to survive and reach optimal growth and development.

The Rajasthan Nutrition Project (RNP) is a cross-sectoral project being designed to build on the existing women's self-help group (SHG) movement to supplement standard savings and agricultural livelihood activities with key nutrition-related interventions to reach at least 8,000 women SHG members and their households (an additional 28,000 family members) in Sirohi and Banswara.

Figure 1. Map of Rajasthan

The project will build the capacity of VAAGDHARA and PRADAN to integrate vital health and nutrition knowledge and budgeting/planning skills into existing SHG activities, as well as support improved gender awareness and linkages to nutrition-related services and advocacy for improved service delivery in the target communities. Three goals guide the Rajasthan Nutrition Project:

1. To improve knowledge, behaviors and access to local nutrition-related services for women, adolescent girls and young children.
2. To facilitate dialogue that will lead to increased women's empowerment and more gender-equitable resource management and food distribution within the household.
3. To improve women's financial literacy, resource management ability and skills related to planning for better household nutrition.

Three impact areas were chosen to guide the RNP and measure its success at achieving improved food security and health-seeking behaviors among the rural Rajasthan population:

1. Infants breastfed within first hour after birth
2. Use of ORS and increased fluids in treating diarrhea
3. Improved food security

The purpose of this paper is to summarize the findings from the baseline assessment, completed between May and June 2015, to help inform program design and management.

BACKGROUND

While global food security has improved over the last several decades, it is still a serious problem for poor countries such as India, which ranked 68th out of 109 in the most recent GFSI study of food insecurity in both developed and underdeveloped nations.[i] The World Food Programme reports that one in four hungry people in the world lives in India and that 32.7 percent of its population lives on less than US$1.25 a day.[ii]

India also bears a disproportionate burden of global disease. India accounted for 20 percent of disability-adjusted life years (DALYs) in 2004.[iii] In 2013, the life expectancy at birth for both males and females was below the global averages for both groups. The life expectancy at birth in India was 65 years for males and 68 years for females, compared to global averages of 68 and 73 years, respectively.[iv]

India's below-average life expectancy is significantly influenced by maternal and infant mortality, which are both caused by complications related to pregnancy and childbirth.[v] The estimated maternal mortality ratio in India in 2013 was 190 per 100,000 live births,[vi] which exceeds the Millennium Development Goal (MDG) 5 of less than 100 per 100,000 by the end of 2015. In addition to the Millennium Development Goals, the United Nations Sustainable Development goals include reducing the maternal mortality ratio to less than 70 per 100,000 by 2030[vii]. Regions with high maternal mortality also have high neonatal mortality.[viii] In India, the neonatal mortality rate was 29.2 per 1,000 live births, the infant mortality rate was 41.4 per 1,000 live births, and the under-five mortality rate was 52.7 per 1,000 live births in 2013.[ix] Even when poor maternal health does not cause maternal mortality, it still leads to poor child health.[x] For example, two-fifths of women in India are underweight and underweight mothers are more likely to give birth to low weight babies.[xi] Low weight babies are 13 times more likely to die than their normal weight counterparts.[xii] A recent study estimated that five causes of child mortality accounted for 62 percent of all child deaths in India: pneumonia, prematurity and low birthweight, diarrheal diseases, neonatal infections, and birth asphyxia and birth trauma.[xiii]

The quality of nutrition that a child receives in their first 1,000 days of life is critical for growth and development.[xiv] Children who receive inadequate nutrition often experience poor growth outcomes such as stunting and wasting—especially the very poor (bottom 20 percent) who are twice as likely to be stunted.[xv] Breastfeeding has been established as an essential component to reducing poor nutrition and mortality within the first years of life,[xvi,xvii,xviii,xix] and is one of the specific targets of the new SDGs.[xx] In India, breastfeeding is culturally accepted, but exclusive breastfeeding rates remain low, especially as the infant's age increases.[xxi] Patwari, Kumar, and Beard[xxii] found that 69 percent of infants were exclusively breastfed in their first two months of life, 50 percent their first two to three months and only 27 percent for their first four to five months. Of the women living within Banswara and Sirohi, 31.5 and 37.6 percent report breastfeeding within the first hour and 36.3 and 37.6 percent report exclusively breastfeeding for six months, respectively.[xxiii]

The following table summarizes key statistics related to under and malnutrition for India, Rajasthan and the two districts within Rajasthan where the RNP is based.

Table 1. Key Country, State, District-level Health Statistics[1]

Statistic	India National	Rajasthan	Banswara District	Sirohi District
Population[xxiv]	1.21 billion	68,548,437	1,797,485	1,036,346
Percentage below national poverty line [xxv,xxvi,xxvii]	22%	14.71%	40.4%	19.6%
Percentage belonging to a tribe[xxviii]	8.6%	13.4%	76.4%	24.8%
Infant Mortality Rate (IMR)[2xxix]	47	55	57	65
Percentage <5 years who are stunted[xxx,xxxi]	48%	44%	59%	45%
Percentage <5 years who are underweight[xxxii]	43%	37%	52%	n/a
Percentage who breastfed within 1 hour of birth[xxxiii]	24% to 26%*	54.1%	35.2%	39.9%
Percentage who exclusively breastfed first 6 months[xxxiv]	46.3%	32.1%	36.4%	42.6%
Percentage who had a child with diarrhea that used ORS[xxxv]	31% (1998 data)	81.7%	78.7%	58.7%
Male literacy rate [xxxvi,xxxvii]	82.1%	88.3%	81.9%	75.1%
Female literacy rate[xxxviii,xxxix]	65.5%	61.3%	51.1%	47.5%
Percentage with access to improved drinking water source [xl,xli,xlii, xliii]	84.4%	81.8%	66.2%	87.6%
Percentage with access to toilet facility [xliv,xlv,xlvi, xlvii]	49.3%	25.1%	7.8%	23.2%

