

Nutrition and Food Security Survey in Badulla District in 2009

**Dr. Renuka Jayatissa
Dr. Moazzem Hossaine**

**Department of Nutrition
Medical Research Institute in collaboration with
UNICEF
2009**

Key findings of the survey

Nutrition status of children:
<ul style="list-style-type: none">• Among all children in the age group 0–59 months, 23.7 percent were stunted, 9.3 percent wasted and 23.0 percent were underweight• 21.2 percent of children in the age group 6–59 months were anaemic• The prevalence of LBW was 27.5 percent
Nutrition status of women:
<ul style="list-style-type: none">• Non-pregnant women aged between 15 to 49 years, 23.7 percent were underweight, 19.8 percent were overweight and 4.3 percent were obese.• Prevalence of anaemia among pregnant women was 21.7%. Among lactating women, the prevalence was 17.6% and 16.6% among non-pregnant women
Childhood illness:
<ul style="list-style-type: none">• Among the total group, 17.4% reported to have had symptoms related to respiratory illness and 3.4% had diarrhoea during the specified period In the total sample,
Dietary intake:
<ul style="list-style-type: none">• The percentage of children yet to achieve the target of dietary diversity was 59.7 which decreased with increasing income categories and wealth quintiles.
Caring:
<ul style="list-style-type: none">• 35.5% of children under 24 months had been bottle fed• Of the children aged 36-59 months,77.8% had attended an early childhood educational programme
Health services and sanitation:
<ul style="list-style-type: none">• All children aged 36 months and over, only 77.1% had been given 3 mega doses of Vitamin A• 37.0% of the children who had diarrhoea or respiratory symptoms were obtained services from the government sector,60.3 percent from the private sector and 2.7% from other sectors• Of all pregnant mothers, 85.7% received iron tablets of whom 84.6% took them daily while 50.0% received Thriposaha and all women had received “poshana malla”• Only 54.4% of households used both improved water source and sanitary means of excreta disposal.
Food security
<ul style="list-style-type: none">• The percentage of households yet to achieve the target of dietary diversity was 74.2% which decline with increasing income and wealth quintiles.• 16.7% of the households in the highest wealth quintile also received Samurdhi beneficiary• 13.0% of households had taken loans within the preceding month to purchase food• 18.4% of households were ‘food insecure’

District profile - Badulla

Badulla district is one of the two districts in the Uva province of Sri Lanka and Badulla town is the capital of the Uva province. Situated at 680 metres above sea level and surrounded by tea plantations, Badulla town is situated about 230 km. Away from the capital city of Colombo, towards the eastern slopes of the central hills.

Map of Sri Lanka showing Badulla district is given in Figure 1.

The district includes areas with a wide variation in geographical, climatological and agricultural practices. Administratively, the district is divided into 15 Divisional Secretary (DS) divisions and 567 Grama Nildhari (GN) divisions. The local government institutions in the province include one Municipal Council (MC), 2 Urban Councils and 14 Pradeshiya Sabahas¹.

The district includes a land area of approximately 2,861 sq.km. with a population of 850,000 (estimated for 2007) with a population density of 293 persons per square kilometre. Of them, 55,303 (6.6 percent) reside in urban sector with 608,641 (72.7 percent) in the rural sector and 173,056 (20.7 percent) in the estate sector.

Of the employed population within the district, 68.0 percent are engaged in agriculture, with the percentages employed in the service and industrial sectors being 21.6 and 10.4 respectively.

Health services provided by the state sector western type of health services include 32 health care institutions including one General Hospital and 2 District General Hospitals, 13 District hospitals, 01 Peripheral unit, 16 Rural Hospitals. In addition there are 17 Central Dispensaries that provide curative care services. Preventive and promotive health services are provided through 15 Health Unit areas with Medical Officers of Health and field staff².

The literacy rate among males is 88.9 percent with that for females being 81.7 percent (Census 2001). The percentage of households below the poverty line is 24. The median income level of Rs 14,804, lower when compared to that at national level (Rs.16,735)³.

A cross sectional descriptive study was carried out to identify the most vulnerable populations in relation to their nutritional status

1. Methods

1.1. Selection of households

A sample of 627 households from the district of Badulla were included in the study. The sampling frame used for selection of clusters was the most recently available population estimate – the 2001 census from the Sri Lanka Department of Census and Statistics. Clusters were defined at the level

¹ Department of Census and Statistics, District Statistical Handbook, 2007.

² Ministry of Health Care and Nutrition, Annual Health Bulletin, 2007.

³ Department of Census and Statistics, Income and Expenditure Survey 2006/07.

of a Grama Niladhari (GN) division. GN divisions were identified using the probability proportional to size technique. Within each cluster, 30 households were identified using a systematic sampling procedure..

Map indicating the selected GN divisions is given in Figure 2.

A household was defined as persons routinely sharing food from the same cooking pot and living in the same compound or physical location. Members of a household need not necessarily be relatives by blood or marriage. All selected households were included in the survey, irrespective of whether there was a child under five.

1.2. Composition of the survey teams

Each survey team included three interviewers and one team leader. Co-ordinator was recruited to take the overall responsibility for the conduct of the survey. All team leaders and team coordinators were trained by staff from Medical Research Institute (MRI) with experience from past surveys

The three interviewers from the survey team conducted all interviews, averaging seven interviews each, per day. The team leader was responsible for selection of households.

1.3. Household survey included several components.

Administration of the questionnaire : A pre tested questionnaire was administered to the head of the household. Where possible, mothers were interviewed to obtain information on child care practices and maternal nutrition. The minimum age of respondents was 15 years.

Anthropometric assessments: All children aged 0 to 59 months, along with their mothers and any pregnant women in the household, were selected for measurement. All measurements were conducted by team leaders, and standardized procedures for measuring the height/length, weight were used (WHO,1995). Anthropometric measurements were made using UNISCALES and UNICEF measuring boards.

For pregnant women, Mid Upper Arm Circumference (MUAC) was measured in addition to height and weight.

Measurement of haemoglobin levels was carried out for all individuals selected for measurements except children less than six months of age using hemocue method, using capillary blood.

1.4. Supervision and quality assurance

Constant supervision and monitoring of all field activities was attempted. Team leaders would monitor interviewers, while team coordinators monitored team leaders as well as the interviewers. Routine field-editing of all questionnaires was conducted by the team leaders.

1.5. Data processing and analysis

EPI Info 6.0 software package was used for data management and entry. Data cleaning was carried out in MS Access by sorting records to filter out extreme values and SQL queries to check logical errors. Consistency checks were run to detect and correct data entry errors.

Data analysis was conducted in Anthro and SPSS. Anthro was used to calculate nutrition z-scores for women and children based on the anthropometric measurements, using WHO standards as the reference value..

2. Results

A total of 627 households was included from Badulla district. As shown in Table 3.2, of the total 2869 individuals who were usually resident in the selected households, 769(26.8 percent) were women aged between 15.0 and 49.9 year, 15.1 percent (n=485) were children aged between 5.0 and 14.9 years and 485(15.1percent) were in the age group 5 – 14.9 years.

2.1. Nutritional Status

2.1.1.Nutritional status of children

The three indices of physical growth that describe the nutritional status of children according to WHO growth standards (WHO, 2006) are : Height-for-age, Weight-for-height and Weight-for-age. Each of the four nutritional status indicators expressed in terms of standard deviations from the median (Z-scores) of the reference population was used to assess the prevalence of stunting (height for age < -2SD), wasting (weight for height <-2SD) , underweight (weight for age <-2SD) and overweight (weight for height more than +2SD). .