METHODS

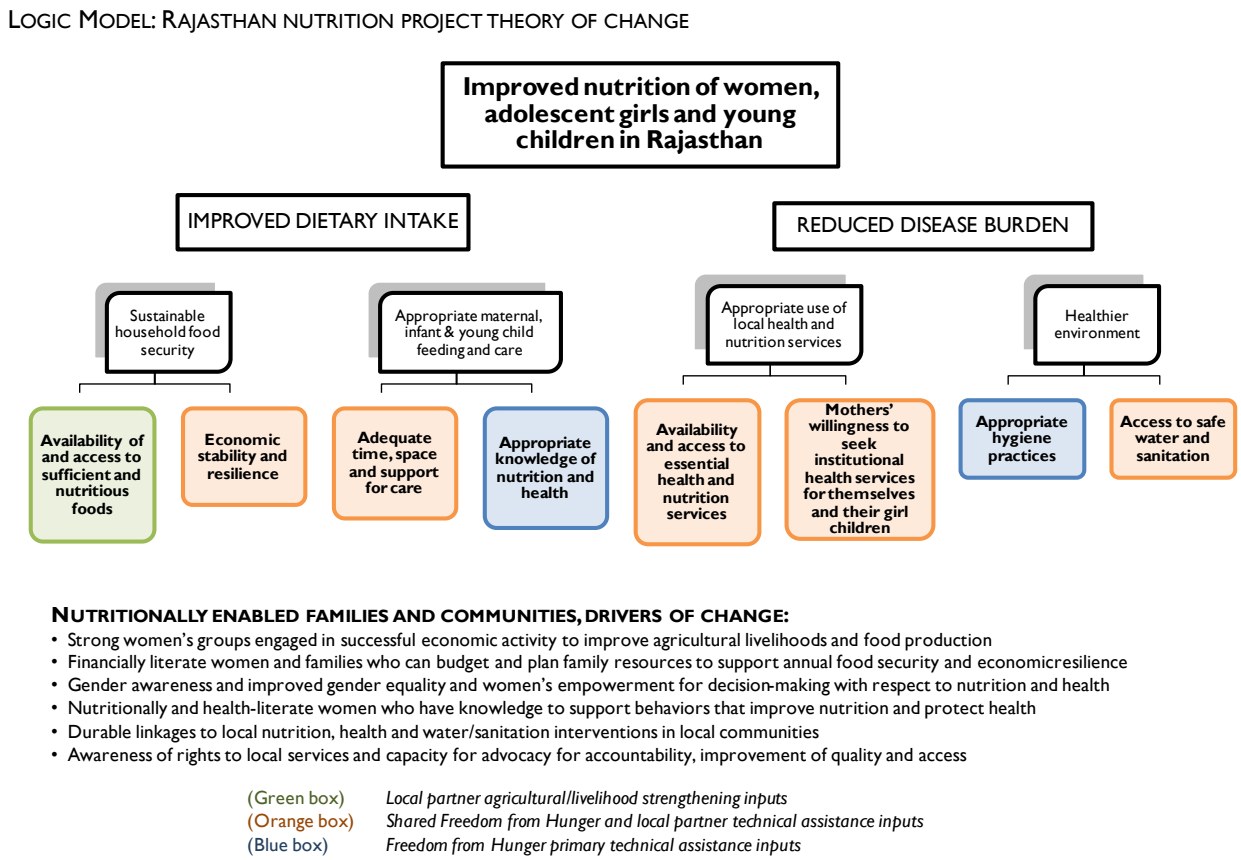
THEORY OF CHANGE

The nutrition conceptual framework used by the RNP, shown below in Figure 2, is closely aligned with the current USAID and UNDP Multi-Sectoral Nutritional Strategies, and depicts the multi-sectoral nature of the problem and its solution. While the interventions of the RNP directly engage SHG members, who are primarily women of reproductive age plus influencers (mothers, mothers-

[1] The statistics provided in this table were generated prior to publication of the updated health statistics that can now be found in the National Family Health Survey – 4, International Institute for Population Sciences, Mumbai, India.
[2] Calculated as per 1,000 births.

in-law), the indirect target beneficiaries include adolescent girls and young children in their households.

Figure 2. Logic Model for the Rajasthan Nutrition Program



PARTICIPANTS AND SAMPLING

The respondents for the baseline study were SHG members from PRADAN and VAAGDHARA who were pregnant (in their second or third trimester) and who were mothers of children less than one year in age living in Banswara and Sirohi. After conducting a census of all SHG members who fit these criteria, 1,394 women were found to have children in the age group of 0-2 years; 250 women were found to be pregnant. These numbers were used to establish the final distribution of the 400 interviews that were planned for the baseline: 85 percent of the total respondents would be drawn from mothers with children between the ages of 0-2 years and the remaining 15 percent would be drawn from the SHG members who were currently pregnant.

Out of the 1,394 women with children 0-2 years, 1,022 were from Sirohi and the remaining 372 were from Banswara. Of the 250 pregnant women, 202 were from Sirohi and the remaining 48 from Banswara. The baseline therefore consists of a simple representative random sample of 249 mothers

and 48 pregnant members from Sirohi and 91 mothers and 12 pregnant members from Banswara. At the completion of the baseline, 403 interviews were conducted due to slight oversampling.

SURVEY INSTRUMENT

Freedom from Hunger designed the baseline survey instrument, drawing on the India Progress out of Poverty Index® (PPI®) Scorecard developed by the Grameen Foundation[xlviii] to establish poverty levels among the SHG member households; a set of health indicators[xlix] previously tested by Freedom from Hunger for use with microfinance institutions; a coping strategies index[l]; a dietary diversity index,[li] nutrition, sanitation and safe water, curative care, household decision-making, and breastfeeding and infant/child feeding. The survey instrument was translated into and conducted in Hindi. An English version of this survey is available in the Appendix.

RESEARCH TEAM

Independent consultants from the Institute of Health Management Research (IIHMR), a globally-recognized university based in Jaipur, Rajasthan that is known for its focus on health systems management, developed the sampling strategy, pre-tested the survey instrument, and collected the data for the baseline survey. Data was collected between June 29 and July 2015 in Sirohi and between July 11 and July 19, 2015 in Banswara. Master's of Public Health students working under Dr. Benjamin Crookston at Brigham Young University assisted in the analysis of the baseline data.

DATA ANALYSIS

SAS (statistical analysis software) 9.4 was used for analyzing and managing the data. The International Poverty Line (IPL) $1.25/day, IPL $2.50/day, and National Tendulkar indices were constructed using values from the *India Progress out of Poverty Index (PPI): Scorecard.* Raw values were generated based on responses, summed, and then matched with probability ranges using PPI® documentation. While the IPL $1.25/day and $2.50/day represent households living under *international* poverty lines of $1.25/day and $2.50/day, the National Tendulkar represents households living under India's *national* poverty line.

To calculate the Dietary Diversity Score (DDS) participants were assigned a value of 1 if they indicated they had eaten any of the foods that corresponded to a specific food group (e.g., meats, dairy, etc.) and a value of 0 if they indicated they had not eaten any of the foods that corresponded to a specific food group. Scores were summed to generate an overall index score for diet diversity (0=least dietary diversity, 9=most dietary diversity).

The Coping Strategies Index (CSI) used 13 variables to assess respondents' coping behaviors during a food shortage. Examples of coping behaviors assessed included relying on less preferred or less expensive foods, borrowing food or relying on help from relatives, sending household members to beg, and limiting portion size at meal. Participants were assigned a value of 1 if they indicated that they had participated in the coping behavior and a value of 0 if they indicated they had not

participated in the coping behavior. Scores were summed to generate an overall index score for coping strategies (0=least number of coping behaviors, 13=most number of coping behaviors).

Statistical tests were run in SAS to obtain frequencies, percentages, and means of demographic questions and to compare key variables of interest to other variables using t-tests and chi-square tests.

RESULTS

DEMOGRAPHICS

Table 2 displays the frequencies, percentages, and means for demographic variables. The majority of participants indicated that they were Hindu (99.75%), part of a tribe (90.82%), married (96.53%), and had children under the age of two (94.43%). A total of 21.09 percent of participants were currently pregnant, which was intentional due to sampling procedures. Among participants, there was an average of 3.21 children (1.72 girls and 1.55 boys). The average age of the participants' youngest child was 1.09 years of age.