A total of 265 children under five years were included in the survey. As shown in Table 1, among all children in the age group 0–59 months, 23.7 percent were stunted, 9.3 percent wasted and 23.0 percent were underweight (Table1) . Severe stunting was seen among 5.1 percent of the total group, with the comparable figures for severe wasting and severe underweight being 1.6 percent and 6.1 percent respectively. There were 1.6.percent of children with weight for height values more than +2 SD.

Numbers of children within sub groups are relatively low, thus posing limitations in making comparisons.

The prevalence of stunting (height for age <-2 SD) was high during the first six months of life and in the third year of life. Prevalence of underweight show a similar pattern.

The percentage of children with wasting and underweight were higher among males compared to females.

In general, a declining trend was seen in the prevalence of stunting, wasting and underweight with increasing monthly household income and wealth quintiles, even though the pattern was not consistent. The prevalence of wasting and underweight decreased with increasing maternal educational levels.

Prevalence of severe stunting, was highest in the third year of life (12.5 percent), marginally higher among males (5.4 percent) .

Table1: Prevalence of malnutrition: stunting, wasting, overweight and underweight by background characteristics

Background characteristic	Height-for- age (%)		Weight-for-height (%)			Weight-for-age (%)		Total No of Children
	<-2SD	<-3SD	<-2SD	<-3SD	≥+2SD	<-2SD	<-3SD	
Age of child (months)								
<6	22.2	3.7	10.7	3.6	7.1	17.2	6.9	29
6-11	11.1	0.0	0.0	0.0	7.1	0.0	0.0	29
12-23	20.7	3.4	7.0	1.8	0.0	20.7	3.4	60
24-35	37.5	12.5	12.8	4.3	0.0	37.5	12.5	49
36-47	23.9	6.5	12.8	0.0	0.0	25.5	6.4	47
48-59	21.6	2.0	9.8	0.0	0.0	25.5	5.9	51
Sex of child								
Male	24.8	5.4	10.9	1.6	1.6	22.7	5.3	134
Female	22.7	4.7	7.8	1.6	1.6	23.3	7.0	131
Sector								
Urban	15.0	0.0	10.0	5.0	0.0	20.0	5.0	20
Rural	22.7	3.5	10.0	1.5	2.0	22.9	5.0	205
Estate	33.3	15.4	5.3	0.0	0.0	25.0	12.5	40
Mother's education								
No schooling	66.7	33.3	0.0	0.0	0.0	33.3	0.0	3
Primary	25.0	12.5	12.5	0.0	0.0	25.0	12.5	16
Secondary	22.2	4.8	12.7	3.2	3.2	26.6	7.8	65
Passed O' Level	24.4	4.4	5.6	0.0	1.1	18.7	5.5	92
Higher	22.6	3.8	13.0	3.7	1.9	27.8	5.6	55
Monthly household income								
< 9,000	23.9	6.5	9.5	1.5	2.2	23.7	5.8	141
9,000 – 13,999	25.0	10.0	12.5	2.5	0.0	34.1	9.8	41
14,000 – 19,999	22.2	0.0	7.4	0.0	3.7	14.8	3.7	27
20,000 – 31,999	21.6	0.0	10.3	2.6	0.0	17.9	7.7	40
≥ 32,000	28.6	0.0	0.0	0.0	0.0	14.3	0.0	15
Wealth index quintile								
Poorest	22.6	4.8	6.6	0.0	3.3	24.2	3.2	62
Second	30.8	9.2	9.2	0.0	0.0	24.2	6.1	67
Middle	17.5	5.3	3.6	0.0	1.8	19.6	3.6	58
Fourth	25.0	2.3	17.4	4.3	2.2	26.1	10.9	47
Richest	20.7	0.0	13.3	6.7	0.0	19.4	9.7	31
Overall	23.7	5.1	9.3	1.6	1.6	23.0	6.1	265

2.2. Anaemia in children

The haemoglobin levels of 231 children in the age group 6–59 months were assessed using the ‘haemocue’ method (cut off point - Hb <11.4 gms % due to altitude adjustment) . As shown in Table 2 the prevalence of anaemia in this group was 21.2 percent, with the highest percentage during the latter half of infancy (63.0 percent), and declining with increasing age, with the 48–59 months age group showing the lowest prevalence (9.8 percent). Male children showed a marginally higher prevalence(22.1 percent) than females(20.3 percent).

Table 2: Prevalence of anaemia among children 6-59 months of age by background characteristics

Background characteristic	% of children with Anaemia (Hb<11.0g/dl)*	Number of Children who were investigated for Hb
Age of child (months)		
6-11	63.0	27
12-23	27.6	58
24-35	12.5	48
36-47	10.6	47
48-59	9.8	51
Sex of child		
Male	22.1	113
Female	20.3	118
Sector		
Urban	22.2	18
Rural	23.7	177
Estate	8.3	36
Mother's education		
No schooling	0.0	3
Primary	13.3	15
Secondary	30.5	59
Passed O' Level	18.8	80
Higher	21.7	46
Monthly household income		
< 9,000	21.0	124
9,000 – 13,999	25.0	36
14,000 – 19,999	11.5	26
20,000 – 31,999	28.1	32
≥ 32,000	16.7	12

Wealth index quintile		
Poorest	14.8	54
Second	30.0	60
Middle	21.6	51
Fourth	27.5	40
Richest	3.8	26
Overall	21.2	231

2.3. Birth weight

The birth weights were obtained from the Child Health Development Records (CHDRs). This study included children born within the 5 years preceding the survey. Considering the newborns with a birth weight of less than 2500 grams as being low birth weight (LBW), the overall prevalence in the district was 22.6 percent (Table 3). Birth weight distribution by the current age of the child enables comparison of prevalence of LBW among different birth cohorts. There is no definite pattern observed except that the cohort aged between 48 – 59 months at the time of the study had the highest prevalence of LBW of 27.5 percent.

The prevalence was higher among female newborns than males. The prevalence in the estate sector (54.1 percent) was much higher than in other sectors. There was no consistent pattern in the prevalence with increasing levels of mother's education and with increasing income levels and wealth quintiles.

Mean birth weight for the total group was 2.81 ± 0.58 kg with no clear pattern observed between age groups, districts, maternal educational levels or in relation to income levels and levels of wealth quintiles.