Table 2. Demographics

Variables	Percent	Mean
Religion		
Hindu	99.75	-
Muslim	0.25	-
Caste or tribe		
Caste	9.18	-
Tribe	90.82	-
Marital status		
Single	1.49	-
Married	96.53	-
Separated/Divorced	0.25	-
Remarried	1.74	-
Children <2 years old		
Yes	94.43	-
No	5.57	-
Number of children	-	3.21
Number of girls	-	1.72
Number of boys	-	1.55
Age of youngest child	-	1.09
Pregnancy status		
Yes	21.09	-
No	78.91	-

POVERTY & FOOD SECURITY STATUS

Of the total sample population, 44.7 percent lived below the $1.25 international poverty line, 94.2 percent lived below the $2.50 international poverty line and 34.6 percent live below national poverty line known as the Tendulkar poverty line (Table 3), as measured by the PPI®. Nearly 77 percent of the children of households in this survey were reported as being food insecure, compared to 79 percent of women.

Table 3. Poverty and Food Security Status

Variables	Percent
PPI ($1.25/day)	44.7%
PPI ($2.50/day)	94.2%
PPI (NPL)	34.6%
Child food security	
Secure	23.33
Insecure	76.67
Female head of household food security	
Secure	21.09
Insecure	78.91

DIETARY DIVERSITY

Ninety-eight (98) percent of the respondents ate wheat products in the prior 24 hours, followed by red palm oil products, beans, peas, lentils, roots or tubers, and milk products and other vegetables. There was very little consumption of nuts and seeds, green leafy vegetables, eggs, meat and meat products. The average number of food categories consumed by the respondents was 4.5 food groups; the minimum consisting of one food group and the maximum of 10 food groups.

Table 4. Dietary Diversity of Client

Variables	Percent	Mean
Wheat products	98	-
Roots or tubers	51	-
Beans, peas, lentils	63	-
Nuts or seeds	12	-
Milk products	48	-
Eggs	6	-
Meat	1	-
Organ meat from domesticated animals	3	-
Organ meat from wild animals	1	-
Fish	.25	-
Grubs/insects/snails	0	-
Green leafy vegetables	13	-
Yellow/orange vegetables	2	-

Variables	Percent	Mean
Fruit high in vitamin A (mango)	23	-
Red palm oil products	81	-
Other vegetables	33	-
Other fruits	7	-
Minimum diet diversity score	-	1
Maximum diet diversity score	-	10
Average diet diversity score	-	4.5

Coping Strategies

Respondents were asked to reflect on what they do when they lack enough money to purchase food. The majority of households relied on less-preferred foods, borrowed food from relatives and friends, followed by consuming next year's seed stock, limiting portion sizes and reducing the number of meals per day. The minimum number of coping strategies used was zero; the maximum was ten, which suggests some used almost all coping mechanisms listed here. The average number of coping mechanisms used by the households was four.

Table 5. Coping Strategies

Variables	Percent	Mean
Rely on less preferred foods	92	-
Borrow food from friends or relatives	91	-
Gather wild foods	27	-
Consume next year's seed stock	46	-
Limit portion sizes	40	-
Send household members to eat elsewhere	7	-
Skip entire day without eating	22	-
Restrict consumption by adults in order for small children to eat	19	-
Feed working members at expense of non-working members	6	-
Reduce number of meals per day	35	-
Take children out of school	4	
Send household members to beg	5	-
Other	4	-
Minimum number of coping mechanisms used	-	0
Maximum number of coping mechanisms used	-	11
Average number of coping mechanisms used	-	4

Use of Integrated Child Development Services (ICDS) Scheme Benefits

The majority of participants (61%) indicated that they themselves, or someone in their family, had received benefits from the ICDS center in the last 12 months. Among participants who had received benefits, the most commonly received services were immunizations and supplementary food. Of those who received supplementary food from the ICDS center, the majority received it monthly. The least commonly received services were breastfeeding support and education. A little less than one-half also indicated that in the last 12 months, they had received nutrition messages from the ICDS center.

Table 6. Use of ICDS Centre Benefits

Variables	Percent
Received benefits from the ICDS centre in the last 12 months	60.6
Benefits received from ICDS centre	
Supplementary food	84.4
Growth monitoring	34.84
Immunizations	89.3
Health checkup	33.6
Education	16.0
Breastfeeding support	10.7
Received food from ICDS center at least once a month	58
Received food from ICDS center weekly	17
Received food from ICDS center daily	15
Received health information from ICDS center	47
Received health information from private doctor	23

Water and Sanitation

Tube wells or boreholes are the main sources of water, with unprotected dug wells a second-most used source (Table 7). A little more than one-half of the households report treating their water; the majority of whom are treating their water by straining it through a cloth. Ninety-seven of the households report not having a sanitation facility; all but four people (99 percent) reported defecating in the open in the prior day.

Table 7. Drinking Water and Sanitation Facilities

Variables	Percent
Main source of drinking water for household	
Piped water	7.9
Tube well or borehole	64
Dug well (protected)	1
Dug well (unprotected)	26
Rainwater	0.25
Surface water	1

Variables	Percent
Treats water	57
Water treatment method used	
Strain through a cloth	95
Other	5
Sanitation Facility	
Flush or pour flush toilet that flushes to septic tank	0.74
Flush or pour flush toilet that flushes to pit latrine	1.24
Dry latrine	0.5
No facility	97.5
Reported having defecated in open in past day	99

DIARRHEA

Only 21 percent of the respondents reported they had a child in their household with diarrhea during the two weeks prior to the survey (Table 8). Of those children, only 7 percent of them were given more to drink and fewer were given more food to eat. Fifty-eight percent of all respondents had heard of ORS; only 34 percent of those whose children had suffered from diarrhea during the prior two weeks had used ORS to treat diarrhea. Less than 19 percent reported having purchased ORS in the last year. The lack of giving a child more to drink is reflected in the knowledge of giving a child more to drink when they are suffering from diarrhea. Only 16 percent reporting that they should give a child more to drink; more than half reported believing they should give less water.

Table 8. Diarrhea

Variables	Percent
Child had diarrhea in past 2 weeks	21.1
Child with diarrhea was given more to drink	7.1
Child was given more to eat	1.2
Have heard of ORS	57.7
ORS used to treat diarrhea	34.1
Purchased ORS in past year to treat diarrhea	18.6
Knowledge about amount of liquid a child with diarrhea should be given	
More	16.4
Same	24.8
Less	54.1
Don't Know	4.7

TREATMENT-SEEKING BEHAVIORS AND PERCEPTIONS

Slightly more than one-half reported to have delayed seeking treatment for their children in the past year due to cost (Table 9). Sixty-two (62) percent of respondents delayed treatment for themselves due to cost. When asked to share the factors that most often prevent them from seeking medical care, money for treatment was identified as the biggest problem (66 percent), followed by distance

to the health center and the concern that there might not be drugs or a health care provider available.