Table 3: Prevalence of low birth weight, and mean birth weight among children born in the 5 years preceding the survey, by background characteristics

Background characteristic	Birth Weight				Number of children
	< 2500g (%)	≥ 2500g (%)	Mean (kg)	SD	
Age of child (months)					
0-5	24.1	75.9	2.75	.36	29
6-11	13.8	86.2	2.95	.51	29
12-23	22.8	77.2	2.89	.81	60
24-35	20.4	79.6	2.82	.51	49
36-47	23.9	76.1	2.74	.57	47
48-59	27.5	72.5	2.74	.45	51
Sex of child					
Male	15.0	85.0	2.86	.47	134
Female	30.5	69.5	2.76	.67	131
Residence					
Urban	5.0	95.0	3.09	.42	20
Rural	18.6	81.4	2.86	.56	205

Background characteristic	Birth Weight				Number of children
	< 2500g (%)	≥ 2500g (%)	Mean (kg)	SD	
Estate	54.1	45.9	2.38	.53	40
Mother's education					
No schooling	-	100.0	3.06	.50	3
Primary	43.8	56.3	2.46	.61	16
Secondary	19.0	81.0	2.87	.49	65
Passed O' Level	20.7	79.3	2.87	.70	92
Higher	24.1	75.9	2.82	.45	55
Monthly household income (n=2592)					
< 9,000	26.1	73.9	2.75	.66	141
9,000 – 13,999	9.8	90.2	2.97	.43	41
14,000 – 19,999	25.9	74.1	2.76	.60	27
20,000 – 31,999	20.5	79.5	2.88	.36	40
≥ 32,000	26.7	73.3	2.83	.48	15
Wealth index quintile					
Poorest	27.9	72.1	2.67	.46	62
Second	24.6	75.4	2.68	.51	67
Middle	17.5	82.5	2.97	.81	58
Fourth	21.3	78.7	2.89	.43	47
Richest	19.4	80.6	2.96	.48	31
Overall	22.6	77.4	2.81	.58	265

2.2. Nutritional status of women of 15-49 years

2.2.1. Non pregnant women (using Body Mass Index)

A total of 265 non-pregnant women aged between 15 to 49 years, and with a child under 5 years age were included in the assessment of body mass index . As shown in Table 4., of this group , 23.7 percent had BMI less than 18.5, 19.8 percent with values between 25 and 29 (overweight) and 4.3 percent, with BMI values 30 or above (obese).

The prevalence of underweight (BMI less than 18.5) was high in the 15 -19 age group (42.9 percent) with a substantial decline in the age groups 30-39 years (20.7 percent) and 40-49 years (15.4 percent). Of all non-pregnant women studied, 24.1 percent were either overweight or obese. This percentage increased with increasing age, most marked after 30 years of age.

There was no consistent pattern in the prevalence of low BMI with level of maternal education, income levels or wealth quintiles.

Table 4: Distribution of non-pregnant women 15-49 years by BMI levels, by background characteristics

Background Characteristics	BMI category (%)				Total women
	Underweight (BMI<18.5)	Normal (BMI=18.5-24.9)	Overweight (BMI=25.0-29.0)	Obese (BMI>30.0)	
Age group (years)					
15-19	42.9	57.1	0.0	0.0	7
20-29	27.7	51.8	16.1	4.5	115
30-39	20.7	51.7	27.6	0.0	92
40-49	15.4	50.0	15.4	19.2	28
Sector					
Urban	10.7	53.6	17.9	17.9	30
Rural	22.5	52.7	22.0	2.7	189
Estate	54.5	40.9	4.5	0.0	23
Women's education level					
no schooling	40.0	40.0	20.0	0.0	5
primary	28.6	50.0	21.4	0.0	14
Secondary	29.3	41.4	22.4	6.9	60
Passed GCE (O/L)	24.5	57.4	17.0	1.1	96
Higher	17.2	51.7	22.4	8.6	64
Monthly household income					
< 9,000	24.8	55.4	18.2	1.7	123
9,000 – 13,999	25.8	51.6	19.4	3.2	33
14,000 – 19,999	10.0	50.0	35.0	5.0	20
20,000 – 31,999	22.9	45.7	20.0	11.4	39
≥ 32,000	0.0	63.6	27.3	9.1	11
Wealth index quintiles					
Poorest	25.5	54.9	13.7	5.9	123
Second	32.7	54.5	12.7	0.0	33
Middle	28.8	40.4	28.8	1.9	20
Fourth	9.1	59.1	22.7	9.1	39
Richest	20.0	50.0	23.3	6.7	11
Overall	24.1	51.7	19.8	4.3	242

Pregnant women (using Mid Upper Arm Circumference (MUAC)

Nutritional status of 23 pregnant women were assessed using MUAC. Of this group, 21.7 percent of the women were found to be undernourished.

Anaemia in women

Three groups of women were included in this component of the study : i). pregnant women(23) ii.) lactating women(108) iii.) all non pregnant women including lactating women(229) .

As shown in Table 5, the overall prevalence of anaemia among the pregnant women was 21.7 percent among lactating women, the overall prevalence was 17.6 percent, lower than among the pregnant women. The lowest prevalence was among the non pregnant women, 16.6 percent.

Comparisons between subgroups was not possible due to limited numbers.

Table 5 Prevalence of Anaemia*, among i) pregnant women, ii). lactating women and iii). All non-pregnant women by background characteristics

background characteristic	Pregnant		Lactating		All Non-pregnant	
	Percent	Total No of Women	Percent	Total No of Women	Percent	Total No of Women
Age group (years)						
< 20	0.0	2	100.0	1	28.6	7
20-29	33.3	12	13.3	60	14.7	109
30-39	12.5	8	19.5	41	15.1	86
40-49	0.0	1	40.0	5	26.9	26
Residence						
Urban	20.0	20	33.3	3	10.7	28
Rural	33.3	3	15.5	97	14.5	179
Estate	-	-	37.5	8	40.9	22
Women's education level						
no schooling	0.0	1	50.0	4	40.0	5
primary	0.0	1	20.0	5	21.4	14
Secondary	75.0	4	14.7	34	19.3	57
Passed GCE (O/L)	15.4	13	19.0	42	16.5	91
Higher	0.0	4	15.0	20	10.3	58
Monthly household income						
< 9,000	23.1	13	17.7	62	21.4	117
9,000 – 13,999	50.0	2	28.6	14	23.3	30
14,000 – 19,999	33.3	3	0.0	8	0.0	19
20,000 – 31,999	0.0	3	22.2	18	13.2	38
≥ 32,000	0.0	1	0.0	5	9.1	11

background characteristic	Pregnant		Lactating		All Non-pregnant	
	Percent	Total No of Women	Percent	Total No of Women	Percent	Total No of Women
Wealth quintile of household						
Poorest	50.0	2	26.1	23	26.5	49
Second	16.7	6	18.5	27	16.7	54
Middle	20.0	5	3.8	26	11.5	52
Fourth	16.7	6	25.0	20	16.7	42
Richest	25.0	4	16.7	12	9.4	32
Overall	21.7	23	17.6	108	16.6	229

All tables included in this section are given in Annex

2.3. Childhood Illnesses

2.3.1. Respiratory illness

Respondents were asked whether their children less than five years of age had one or more symptoms related to respiratory illness (cough, rapid or difficult breathing) during the period of 2 weeks preceding the survey. A child who was having cough with rapid or difficult breathing, was identified as having had symptoms of respiratory illness. Among the total group, 17.4 percent reported to have had symptoms related to respiratory illness during the specified period (Table A 1).

2.3.2. Diarrhoea

The respondents were asked whether their children under five years had experienced an episode of diarrhea during the two weeks preceding the survey. (Diarrhoea was defined as three or more loose or watery stools per day or blood in stool). If the child had diarrhea, information on giving oral dehydration fluid using the packet 'Jeewani' during the episode of diarrhoea, was inquired into. Of the total group, 3.4 percent of children who reported to have had diarrhea during the specified period. Of them, 33.36 percent were given "Jeewani".

2.4. Dietary intake and feeding practices

2.4.1. Breastfeeding practices

Percentage of children less than 24 months years of age who were ever breastfed, currently breastfed and started breastfeeding within one hour / one day of birth are given in Table A 2 . All children were ' ever breastfed'. Of them, 93.2 percent were breast fed within the first hour of birth and 97.3 percent were currently breast fed , given breast milk in the previous 24 hours .

2.4.2. Complementary feeding and bottle-feeding practices

As shown in Table A 2, all children 6-8 months were given breast milk and solid / semi solid foods. In the total sample, 30.3 percent of infants under 24 months had been bottle fed.

2.4.3. Food Consumption among children in the age group 6 – 59 months

Food consumption pattern was based on the information about the food items given to children aged 6 – 59 months on the day preceding the interview. Ten different food items were included in this analysis. Table A 3 shows the percentage of children in this age group who were given the food items within the preceding 24 hours, by background characteristics.

For the total sample, 98.3 percent of the children were given grains/roots/tubers, while 70 to 80 percent were given vitamin A rich fruits and vegetables, other fruits and vegetables, and meat fish/ poultry/ organ meats. Proportions of children who received eggs (18.6 percent) and dairy products (39.4 percent) were low. Foods cooked with oil or fat were given to 55.5 percent of children and 26.7 percent had been given

fortified food (commercially available cereals) with a much higher percentage (76.7 percent) having been given sugary food (chocolates, sweets, candies, cakes, biscuits etc.).

2.4.4. Dietary diversity

Dietary diversity is based on the premise that more diverse diets are more likely to provide adequate levels of a range of nutrients.

Individual dietary diversity score for children aged 6-59 months

In this study, individual dietary diversity score for children aged 6 – 59 months was assessed. (according to FANTA⁴). As shown in Table A 4, for all children in this age group, the IDDS was 5.0 (SD =1.5) .

The dietary diversity score of children aged 6-59 in the households belonging to the highest wealth quintile was used as a “target to be achieved” based on the assumption that poorer households will diversify their food consumption practices as incomes rise, and thereby attempting to follow the consumption pattern of wealthier households. Table A 4 shows the IDDS among children in the highest wealth quintile was 4.9. Based on this value, the percentage of children yet to achieve the target was assessed. This percentage was 59.7 for the total sample. The percentage decreased with increasing income categories and wealth quintiles. .

Information on Minimum meal frequency, minimum dietary diversity and minimum acceptable diet for children aged 6-23 months are given in Table A 5.

2.5. Care Practices

Care practices were studied in relation to activities on early childhood development including promoting early learning at household level, practices related to play activities, early childhood education, school enrolment. The age group to be included in the different components in the study of care practices varied, depending on the relevance.

2.5.1. Promoting early learning at household level

As shown in Table A 6, the average number of education related activities' undertaken by the children was 5.4. For 92.2 percent of children, an adult was engaged in more than three activities that promoted early learning, during the 3 days preceding the survey. Considering the children under 5 years of age, 12.2 percent were looked after by a child under the age of 10 years, during the week preceding the interview.

2.5.2. Childhood education

As shown in Table A 7, of the children aged 36-59 months, 75.3 percent had attended an early childhood educational programme and 98.9 percent of the children who have completed 5 years by 31st January 2009 were enrolled in grade 1 and 100 percent of all children 5-10 years of age were attending Primary School (Table A 8).

⁴ Anne Swindale & Paula Bilinsky Household Dietary Diversity Score (HDDS) for Measurement of Household Food Access: Indicator Guide VERSION 2 September 2006

Information related to play items and child labour are given in Tables A 9 and A 10 respectively.

2.6. Use of health services

2.6.1. Attendance at Child Welfare Clinic

As shown in Table A 11, 96.7 percent of the children under 5 years had received care at a Child Welfare Clinic (CWC) and 94.8 percent of the children had their Child Health Development Records (CHDRs) with them at the time of interview. Of the mothers who attended the child welfare clinics, 96.7, 94.8 and 91.8 percent received advice on growth, nutrition and early childhood development respectively. Of this group, 7.7 percent of children aged 6-59 months had received at least one packet of thriposha in the previous month.

2.6.2. Vitamin A supplementation for children

Of the group, 80.2 percent of children who had completed 9 months of age had received a mega dose of vitamin with the percentage of children who received a vitamin A mega dose at 18 months, 36 months being 93.6, 89.7 and 81.2 percent respectively. Considering all children aged 36 months and over 80.2 percent had been given 3 mega doses of Vitamin A (Table A 12).

2.6.3. Source of medical care for common childhood illnesses

Source of medical care for those children who reported diarrhoea / respiratory symptoms within the 2 weeks preceding the interview was considered under services provided by the government sector, private sector and other sectors. As shown in Table A 13, 49.1 percent of the total group used services from the government sector, 46.4 percent from the private sector and 4.5 percent from other sectors.

2.6.4. Use of services at antenatal clinics

A total of 91.3 percent of the pregnant mothers had attended antenatal clinics regularly as shown in Table A 14. Of the mothers who attended the ANC, 95.5 percent received iron tablets of whom 95.5 percent used them daily.

2.6.5. Food and nutrient supplementation for women

The two main nutrition supplementation programmes aimed at pregnant women are the provision of a food basket ("poshana malla") through the Samurdhi programme implemented by the Ministry of Samurdhi and Poverty Alleviation and the Thriposha programme implemented by the Ministry of Health care and Nutrition. Of all pregnant mothers, 55.6 percent received Thriposaha and 27.8 percent had received "poshana malla" (Table A 14).

Of the lactating mothers with a child under 6 months of age, 87.0 percent had received "thriposha" (Table A 15) and vitamin A mega dose has been given to 74.1 percent, after childbirth.

2.6.6. Samurdhi beneficiaries

In the households included in the study, there were a total of 109 non pregnant, non lactating women in the age group 15 – 49 years. Of this group, 21.3 percent received *Samurdhi* benefits, being members of households that were beneficiaries under the *Samurdhi* programme. (Table A 16). in rural and 6.2 percent in the estate sectors. As would be expected, the percentage of *Samurdhi* recipients was high

Percentage beneficiaries among the pregnant women and lactating women were 28.0 percent and 34.59 percent respectively.

2.7. Water and Sanitation

2.7.1. Use of improved water sources

As shown in Table A 17, 59.8 percent of the households had improved sources of water. The households with piped water inside the dwelling increased with increasing wealth quintiles, from 3.1 percent in the lowest quintile to 63.5 percent in the highest quintile. A similar increase was seen as the income increases. About 84.3 percent of the households used any one of the appropriate water treatment methods to treat their drinking water with boiling being the most frequently used method, practiced by 84.8 percent of the households included in the study (Table A 18). The percentage of households that used boiling as a method of making water safe, increased from the lowest wealth quintile to the highest. In some households, more than one method was used

2.7.2. Use of sanitary means of excreta disposal

Use of flush toilets connected to sewage systems, or septic tanks was considered as sanitary means of excreta disposal. As shown in Table A 19, the percentage of households using sanitary means of excreta disposal was 95.7 percent. There is an increasing pattern of use is seen with the increase in household wealth index, ranging from 84.4 percent in the poorest to 98.8 percent in the richest.

2.7.3. Use of improved water sources and sanitary means of excreta disposal

Table A 20 shows the distribution of households that use both improved sources of drinking water and sanitary means of excreta disposal. For the district sample, 57.9 percent of households reported used both improved water source and sanitary means of excreta disposal. The percentage of households that had both facilities increased with increasing levels of income and levels of wealth quintiles.