Table 9. Treatment-seeking behaviors and perceptions

Variables	Percent
Factors that respondents identified as big problems preventing them from seeking medical care for themselves	
Concern there may be no drugs available	58
Concern there may not be any health care provider	40
Concern there may not be a female health care provider	19
Finding someone to go with you	23
Having to take transport	47
The distance to the health facility	59
Getting money needed for treatment	66
Getting permission to go	16
Delayed medical treatment for children in past year due to cost	55
Delayed medical treatment for herself (respondent) in past year due to cost	62

HOUSEHOLD DECISION-MAKING, COMMUNICATION, AND MOBILITY

Overall, women appear to have the most decision-making power when it comes to deciding the amount of food to serve family members (41%); however, husbands typically make the majority of decisions regarding food purchases, how money is spent generally, on whether she will seek medical treatment for herself, and whether she can visit friends or family. While 70 percent of respondents have unrestricted access to income, less than 30 percent spend that money without receiving permission first. Seventy-one percent of respondents reported to have spoken to their husbands regarding food needs in the past six months. Less than 38 percent of the respondents can travel to any location within the village without permission; less than 12 percent can travel alone to another village without permission.

Table 10. Household Decision-making, Communication, and Mobility

Variables	Percent
Food Purchases	
Wife decision	19.6
Husband decision	36.7
Both	24.8
Someone else	18.6
Decision about how much food to serve family members	
Wife decision	40.5
Husband decision	30.8
Both	11.7
Someone else	17.1
Decision on how money is spent	
Wife decision	5.2
Husband decision	71.2
Both	23.6

Variables	Percent
Decision on whether she seeks health care for herself	
Wife decision	3.5
Husband decision	69.5
Both	27.1
Decision on whether she can visit family or friends	
Wife decision	4.2
Husband decision	63.8
Both	32.0
Spoke to husband in past 6 months regarding food needs	71.2
Have unrestricted access to income	69.4
Spend money most of the time without discussing with husband first	27.5
Can go to market alone	28.3
Can go to health facility alone	23.3
Can visit friends or family within the village alone	37.7
Can visit friends or family outside of the village alone	11.9

SAVINGS

Table 11 below shows fairly high levels of planning and saving for future health and food expenses. Sixty-two and 66 percent of the respondents report setting aside money for future food and health expenses, respectively. Between 75 and 76 percent of respondents reported having saved grain or livestock for future food or health expenses, respectively.

Table 11. Savings Behaviors

Variables	Percent
Set aside savings for health in past 6 months	65.5
Saved or set aside any money to cover future food expenses in past 6 months	61.8
Saved in grain for food or health expenses in past 6 months	74.9
Saved livestock to cover any future food or health expenses in past 6 months	75.7

BREASTFEEDING

A majority of the respondents know a child should be breastfed immediately or within the first hour of life; but of those with children 12 months or younger, only 47 percent of mothers reported to have breastfed within the first hour (Table 12). When respondents were asked whether they gave the child something other than breastmilk in the first three days of life, they answered that over 50 percent of the children were given either milk (other than breastmilk) or water. Eleven (11) percent were given honey or something else.

Far fewer (37%) knew that a child should be breastfed exclusively for six months, compared to the need to give a child breastmilk within the first hour of birth. Behaviors are consistent with the low knowledge about exclusive breastfeeding; only 28 percent of children 12 months or younger were breastfed exclusively for six months. Given 66 percent of respondents reported to have given something other than breastmilk within first three days of life, reports of exclusive breastfeeding are

likely overestimated. When asked whether the child was given anything other than breastmilk in the first six months, 75 percent of children were given water, 53 percent were given milk (other than breastmilk), 26 percent were given a wheat-based food product, such as bread or chapatti, and 12 percent were given infant formula. This confirms that exclusive breastfeeding is likely very limited.

Only 26 percent of respondents knew that a child should be begin to receive soft or semi-foods between 6 and 8 months of life; 32 percent knew that a 6-to 8-month-old should receive at least two food groups per day.

Table 12. Breastfeeding and Complementary Foods

Variable	Percent
Say a child should be breastfed immediately or within the first hour	72.0
Say a child should be breastfed exclusively for 6 months	37.0
Know a mother should begin giving a child soft and semi-solid foods between 6 and 8 months	26.3
Know a mother should give a 6-8 month old at least 2 food groups per day	32.8
Households with a child 12 months of age or younger	46.7
Children (12 months or younger) ever breastfed	99.5
Children (12 months or younger) breastfed within first hour	47.1
Children (12 months or younger) given something other than breastmilk in first 3 days of life	66.0
Child given milk in first 3 days of life	65.3
Child given plain water in first 3 days of life	53.2
Child given sugar/sugar water in first 3 days of life	0.81
Child given infant formula, fruit juice, or gripe water in first 3 days of life	0.0
Child given tea in first 3 days of life	4.0
Child given honey in first 3 days of life	11.3
Child given Janam Ghutti in first 3 days of life	0.81
Child given something else ("Other") in first 3 days of life	11.3
Percentage of children (12 months or younger) breastfed exclusively for 6 months	27.7
Child was given infant formula in first 6 months of life	12.2
Child was given water in first 6 months of life	75.0
Child was given juice in first 6 months of life	6.4
Child was given milk, such as tinned, powdered or fresh animal milk, in first 6 months of life	52.7
Child was given clear broth in first 6 months of life	1.1
Child was given packaged baby food in first 6 months of life	0.5
Child was given yogurt in first 6 months of life	0.0
Child was given commercially fortified baby food (Celerax or Farex) in first 6 months of life	2.1
Child was given bread, chapati, rice, noodles, biscuits, or any other foods made from grains in first 6 months of life	26.0
Child was given pumpkin, carrots, squash or sweet potatoes that are yellow or orange inside in first 6 months of life	2.1
Child was given white potatoes, white yams, manioc, cassava, or any other foods made from roots in first 6 months of life	1.6
Child was given dark green, leafy vegetables in first 6 months of life	1.1
Child was given ripe mangoes, papayas, cantaloupe or jackfruit in first 6 months of life	1.6

ATTITUDES AND DOMESTIC VIOLENCE

Fifty-four percent of respondents felt very or somewhat confident they could afford nutritious foods for all of their family members. The majority of respondents felt hopeful in the past year; 52 percent felt at least somewhat satisfied with the life they led. Ninety-three percent of respondents were either some or most of the time afraid of their husband or partner in the past year suggesting domestic violence may be highly prevalent. Only 20 percent feel that a husband is justified in hitting or beating his wife.

Table 13. Attitudes and Domestic Violence

Variables	Percent
Feels very confident that she can afford nutritious foods for all of my family members	15.4
Feels somewhat confident that she can afford nutritious foods for all of my family members	38.7
Felt hopeful in the past year (yes)	25.6
Felt hopeful in the past year (somewhat)	59.8
Feels very satisfied with life she leads	9.7
Feels somewhat satisfied with life she leads	52.1
Feels a husband is justified in hitting or beating his wife	20.1
In the last 12 months, was afraid of husband/partner (most of the time)	17.4
In the last 12 months, was afraid of husband/partner (some of the time)	75.4

DISCUSSION

While the RNP's duration of two years is not sufficient to allow measurement of change in broad indicators of success such as reduced infant and maternal mortality, four impact areas will be tracked for the target population of 8,000 women and their households:

1) Infants breastfed within first hour after birth and exclusively for six months
2) Use of ORS for treating diarrhea
3) Improved food security
4) Awareness of local nutrition and feeding services

These are measures of behavior change, awareness and food security that are indicative indicators of anticipated long-term nutritional improvement, while at the same time are feasible to collect in the short term.