Information on the time consumed to collect water and the person collecting water are given in Tables A 21 and A 22 respectively.

2.8. Food Security and Coping Strategies

2.8.1. Household food consumption

The food items consumed by households were grouped into 11 categories based on the FAO classification of food groups with some modifications to include coconut and sugar separately. These food groups were used in assessing the food consumption pattern as shown in Tables A 23 and A 24 .

Table A 23 provides information on food items consumed within 24 hours preceding the survey. Consumption of rice and rice products, coconuts and sugar was nearly 100 percent and consistent across all sub groups studied. Bread and wheat products were consumed by 53.7 percent of all households. Only 55.6 percent of households consumed nuts/pulses. Of all households, 72.6 percent consumed meat/poultry/ fish or dry fish, and this percentage showed a marked increase with increasing income and wealth categories. Consumption of eggs was low , 21.7 percent. A total of 72.1percent of households consumed fruits. An increasing trend of consumption of fruits was seen with increasing levels of income and higher wealth quintiles.

The percentages of households that consumed milk and milk products was 89.9. Consumption of oils and fats were 96.1 percent and was high across most strata.

Information on the consumption of different foods for at least 5 days during the week preceding the survey is shown in Table A 24. This information indicated the consistency of consumption of the foods and shows important differences from the Table A. 23, which focused on the consumption pattern during the 24 hours preceding the survey.

Similar to the 24-hour consumption pattern, rice, coconut and sugar were consumed by more than 95 percent of the households. However, the consumption of food groups such as bread and wheat products, nuts and pulses, fruits, meat/poultry/fish and dry fish, eggs, and milk/dairy products were markedly lower during the 7-day period.

Table A 25 provides information on the household members who consume three or more main meals a day.

2.8.2. Household dietary diversity

Household dietary diversity score (HDDS) is a proxy measure of households consuming a variety of food indicating a nutritionally 'satisfactory' diet and the method used to make this assessment is given in Table A 26 . This table indicates that the mean HDDS for the total group was 9.0 (SD 1.6). The values ranged from 6.9. in the lowest wealth quintile to 9.0 n the highest.

The HDDS obtained by the households in the highest wealth quintile category (8.4) was taken as the 'target ' to be achieved and the percentage of households yet to achieve the target was calculated. For the total sample, the percentage of households yet to achieve the target was 74.2 .The percentage showed a consistent decline with increasing income and wealth quintiles.

2.8.3. Expenditure on food and other goods and services

Study of broad categories under which household expenditure for a one-month period showed that considering all households included in the study, 27.1 percent of the total household monthly income was spent on food, and 67.2 percent on other goods and services (Table A 27).

Proportion of households by type of food groups by source is given in Table A 28. Food availability at household, food stocks and food aid are given in tables A 29, 30 and 31 respectively.

2.8.4. Coping Strategies

During the periods when there were limitations in food availability, different coping strategies were adopted by households (Table A 32). Use of such strategies during the month preceding the survey was studied paying attention to the frequency of practice. Of the total number of households, 51.5 percent had adopted one or more coping strategies. Of them, more of the households adopted food related coping strategies compared to non-food coping strategies.

The common strategies adopted were: to rely on less preferred food (46.5 percent) and purchased food on credit (46.1percent). Between 20-25 percent, had borrowed food or reduced meal size. The main non-food strategies adopted were : borrowing money from relatives/neighbours (26.8 percent), pawning jewellery (23.4 percent) and using savings (23.6 percent).

The distribution of the households that adopted a specific food-related coping strategy by background characteristics is shown in Table A 33. The number of households in the sub categories are small, leading to inability of drawing conclusions

Taking loans is a commonly adopted strategy to cope with difficult situations, whether it be food related or not. As shown in Table A 34, 34.4 percent of households had taken loans within the preceding month which were used for: purchase food (33.5 percent), income generation activities (26.0 percent)and repair damaged house (16.0 percent).

2.8.5. Food insecurity

A state of food insecurity exists when nutritionally adequate and safe foods are not readily available or there is inability to acquire acceptable foods. In this study, food insecurity levels were determined according to the method described by the World Food Programme (WFP), given in annex 2..

Household food consumption adequacy score (HFCAS)

As shown in Table A 35, the mean HFCAS for all households was 62.6(SD=17.1). The scores differed between sectors, highest in the urban sector,71.7 and lowest in the rural sector, 61.2 with the value for the estate sector being 63.9. Study of HFCAS categories indicates that 0. 2 percent of the households had poor food consumption, 6.1percent were borderline and 93.8 percent , had adequate food consumption. .

Food insecurity categories

Food insecurity levels obtained by cross-tabulating food access categories (as indicated by percentage expenditure on food) and food consumption categories for households with a child aged less than 5 years (n= 243) are presented in Table 36. Of these households, 2.2 percent were found to be 'severely food insecure' with comparable percentages for 'moderately insecure' and 'secure' were 16.2 and 81.7 percent respectively.

In interpreting food insecurity, the two categories, moderately and severely food insecure categories were considered together. There were no food insecure households in the urban sector. The percentage of secure households increased with increasing number of members in the household from 63.6 percent in households with 1-2 persons to 89.5 percent in those with 7 or more (Table A 37).

Considering the key socio-economic indicators included in this study, the marked influences such indicators have on food insecurity is clearly shown. There was a consistent upward trend in the percentage of food secure households, with increasing level of education of the head of the household and increasing income

levels and wealth quintiles. However, these observations have to be interpreted with caution as numbers in some of the such categories are small.

Childhood Illnesses

Table A 1 : Percentage of under-5 children who reported symptoms of respiratory illness and diarrhoea by background characteristics

background characteristic	Total number of children	% reported symptoms of		Total No. of children reported Diarrhoea	% Given Jeewanee *
		Respiratory illness	Diarrhoea		
Age of child (months)					
<6	29	10.3	3.4	1	100.0
6-11	29	20.7	3.4	1	100.0
12-23	60	23.3	1.7	1	100.0
24-35	49	16.3	2.0	1	100.0
36-47	47	17.0	8.5	4	0.0
48-59	51	13.7	2.0	1	0.0
Sex of child					
Male	134	14.9	1.5	2	100.0
Female	131	19.8	5.3	7	60.0
Sector					
Urban	20	20.0	5.0	1	0.0
Rural	205	18.5	3.4	7	60.0
Estate	40	10.0	2.5	1	100.0
Mother's education					
No schooling	3	66.7	33.3	1	0.0
Primary	16	18.8	0.0	0	0.0
Secondary	65	24.6	4.6	3	100.0
Passed O' Level	92	14.1	4.3	4	66.7
Higher	55	9.1	1.8	1	0.0
Monthly household income					
< 9,000	141	22.0	3.5	5	50.0
9,000 – 13,999	41	9.8	0.0	0	0.0
14,000 – 19,999	27	3.7	0.0	0	0.0
20,000 – 31,999	40	22.5	10.0	4	100.0
≥ 32,000	15	6.7	0.0	0	0.0
Wealth quintile					

background characteristic	Total number of children	% reported symptoms of		Total No. of children reported Diarrhoea	% Given Jeewanee *
		Respiratory illness	Diarrhoea		
Poorest	62	22.6	1.6	1	0.0
Second	67	19.4	3.0	2	50.0
Middle	58	15.5	3.4	2	50.0
Fourth	47	12.8	4.3	2	100.0
Richest	31	12.9	6.5	2	100.0
Overall	265	17.4	3.4	9	66.7

Dietary Intake and Feeding Practices

Table A 2: Infant and young child feeding practices by background characteristics.

background characteristic	Percent						No. of children under 2 year
	Ever breastfed	Currently breastfed	Initiated breastfeeding within one hour of birth*	initiated breastfeeding within one day of birth	Introduced complementary food among infants 6-8 months	bottle-fed	
Age of child in months							
<6	100.0	100.0	96.6	100.0	0.0	17.4	29
6-11	100.0	94.7	94.7	94.7	0.0	34.5	29
12-23	100.0	96.0	88.0	96.0	0.0	33.3	60
Sex of child							
Male	100.0	97.6	92.7	100.0	100.0	24.6	66
Female	100.0	96.9	93.8	93.8	100.0	37.5	52
Residence							
Urban	100.0	75.0	75.0	100.0	100.0	40.0	6
Rural	100.0	98.4	93.8	96.9	0.0	26.7	96
Estate	100.0	100.0	100.0	100.0	100.0	50.0	16
Maternal education							
no schooling	100.0	100.0	100.0	100.0	0.0	0.0	1
Primary	100.0	100.0	100.0	100.0	100.0	83.3	7
Secondary	100.0	100.0	100.0	100.0	100.0	23.8	28
Passed GCE (O/L)	100.0	96.8	93.5	96.8	100.0	18.2	44
Higher	100.0	93.8	87.5	100.0	100.0	47.8	24
Monthly household income							
< 9,000	100.0	97.4	100.0	100.0	100.0	18.0	57
9,000 – 13,999	100.0	100.0	90.9	90.9	100.0	26.3	20
14,000 – 19,999	100.0	100.0	100.0	100.0	100.0	38.5	13
20,000 – 31,999	100.0	91.7	75.0	91.7	0.0	52.9	18
≥ 32,000	100.0	100.0	83.3	100.0	0.0	50.0	10
Wealth quintile of household							
Poorest	100.0	93.3	100.0	100.0	100.0	21.1	23
Second	100.0	100.0	94.1	94.1	100.0	41.4	31
Middle	100.0	100.0	85.7	92.9	100.0	12.5	25
Fourth	100.0	100.0	100.0	100.0	100.0	21.7	25
Richest	100.0	88.9	77.8	100.0	0.0	64.3	14
Overall	100.0	97.3	93.2	97.3	100.0	30.3	118

Table A 3 : Percentage of children aged 6-59 months, who were given different food items on the day preceding the interview, by background characteristics

background characteristic	Grains/Roots/Tubers	Legume/Nuts	Vit A rich fruits and vegetables	Other fruits and vegetables	Dairy product/Milk / yogurt/cheese*	Eggs	Meat/fish/Poultry/organ meats	Food cooked with oil or Fat	Fortified Food	Sugary Food
Age of child in months										
6-11	96.6	65.5	79.3	72.4	24.1	24.1	51.7	44.8	34.5	75.9
12-23	98.3	66.7	88.3	71.7	31.7	15.0	70.0	51.7	38.3	76.7
24-35	98.0	46.9	87.8	65.3	42.9	26.5	59.2	61.2	18.4	79.6
36-47	100.0	72.3	85.1	78.7	55.3	17.0	66.0	70.2	25.5	85.1
48-59	98.0	64.7	86.3	74.5	39.2	13.7	66.7	47.1	17.6	66.7
Sex of child										
Male	98.3	65.5	85.3	73.3	45.7	16.4	64.7	61.2	28.4	77.6
Female	98.3	60.8	86.7	71.7	33.3	20.8	63.3	50.0	25.0	75.8
Residence										
Urban	100.0	55.6	83.3	83.3	66.7	16.7	100.0	38.9	22.2	83.3
Rural	97.8	67.0	91.2	72.0	36.8	16.5	65.4	59.9	31.3	73.6
Estate	100.0	47.2	61.1	69.4	38.9	30.6	38.9	41.7	5.6	88.9
Maternal education										
no schooling	100.0		66.7				66.7	66.7		66.7
primary	100.0	66.7	60.0	86.7	46.7	26.7	40.0	46.7	20.0	73.3
Secondary	100.0	50.8	89.8	66.1	33.9	20.3	57.6	50.8	32.2	76.3
Passed GCE (O/L)	95.2	65.1	84.3	75.9	31.3	13.3	62.7	54.2	26.5	74.7
Higher	100.0	87.2	97.9	74.5	57.0	19.1	87.2	63.8	29.8	72.3
Monthly household income										
< 9,000	98.4	56.3	88.0	69.0	34.1	15.1	57.9	50.0	27.0	72.2
9,000 – 13,999	97.3	62.2	81.1	67.6	37.8	8.1%	62.2	64.9	32.4	83.8
14,000 – 19,999	100.0	65.4	80.8	88.5	26.9	34.6	73.1	50.0	26.9	69.2
20,000 – 31,999	97.0	87.9	84.8	66.7	60.6	36.4	72.7	63.6	15.2	87.9
≥ 32,000	100.0	61.5	92.3	100.0	69.2	7.7	84.6	76.9	38.5	84.6
Wealth quintile of household										
Poorest	98.1	53.7	87.0	57.4	25.9	14.8	55.6	46.3	18.5	70.4
Second	98.4	61.3	74.2	82.3	38.7	17.7	59.7	51.6	19.4	79.0
Middle	98.1	57.7	94.2	73.1	34.6	9.6	59.6	53.8	28.8	82.7
Fourth	100.0	75.6	90.2	78.0	43.9	31.7	75.6	61.0	46.3	70.7
Richest	96.3	77.8	88.9	70.4	70.4	25.9	81.5	77.8	25.9	81.5

background characteristic	Grain s/Roots/Tubers	Legume/Nuts	Vit A rich fruits and vegetables	Other fruits and vegetables	Dairy product/Milk / yogurt/cheese*	Eggs	Meat/fish/Poultry/organ meats	Food cooked with oil or Fat	Fortified Food	Sugary Food
Overall	98.3	63.1	86.0	72.5	39.4	18.6	64.0	55.5	26.7	76.7

(*Breast milk was not included)

Table A 4 : Individual dietary diversity score in children (IDDS) according to background characteristics for children 6 – 59 months

Background characteristic	IDDS (range 0-8)		% of individuals yet to achieve the target	Total number of children
	Mean	SD		
Age of child in months				
6-11	4.6	1.8	65.5	19
12-23	4.9	1.3	61.7	37
24-35	4.9	1.6	61.2	30
36-47	5.4	1.2	48.9	23
48-59	4.9	1.6	62.7	32
Sex of child				
Male	5.1	1.5	50.9	59
Female	4.9	1.4	68.3	82
Residence				
Urban	5.4	1.3	44.4	8
Rural	5.1	1.5	54.9	100
Estate	4.3	1.1	91.7	33
Maternal education				
no schooling	3.0	1.0	100.0	3
Primary	4.7	.8	86.7	13
Secondary	4.7	1.4	71.2	42
Passed GCE (O/L)	4.8	1.6	62.7	52
Higher	5.9	1.1	29.8	14
Monthly household income				
< 9,000	4.7	1.5	69.8	88
9,000 – 13,999	4.8	1.5	56.8	21
14,000 – 19,999	5.2	1.1	53.8	14
20,000 – 31,999	5.7	1.5	36.4	12
≥ 32,000	5.9	1.1	38.5	5
Wealth quintile of household				
Poorest	4.6	1.8	77.8	42
Second	4.9	1.3	69.4	43