The RNP aims to achieve a level of early breastfeeding that exceeds Rajasthan's average of 50.1 percent, which would represent solid gains over current district averages of 35.2 percent and 39.9 percent for Banswara and Sirohi, respectively. **The baseline assessment reveals that 47 percent of respondents reported breastfeeding within an hour of birth; but given 66 percent also reported to have given something other than breastmilk in the first three days of life, the greatest change this program can aim to achieve is the reduction of use of other liquids during the first three days of life.** For exclusive breastfeeding, RNP aims to achieve the national level of exclusive breastfeeding, which is 46 percent. **The baseline reveals that 27 percent of mothers reported exclusively breastfeeding for six months, which is much lower than the**

statistics provided elsewhere for Banswara and Sirohi. Achieving gains in exclusive breastfeeding will be challenged both in measurement and practice as the mothers who reported exclusively breastfeeding during six months also reported giving their child water, other milk products, and foods.

The RNP also targets improvements in use of ORS and increased fluids in treating diarrhea to exceed the level of Rajasthan overall (a significant improvement for Sirohi, which currently shows 58.7 percent versus a Rajasthan average of 81.7 percent). The baseline assessment suggests that use of ORS across both Banswara and Sirohi is relatively low: **only 19 percent of respondents ever purchased ORS in the past year. For children who had suffered from diarrhea during the prior two weeks, 34 percent of respondents used ORS to treat the diarrheal episodes. This suggests use of ORS is much lower in Sirohi and Banswara than the statistics provided elsewhere. Only 7 percent of respondents indicated that they gave more liquids when a child had diarrhea. Improvements in this behavior should be expected as a result of the planned activities for RNP.**

For improved food security, RNP targets are to move all families up at least one point (on a four-point scale) on the food security scale and to realize a measurable reduction overall for families experiencing seasonal and/or chronic food insecurity. **Only 21 percent of respondents were food secure and 23 percent of their children were considered food secure**. Dietary diversity and the coping strategies index also suggest that while diets may be considered diverse since the majority consumes on average 4.5 foods during the prior 24 hours, the makeup of these food groups consists primarily of wheat products; roots or tubers; beans, peas and lentils; and red palm products, suggesting low consumption of milk and dairy, vegetables, and meat.

Conclusion

The RNP aims to improve food security, breastfeeding, and diarrhea treatment among the women of SHGs in Banswara and Sirohi. Per the baseline measures, there is an opportunity to make an important impact among agricultural households through the integration of nutrition and health education, linkages to local health services, and financial services such as savings.

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APPENDIX: BASELINE SURVEY INSTRUMENT

Client Health & Nutrition Outcomes Quantitative Survey

RAJASTHAN NUTRITION PROJECT

NOTE FOR INTERVIEWERS: *ITALICIZED* WORDS ARE INTERVIEWER INSTRUCTIONS; DO NOT READ THEM ALOUD TO THE RESPONDENT.

DO NOT READ ALOUD ANSWER OPTIONS UNLESS THE DIRECTIONS SAY ☞ *READ OUT OPTIONS.*

MARK ONLY ONE ANSWER CODE PER QUESTION UNLESS THE DIRECTION SAY ☞*MULTIPLE RESPONSES POSSIBLE.*

A. Identification *(Write in answers)*		
A1.	**Branch**	
A2.	**Village**	
A3.	**Panchayat or Block**	
A4.	**Self-Help Group**	
A5.	**Respondent ID**	
A6.	**Date joined SHG**	Month: _ _ Year: _ _ _ _
A7.	**Gender**	Female = 1 Male = 2
A8.	**Age**	____ (in years)

B. Interview Details					
	A. Name of the Interviewer	B. Date DD/MM/YR	C. Start time *(24-hour format)*	D. End time *(24-hour format)*	E. Interview Successfully Completed?
B.1 First visit		__/__/__	___:___	___:___	Yes.....1 No..... 2
B.2 Second visit		__/__/__	___:___	___:___	Yes .....1 No..... 2

C. Introduction and Permission

Namaste. My name is _____. We are conducting a survey about the well-being of our clients, focusing particularly on your family's health.

Participation in this survey is voluntary. However, we hope that you will participate because your views are important. This information will be used to help us plan and improve our services as well as understand whether the products and services we provide to you contribute to your household's well-being. The survey usually takes about 15 minutes to complete. Your identity and your answers will remain confidential.

Do I have your permission to continue? *(If client says yes, start the interview)*

C.1 Yes…….1 No……2

For any additional information and queries on the issues discussed, please contact: ……

Section 1: Demographics

1.01	**What is your religion?**			
	Hindu 1	Muslim 2	Sikh 3	Christian..... 4
	No Religion 5	Other 77	Refuse to answer 997	Don't know 999
1.02	**What is your caste or tribe?**			
	Caste *(specify)* *1*	Tribe *(specify)* *2*	No caste/tribe 3	
	Refuse to answer..... 997	Don't know 999		
1.03	**What is your marital status? (☞ *READ OUT OPTIONS*)**			
	Single..... 1	Married.....2	Separated/Divorced..... 3	Widow 4
	Separated but consider self single 5	Remarried (was divorced or widowed) 6	Deserted 7	Other.....8
1.04	**How many children do you have?**	|_____| **If 0, skip to 2.01**		
1.05	**How many are girls and what are their ages?**	**# of girls |_____|**	**List out ages:**	
1.06	**How many are boys and what are their ages?**	**# of boys |_____|**	**List out ages:**	
1.07	**Do you have any children under the age of 2?**	Yes.....1	No.....2	
1.08	**What is the age of your youngest child?**	|_____|		
1.09	**Are you currently pregnant?**	1= Yes	2= No	

Section 2. Progress Out of Poverty Index

Read aloud the following statement before proceeding: **"I would like to begin this survey by asking you a few questions about you and your household."**

2.01	**How many people aged 0 to 17 are in your household?**			
	Zero 26	One 17	Two 11	Three 7
	Four or more 0			

2.02	**What is the general education level of the male head/spouse?**			
	No male head/spouse 0	Not literate, no formal school, or primary or below 0	Middle 3	
	Secondary or higher 5	Diploma/certificate course, graduate, or post-graduate and above..... 7		
2.03	**What is the household type (what is the primary livelihood activity of the household)?**			
	Labourers (agricultural, casual, other) 0	Self-employed (agriculture or non-agriculture), regular wage/salary-earning, or other 5		
2.04	**What is your houshold's primary source of energy for cooking?**			
	Firewood and chips, dung cake, kerosene, charcoal, coke or coal, gobar gas, or others 0	LPG or electricity..... 3	No cooking arrangement.....9	
2.05	**Does the household possess any casseroles, thermos, or thermoware?**	No 0	Yes 5	
2.06	**Does the household possess a television and a VCR/VCD/DVD player?**			
	No, neither one 0	Yes, only one..... 4	Yes, both 9	
2.07	**Does the household possess a mobile handset and a telephone instrument (landline)?**			
	No, neither one 0	Yes, only a mobile..... 4	Yes, a landline, regardless of mobile 15	
2.08	**Does the household own a sewing machine?**	No 0	Yes.....1	
2.09	**Does the household possess an almirah/dressing table?**	No 0	Yes.....5	
2.10	**Does the household possess a bicycle, motorcycle/scooter, or motor car/jeep?**			
	No, none..... 0	Yes, bicycle only, no motorcycle/scooter, or car 1	Motorcycle/scooter, but no car (regardless of bicycle) 13	Motor car/jeep (regardless of others) 18

Section 3. Food Security and Nutrition

Read aloud the following statement before proceeding: **"Now I would like to ask you a few questions about the foods you eat in your household."**

3.01	**I will read 4 choices for your response. Please tell me which of the following best describes the food consumed by you (woman head of household) in the last year:**		
	ENOUGH AND THE KINDS OF NUTRITIOUS FOOD WE WANT TO EAT 1	ENOUGH BUT NOT ALWAYS NUTRITIOUS FOOD 2	
	SOMETIMES NOT ENOUGH FOOD TO EAT, WAS SOMETIMES HUNGRY..... 3	OFTEN NOT ENOUGH TO EAT, WAS OFTEN HUNGRY 4	
3.02	**I WILL READ 4 CHOICES FOR YOUR RESPONSE. PLEASE TELL ME, WHICH OF THE FOLLOWING BEST DESCRIBES THE FOOD CONSUMED BY THE CHILDREN IN YOUR HOUSEHOLD IN THE LAST YEAR:**		
	ENOUGH AND THE KINDS OF NUTRITIOUS FOOD WE WANT TO EAT 1	ENOUGH BUT NOT ALWAYS NUTRITIOUS FOOD 2	
	SOMETIMES NOT ENOUGH FOOD TO EAT, WAS SOMETIMES HUNGRY..... 3	OFTEN NOT ENOUGH TO EAT, WAS OFTEN HUNGRY 4	
3.03	**Now I would like to ask you about the types of food that YOU ate yesterday during the day and night. I will then also ask you whether your children, those living at home and who are older than 2 years of age, also consumed the same food.** ***(Read the list of foods. Place a 1 in the box if she ate the food in question, place a 0 in the box if she did not eat the food. For the children, circle the appropriate answer. Choose* not applicable *if she does not have any children living at home or if none of her children are two years or older.)***		
		Client's Answers	**Answers for Children**
A.	**Any bajra, bread, rice noodles, biscuits, or any other food made from millet, sorghum, maize, rice, wheat, or any other grains?**	|_____|	All of my children ate it ..... 1 Some of my children ate it ..... 2 None of my children ate it ..... 3 Not applicable 4
B.	**Any potatoes, yams, manioc, cassava or any other foods made from roots or tubers?**	|_____|	All of my children ate it ..... 1 Some of my children ate it ..... 2 None of my children ate it ..... 3 Not applicable 4
C.	**Any foods made from beans, peas, lentils, or nuts?**	|_____|	All of my children ate it ..... 1 Some of my children ate it ..... 2 None of my children ate it ..... 3 Not applicable 4
D.	**Any foods made from nuts or seeds such as [add any local nut/seed names]?**	|_____|	All of my children ate it ..... 1 Some of my children ate it ..... 2 None of my children ate it ..... 3 Not applicable 4
E.	**Any cheese, yogurt, milk, curd, paneer or other milk products?**	|_____|	All of my children ate it 1

			Some of my children ate it ..... 2 None of my children ate it ..... 3 Not applicable 4
F.	**Any eggs?**	|_____|	All of my children ate it ..... 1 Some of my children ate it ..... 2 None of my children ate it ..... 3 Not applicable 4
G.	**Any liver, kidney, heart, or other organ meats from domesticated animals, such as cattle, swine, goat, chicken, or duck?**	|_____|	All of my children ate it ..... 1 Some of my children ate it ..... 2 None of my children ate it ..... 3 Not applicable 4
H.	**Any liver, kidney, heart, or other organ meats from wild animals, such as [names of local commonly-consumed wildlife]?**	|_____|	All of my children ate it ..... 1 Some of my children ate it ..... 2 None of my children ate it ..... 3 Not applicable 4
I.	**Any meat, such as beef, pork, lamb, goat, chicken, or duck?**	|_____|	All of my children ate it ..... 1 Some of my children ate it ..... 2 None of my children ate it ..... 3 Not applicable 4
J.	**Any flesh from wild animals, such as [names of local commonly-consumed wildlife]?**	|_____|	All of my children ate it ..... 1 Some of my children ate it ..... 2 None of my children ate it ..... 3 Not applicable 4
K.	**Fresh or dried fish, shellfish, or seafood?**	|_____|	All of my children ate it ..... 1 Some of my children ate it ..... 2 None of my children ate it ..... 3 Not applicable 4
L.	**Grubs, snails or insects such as [add any local insect names]?**	|_____|	All of my children ate it ..... 1 Some of my children ate it ..... 2 None of my children ate it ..... 3 Not applicable 4
M.	**Any dark green leafy vegetables such as [local dark green leafy vegetables]?**	|_____|	All of my children ate it ..... 1 Some of my children ate it ..... 2 None of my children ate it ..... 3 Not applicable 4
N.	**Pumpkin, carrots, squash, or sweet potatoes that are yellow or orange inside or [other local yellow/orange foods]?**	|_____|	All of my children ate it ..... 1 Some of my children ate it .....

			None of my children ate it ..... 3 Not applicable 4
O.	**Ripe mangoes, ripe papayas or [other local vitamin A-rich fruits]?**	|_____|	All of my children ate it ..... 1 Some of my children ate it ..... 2 None of my children ate it ..... 3 Not applicable 4
P.	**Foods made with red palm oil, red palm nut, or red palm nut pulp sauce?**	|_____|	All of my children ate it ..... 1 Some of my children ate it ..... 2 None of my children ate it ..... 3 Not applicable 4
Q.	**Any other vegetables?**	|_____|	All of my children ate it ..... 1 Some of my children ate it ..... 2 None of my children ate it ..... 3 Not applicable 4
R.	**Any other fruits?**	|_____|	All of my children ate it ..... 1 Some of my children ate it ..... 2 None of my children ate it ..... 3 Not applicable 4