Background characteristic	IDDS (range 0-8)		% of individuals yet to achieve the target	Total number of children
	Mean	SD		
Middle	4.9	1.6	63.5	33
Fourth	5.4	1.2	39.0	16
Richest	4.9	1.6	25.9	7
Overall	5.0	1.5	59.7	141

Table A5: Minimum meal frequency, dietary diversity, and minimum acceptable diet in children 6-23 months, by background characteristics

Background characteristic	Minimum meal frequency		Minimum Dietary diversity score, Mean (range 0-7)	% with minimal dietary diversity (≥ 4 groups)	Percentage of minimum acceptable diet	Total no. of children
	Breastfed	Non-Breastfed				
Age group in months						
6-8	55.6	0.0	3.3	58.3	8.3	12
9-11	55.6	12.5	4.8	82.4	29.4	17
12-14	75.0	25.0	4.9	85.0	35.0	20
15-17	66.7	0.0	4.3	75.0	25.0	8
18-20	16.7	0.0	4.2	73.3	6.7	15
21-23	57.1	30.0	4.1	70.6	29.4	17
Sex of child						
Male	59.1	15.4	4.4	72.9	25.0	48
Female	50.0	14.3	4.2	78.0	22.0	41
Residence						
Urban	0.0	0.0	5.0	100.0	0.0	4
Rural	55.0	18.2	4.4	75.3	27.4	73
Estate	100.0	9.1	3.9	66.7	8.3	12
Maternal education						
no schooling	0.0	0.0	2.0	0.0	0.0	0
Primary	0.0	33.3	4.5	100.0	33.3	1
Secondary	62.5	14.3	4.3	77.3	22.7	6
Passed GCE (O/L)	42.9	14.3	4.2	71.4	20.0	22
Higher	57.1	11.1	5.3	93.8	25.0	35
Monthly household income						
< 9,000	34.8	10.5	4.2	76.2	16.7	42
9,000 – 13,999	71.4	11.1	3.9	56.3	18.8	16
14,000 – 19,999	75.0	12.5	4.6	75.0	16.7	12
20,000 – 31,999	75.0	28.6	4.9	90.9	36.4	11
$\geq 32,000$	100.0	25.0	4.8	87.5	62.5	8
Wealth quintile of household						
Poorest	16.7	11.1	3.9	66.7	13.3	15
Second	58.3	7.1	4.3	76.9	19.2	26
Middle	50.0	27.3	4.3	73.7	21.1	19
Fourth	75.0	14.3	4.6	78.9	42.1	19
Richest	50.0	16.7	4.8	80.0	20.0	10
Overall	54.8	14.9	4.3	75.3	23.6	89

Table A 6 : Participation of adult members in activities of children aged 2 to 5 years, and percentage of under 5 children cared for by a child <10 years, by background characteristics

Background characteristic	Household adult member involved		father's involvement		Total children 2- up to 5 years	% of children left under the care of <10 year old child in the past week	Total Children under 5 years
	Mean No. of activities	% of children with four or more activities	Mean No. of activities	% of children with at least one activity			
Age in months							
24-35	5.3	89.7	0.9	53.5	43	11.6	43
36-47	5.3	88.6	1.3	53.8	26	7.7	26
48-59	5.7	97.8	1.0	48.6	37	21.6	37
Sex of child							
Male	5.2	88.1	0.9	51.0	49	8.4	83
Female	5.6	95.7	1.2	52.6	57	16.0	81
Residence							
Urban	5.9	100.0	2.3	50.0	8	18.2	11
Rural	5.4	90.5	0.8	52.0	98	11.8	153
Estate	5.5	94.7	1.7	0.0	0	0.0	0
Maternal education							
no schooling	6.0	100.0	0.5	0.0	0	0.0	0
primary	4.9	85.7	1.3	0.0	3	25.0	4
Secondary	5.6	93.5	1.2	53.6	28	8.0	50
Passed GCE (O/L)	5.2	88.4	0.9	46.5	43	8.3	60
Higher	5.6	96.4	1.0	56.3	16	16.7	30
Monthly household income							
< 9,000	5.4	94.2	1.1	57.6	33	15.9	44
9,000 – 13,999	5.4	88.9	1.2	69.2	13	9.1	22
14,000 – 19,999	5.5	92.9	0.8	44.4	18	10.3	29
20,000 – 31,999	5.4	90.9	1.4	34.4	32	11.1	54
≥ 32,000	5.3	75.0	0.0	77.8	9	14.3	14
Wealth quintile of household							
Poorest	5.4	96.7	1.0	36.4	11	16.7	18
Second	5.0	80.6	1.0	63.2	19	12.5	24
Middle	5.8	100.0	1.1	36.8	19	14.7	34
Fourth	5.6	95.2	1.2	50.0	24	13.2	38
Richest	5.4	86.7	1.1	60.6	33	8.0	50

Background characteristic	Household adult member involved		father's involvement		Total children 2- up to 5 years	% of children left under the care of <10 year old child in the past week	Total Children under 5 years
	Mean No. of activities	% of children with four or more activities	Mean No. of activities	% of children with at least one activity			
Overall	5.4	92.2	1.1	51.9	106	12.2	164

Table A 7 : Percentage of children aged 36-59 months who were attending an early childhood education programme, by background characteristics

Background characteristic	Percent attending Preschool or Daycare	Mean	SD	Total number of children
Age group in months				
36-47	61.4	4.7	0.8	44
48-59	88.9	4.7	0.5	45
Sex of child				
Male	70.7	4.7	0.4	41
Female	79.2	4.7	0.8	48
Residence				
Urban	72.7	4.9	0.4	11
Rural	78.1	4.6	0.7	64
Estate	64.3	5.0	0.0	14
Maternal education				
no schooling	0.0	0.0	0.0	1
primary	50.0	5.0	0.0	4
Secondary	86.4	4.9	0.3	22
Passed GCE (O/L)	70.0	4.6	0.6	30
Higher	77.3	4.6	1.0	22
Monthly household income				
< 9,000	72.7	4.8	0.4	44
9,000 – 13,999	78.6	4.9	0.3	14
14,000 – 19,999	83.3	4.7	0.5	12
20,000 – 31,999	66.7	4.2	1.4	15
≥ 32,000	100.0	4.7	0.6	3
Wealth quintile of household				
Poorest	68.4	4.8	0.4	19
Second	63.6	4.7	0.5	22
Middle	86.4	4.8	0.5	22

Background characteristic	Percent attending Preschool or Daycare	Mean	SD	Total number of children
Fourth	70.6	4.4	1.2	17
Richest	100.0	4.7	0.5	9
Overall	75.3	4.7	0.7	89

Table A 8: Percentage of children 5-10 years of age attending Primary School, by background characteristics

background characteristic	Percentage of children of primary school age currently attending Primary School	No. of children of primary school age (5-10 years)	% entered Grade 1	No. of Children Completed 5 yrs By 31 st of Jan 2009
Sex of child				
Male	98.7	18	98.7	18
Female	100.0	13	100.0	13
Residence				
Urban	100.0	5	100.0	5
Rural	99.2	24	99.2	24
Estate	100.0	2	100.0	2
Monthly household income				
< 9,000	99.3	12	99.3	12
9,000 – 13,999	100.0	4	100.0	4
14,000 – 19,999	100.0	2	100.0	2
20,000 – 31,999	100.0		100.0	
≥ 32,000	100.0		100.0	
Wealth quintile of household				
Poorest	97.3	11	97.3	11
Second	100.0	9	100.0	9
Middle	100.0	7	100.0	7
Fourth	100.0	1	100.0	1
Richest	100.0	3	100.0	3
Overall	99.3	31	99.3	31