3.04	**Now I'm going to ask a question about coping strategies. When you do not have enough money to buy food, what do you do? I am going to read out some common coping strategies that one might use. Please say "yes" if you've ever used this strategy. Please so "no" if you've never used this strategy.**		
A.	**Rely on less preferred and less expensive foods?**	1=Yes	2=No
B.	**Borrow food, or rely on help from friend or relatives?**	1=Yes	2=No
C.	**Gather wild food, hunt, or harvest immature crops?**	1=Yes	2=No
D.	**Consume seed stock held for next season?**	1=Yes	2=No
E.	**Send household members to eat elsewhere?**	1=Yes	2=No
F.	**Send household members to beg?**	1=Yes	2=No
G.	**Limit portion size at mealtimes?**	1=Yes	2=No
H.	**Restrict consumption by adults in order for small children to eat?**	1=Yes	2=No
I.	**Feed working members of the household at the expense of non-working members?**	1=Yes	2=No
J.	**Reduce number of meals eaten in a day?**	1=Yes	2=No
K.	**Skip entire days without eating**	1=Yes	2=No
L.	**Take children out of school**	1=Yes	2=No

M.	**Other**	1=Yes If yes, please explain _____ _____	2=No
3.05	**During the last 12 months, have you or anyone in your family received any benefits from the anganwadi or ICDS centre?** **IF NO, PROBE: Any benefits such as supplementary food, growth monitoring, immunizations, health checkups or education? *If yes to any of these, code as Yes.***	1= Yes	2= No → **Skip to 3.07**
3.06	**If yes, did you receive any of the following:**	1= Yes	2= No
A.	**Supplementary food**	1= Yes	2= No
B.	**Growth monitoring**	1= Yes	2= No
C.	**Immunizations**	1= Yes	2= No
D.	**Health check-u**	1= Yes	2= No
E.	**Education**	1= Yes	2= No
F.	**Breastfeeding support**	1= Yes	2= No
G.	**Other?**	1= Yes (specify)	2= No
3.07	**In the past year, how often did you receive food from the anganwadi/ICDS centre?**	Not at all 1	Almost daily 2
	At least once a week .....3 Don't know..... 5	At least once a month.....4	Less often..... 4
3.07	**In the past 12 months, have you received any messages on nutrition from any of the following sources:**		
A.	**Radio**	1= Yes	2= No
B.	**Television**	1= Yes	2= No
C.	**Magazine or newspaper**	1= Yes	2= No

D.	**Midwife/traditional birth attendant**	1= Yes	2= No
E.	**Anganwadi or ICDS centre**	1= Yes	2= No
F.	**Private doctor**	1= Yes	2= No

Section 4. Sanitation & Safe Water

4.01	**What is the main source of drinking water for members of your household? (☞*MULTIPLE RESPONSES POSSIBLE*)**			
	Piped water (piped into dwelling, yard/plot, public tap/standpipe) 1	Tube well or borehole..... 2	Dug well (protected) 3	Dug well (unprotected) 4
	Well spring (protected) 5	Well spring (unprotected) 6	Tanker truck 7	Rainwater 8
	Cart with small tank 9	Bottled water..... 10	Surface water (river, dam, lake, pond, stream, canal, irrigation channel) 11	Other (specify)_____
4.02	**Do you do anything to treat your water to make it safer to drink?**		Yes.....1	No.....2 → Skip to 4.04
4.03	**If yes, what do you do to treat your water to make it safe to drink? (☞*MULTIPLE RESPONSES POSSIBLE*)**	Let it stand and settle/ sedimentation..... 1	Strain it through a cloth 2	Boil 3
	Add bleach/chlorine.....4	Water filter (ceramic, sand, composite) 5	Solar disinfection 6	Use Alum 7
	Use electric purifier.....8	Other.....9 (specify)	Don't know..... 8	
4.04	**What type of toilet facility do members of your household mainly use? (☞*MULTIPLE RESPONSES POSSIBLE*)**			
	Flush or pour flush toilet that flushes to piped sewer system.....1	Flush or pour flush toilet that flushes to septic tank..... 2	Flush or pour flush toilet that flushes to pit latrine.....3	Flush or pour flush toilet that flushes to somewhere else 4
	Flush or pour flush toilet that flushes, but don't know where 5	Ventilated improved pit (VIP)/Biogas latrine..... 6	Pit latrine with slab/open pit 7	Pit latrine without slab/open pit 8
	Dry latrine 9	No facility..... 10		
	In the past day, has anyone in your household defecated in the open or disposed of feces in the open?		Yes..... 1	No..... 2 / Don't know.....3

Section 5: Curative Care

5.01	**In the past year, did you delay seeking medical treatment for yourself because of worry about the cost?**	Yes 1	No.....2	Don't know 3	
5.02	**In the past year, did you delay seeking medical treatment for any of your children because of worry about the cost?**	Yes 1	No.....2	Don't know 3	
5.03	**Have any of your children had diarrhea in the past 2 weeks?**	Yes 1	No.....2 → **Skip to 5.09**		
5.04	**Now I would like to know how much (NAME) was given to drink (including breastmilk) during the diarrhoea. Was (he/she) given less than usual to drink, about the same amount, or more than usual to drink?** **IF LESS, PROBE: Was (he/she) given much less than usual to drink or somewhat less?**	MUCH 1	SOMEWHAT LESS 2	ABOUT THE SAME 3	
		MORE 4	NOTHING TO DRINK ...5		
5.05	**When (NAME) had diarrhoea, was (he/she) given less than usual to eat, about the same amount, more than usual, or nothing to eat?** **IF LESS, PROBE: Was (he/she) given much less than usual to eat or somewhat less?**	MUCH LESS 1	SOMEWHAT LESS 2	ABOUT THE SAME 3	
	MORE 4	STOPPED FOOD 5	NEVER GAVE FOOD 6	DON'T KNOW 7	
5.06	**Have you ever heard of a special product called (LOCAL NAME FOR ORS PACKET) you can get for the treatment of diarrhoea?** **IF SHE HAS NEVER HEARD OF ORS, SHOW GOVERNMENT AND COMMERCIAL ORS PACKETS AND ASK: Have you ever seen a packet like one of these before? *(Show local brand)***	Yes 1	No.....2		
5.07	**Was the child with diarrhea given ORS to treat their diarrhea?**	Yes 1	No.....2		
5.08	**If not, why not?**	Cost 1	Not available 2	DON'T LIKE 3	
		Other (SPECIFY) _____ 4			
5.09	**When a child has diarrhea, should he or she be given more to drink, the same, or less than normal to drink?**	More to drink ..1	Same.....2	Less than normal 3	Don't know..... .4
5.10	**In the past year, have you ever purchased ORS to treat your children's diarrhea?**	Yes 1	No 2		

5.11	Now I would like to ask you some questions about medical care for you yourself. Many different factors can prevent women from getting medical advice or treatment for themselves. When you are sick and want to get medical advice or treatment, is each of the following a big problem, a small problem, or no problem?			
		Big Problem	**Small Problem**	**No Problem**
A.	**Concern that there may be no drugs available?**	1	2	3
B.	**Concern that there may not be any health care provider?**	1	2	3
C.	**Concern that there may not be a female health care provider?**	1	2	3
D.	**Finding someone to go with you?**	1	2	3
E.	**Having to take transport?**	1	2	3
F.	**The distance to the health facility?**	1	2	3
G.	**Getting money needed for treatment?**	1	2	3
H.	**Getting permission to go?**	1	2	3

Section 6. Household Decisionmaking

6.01	**Would you say that deciding what foods to purchase for your household is mainly your decision, mainly your husband's decision, or did you both decide together, or someone else makes this decision? (☞ *READ OUT OPTIONS*)**			
	Her decision alone 1	Husband's decision.....	Both decide together 3	Someone else makes the decision 4
6.02	**Would you say that deciding how much food to serve to each family member is mainly your decision, mainly your husband's decision, or did you both decide together, or someone else makes this decision? (☞ *READ OUT OPTIONS*)**			
	Her decision alone 1	Husband's decision.....	Both decide together 3	Someone else makes the decision 4

6.03	**Who decides how the money you earn will be used: mainly you, mainly your husband, or you and your husband jointly? (☞ *READ OUT OPTIONS*)**	Mainly her decision 1	Mainly husband's decision 2	Joint decision 3
6.04	**Who usually makes decisions about health care for yourself: mainly you, mainly your husband, you and your husband jointly, or someone else? (☞ *READ OUT OPTIONS*)**	Mainly her decision 1	Mainly husband's decision 2	Joint decision 3

6.05	**Who usually makes decisions about visits to your family or relatives: mainly you, mainly your husband, you and your husband jointly, or someone else? (☞ *READ OUT OPTIONS*)**	Mainly her decision 1	Mainly husband's decision 2	Joint decision 3

6.06	**Are you usually allowed to go to the following places alone, only with someone else, or not at all? (☞ *READ OUT OPTIONS*)**	**Alone**	**With Someone**	**Not at all**
A.	**Market**	1	2	3
B.	**Health facility**	1	2	3
C.	**To other places inside the village (such as a relative's house, friend's house)**	1	2	3
D.	**To places outside this village**	1	2	3

6.07	**In the last 6 months, have you saved or set any money aside to cover future health expenses?**	Yes..... 1	No..... 2
6.08	**In the last 6 months, have you saved or set aside any money to cover future food expenses?**	Yes..... 1	No..... 2
6.09	**In the last 6 months, have you saved grain to cover any future food or health expenses?**	Yes..... 1	No..... 2
6.10	**In the last 6 months, have you saved livestock to cover any furtuer food or health expenses?**	Yes..... 1	No..... 2
6.11	**In the last 6 months, have you spoken with your spouse about household food and nutrition needs?**	Yes..... 1	No..... 2
6.12	**In general, do you have unrestricted access to any income (meaning it is your income and you can generally choose how to spend it)?**	Yes..... 1	No..... 2

6.13	**In general, how often to you spend money without first discussing it with someone else, such as your husband?**	Most of the time 1	Some of the time 2	Never..... 3

Section 7: Breastfeeding and Infant/Child Feeding

7.01	**How long after a child is born should the mother wait to breastfeed it? (☞ *READ OUT OPTIONS*)**	Immediately 1		Within 1 hour of birth 2	
	Within 24 hours.....3	Within first 2 days 4		Other _____ (specify) 5	
7.02	**How long should a child be exclusively breastfed, meaning that he or she is not given any other liquids or water? (☞ *READ OUT OPTIONS*)**	Less than one week 1		Less than one month 2	
	For one to three months.....3	For six months 4		For more than 6 months 5	
7.03	**At what age should a mother begin to give a child soft and semi-solid foods? (☞ *READ OUT OPTIONS*)**	In first week of life 1		In first six months of life 2	
	Between 6 and 8 months.....3	Between 8 months and 1 years 4		Don't know 5	
7.04	**How many different food groups should a child, ages 6 to 8 months, receive per day?**	|_____| put number		Don't know 99	
7.05	**Do you have a child 12 months of age or younger in your household?**	Yes 1		No.....2 → **Skip to 7.12**	
7.06	**For the child 12 months of age or younger, was this child ever breastfed?**	Yes 1		No.....2 → **Skip to 7.08**	
7.07	**How long after birth was the child first breastfed?**	Within one hour ... 1	Within 12 hours 2	Within one day or longer.....3	Don't know 4
7.08	**In the first three days after delivery, was (NAME) given anything to drink other than breast milk?**		Yes 1	No.....2 → **Skip to 7.10**	
7.09	**What was (NAME) given to drink? Anything else?**	MILK (OTHER THAN BREASTMILK) .....A	PLAIN WATER ..... B	SUGAR OR GLUCOSE WATER C	GRIPE WATER .....D
	SUGAR-SALT-WATER SOLUTION..... E	FRUIT JUICE .....F	INFANT FORMULA .....G	TEA..... H	HONEY I
	JANAM GHUTTI..... J	Other ..... .K			
7.10	**For how many months was this child breastfed exclusively and given no other foods or liquids except breastmilk?**	Less than 6 months 1	6 months 2	More than 6 months 3	Don't know 4

7.11	**Within the first six months of life, were any of the following given to the child?**		
A.	**Infant formula?**	Yes..... 1	No..... 2
B.	**Water?**	Yes..... 1	No..... 2
C.	**Juice?**	Yes..... 1	No..... 2
D.	**Milk such as tinned, powdered or fresh animal milk?**	Yes..... 1	No..... 2
E.	**Clear broth?**	Yes..... 1	No..... 2
F.	**Yogurt?**	Yes..... 1	No..... 2
G.	**Packaged baby food?**	Yes..... 1	No..... 2
H.	**Any commercially fortified baby food? eg. Celerax or Farex?**	Yes..... 1	No..... 2
I.	**Any bread, roti, chapati, rice, noodles, biscuits, idli, or any other foods made from grains?**	Yes..... 1	No..... 2
J.	**Any pumpkin, carrots, squash or sweet potatoes that are yellow or orange inside?**	Yes..... 1	No..... 2
K.	**Any white potatoes, white yams, manioc, cassava, or any other foods made from roots?**	Yes..... 1	No..... 2
L.	**Any dark green, leafy vegetables?**	Yes..... 1	No..... 2
M.	**Any ripe mangoes, papayas, cantaloupe or jackfruit?**	Yes..... 1	No..... 2
7.12	**Which of the following best describes your household:**	1) I feel very confident that I can afford nutritious foods for all of my family members. 2) I feel somewhat confident that I can afford nutritious foods for all of my family members. 3) I am not very confident that I can afford nutritious foods for all of my family members. 4) I will never be able to afford nutritious foods for all of my family members 5) I don't know	
7.13	**In the past year, I felt hopeful for the future.**	1) Yes 2) Somewhat 3) No	
7.14	**On the whole, how satisfied are you with the life you lead?**	1) Not satisfied at all 2) Not Very Satisfied 3) Fairly Satisfied 4) Very Satisfied	
7.15	**In your opinion, is a husband ever justified in hitting or beating his wife?**	1) Yes 2) No	
7.16	**In the last 12 months, were you ever afraid of your husband/partner): Most of the time, some of the time, never?**	1) Most of the time 2) Some of the time 3) Never	

Say to the respondent: **"Thank you for your time and cooperation in helping gather information. If there is anything you would like to ask me, please do so now. If you have no further questions, then I would like to say thank you again and good-bye."**

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