Table A 9 : Use of different types of play items by children under 5 years of age, according to background characteristics

Background characteristic	percentage of children who play with:					Total number of children <5 year
	household objects	outdoor material	homemade toys	ready-made toys	3 or more types of play items	
Age group in months						
24-35	97.4	100.0	74.4	79.5	94.9	39
36-47	90.9	97.7	84.1	97.7	90.9	44
48-59	97.8	100.0	91.1	93.3	100.0	45
Sex of child						
Male	89.8	100.0	83.1	93.2	93.2	59
Female	100.0	98.6	84.1	88.4	97.1	69
Residence						
Urban	100.0	92.9	92.9	100.0	92.9	14
Rural	94.7	100.0	81.1	94.7	95.8	95
Estate	94.7	100.0	89.5	63.2	94.7	19
Maternal education						
no schooling	100.0	100.0	100.0	100.0	100.0	2
Primary	85.7	100.0	42.9	71.4	71.4	7
Secondary	100.0	100.0	96.8	90.3	100.0	31
Passed GCE (O/L)	93.0	97.7	79.1	93.0	95.3	43
Higher	96.4	100.0	89.3	96.4	100.0	28
Monthly household income						
< 9,000	92.8	100.0	79.7	84.1	94.2	69
9,000 – 13,999	100.0	100.0	83.3	100.0	100.0	18
14,000 – 19,999	100.0	100.0	92.9	100.0	100.0	14
20,000 – 31,999	95.5	95.5	90.9	100.0	95.5	22
≥ 32,000	100.0	100.0	75.0	75.0	75.0	4
Wealth quintile of household						
Poorest	93.3	100.0	83.3	83.3	96.7	30
Second	90.3	100.0	77.4	87.1	90.3	31
Middle	100.0	100.0	80.6	93.5	100.0	31
Fourth	100.0	95.2	90.5	100.0	95.2	21
Richest	93.3	100.0	93.3	93.3	93.3	15
Overall	95.3	99.2	83.6	90.6	95.3	128

Table A 10: Percentage of children aged 5-14 years who are involved in child labour activities, and mean hours per week, by background characteristics

Background characteristic	working outside household in the previous week			working outside household in the last year		Total number of children aged 5-14 year
	paid work	unpaid work	mean hours per week	paid work	unpaid work	

Background characteristic	working outside household in the previous week			working outside household in the last year		Total number of children aged 5-14 year
	paid work	unpaid work	mean hours per week	paid work	unpaid work	
Age group in years						
9-11	1.2	26.5	3.0	30.1	69.9	83
12-14	0.0	18.5	0.0	22.2	77.8	54
Sex of child						
Male	0.0	20.0	0.0	25.0	75.0	80
Female	1.3	24.1	3.0	27.1	72.9	79
Residence						
Urban	0.0	20.0	0.0	20.0	80.0	25
Rural	0.9	18.6	0.0	22.6	77.4	113
Estate	0.0	42.9	3.0	56.3	43.8	21
Monthly household income						
< 9,000	1.2	16.7	3.0	19.2	80.8	84
9,000 – 13,999	0.0	37.5	0.0	42.9	57.1	16
14,000 – 19,999	0.0	30.8	0.0	50.0	50.0	13
20,000 – 31,999	0.0	40.0	0.0	40.0	60.0	10
≥ 32,000	0.0	0.0	0.0	0.0	100.0	6
Wealth quintile of household						
Poorest	2.3	31.8	0.0	36.8	63.2	44
Second	0.0	7.3	3.0	10.0	90.0	41
Middle	0.0	25.0	0.0	27.6	72.4	32
Fourth	0.0	13.6	0.0	16.7	83.3	22
Richest	0.0	35.0	0.0	36.8	63.2	20
Overall	0.6	22.0	3.0	26.1	73.9	159

Table A 11: Percentage of children less than 5 years of age who received care at child welfare clinic, by background characteristics

background characteristic		Availability of CHDR	Children Attended CWC	% of children whose mothers received advice on			% Received Thripasha*	Total No. of Children
				Growth	Nutritional status	ECCD		
		%	%					
Age group in months	<6	89.7	88.0	72.7	77.3	77.3	0.0	
	6-11	96.6	100.0	85.7	78.6	80.8	20.7	29
	12-23	93.3	100.0	89.8	89.8	84.8	26.7	60
	24-35	98.0	97.8	93.6	83.0	84.8	14.3	49
	36-47	95.7	97.7	88.9	86.4	85.7	21.3	47
	48-59	98.0	98.0	85.7	85.7	85.1	17.6	51
Sex of child	Male	97.0	98.4	84.6	80.8	80.3	19.8	116
	Female	93.9	96.7	90.8	89.1	87.9	20.8	120
Residence	Urban	100.0	100.0	100.0	100.0	100.0	0.0	18
	Rural	97.1	97.4	86.5	82.7	80.6	25.3	182
	Estate	85.0	97.5	87.2	87.2	91.4	5.6	36
Maternal education**	no schooling	100.0	100.0	66.7	66.7	33.3	0.0	3
	primary	100.0	100.0	81.3	81.3	78.6	0.0	15
	Secondary	93.8	98.4	71.4	65.1	63.5	27.1	59
	Passed GCE (O/L)	96.7	96.6	95.4	94.3	95.9	18.1	83
	Higher	98.2	98.0	92.0	90.0	89.6	23.4	47
Monthly household income*** (up to 9000	94.3	97.1	97.1	81.3	80.0	17.5	126
	9000-13999	97.6	95.0	95.0	86.8	93.8	18.9	37
	14000-19999	96.3	100.0	100.0	92.6	88.5	11.5	26
	20000-31999	97.5	100.0	100.0	83.3	80.0	33.3	33
	32000 +	93.3	100.0	100.0	100.0	100.0	38.5	13
Wealth quintile of household	Poorest	98.4	95.0	94.8	94.8	89.3	13.0	54
	Second	94.0	96.9	87.7	87.7	89.3	16.1	62
	Middle	93.1	98.2	76.4	76.4	73.1	28.8	52
	Fourth	95.7	100.0	91.1	91.1	85.7	19.5	41
	Richest	96.8	100.0	88.9	88.9	78.3	29.6	27
Overall		95.5	97.6	87.6	84.7	83.8	20.3	236

Table A 12: Percentage distribution of children who received Vitamin A mega dose supplement at 9, 18 and 36 months, by background characteristics.

background characteristic		Children 9-59 months		Children 18-59 months		Children 36-59months			Of the children 36-59, percentage never received Vit A.
		Number of children	% received Vit A at 9 months	Number of children	% received Vit A at 18 months	Number of children	% received Vit A at 36 month	% received 3 doses of Vit A	
Sex of child	Male	107	90.7	79	88.6	44	88.6	84.1	8.9
	Female	111	96.4	93	95.7	51	84.3	84.3	3.8
Residence	Urban	18	100.0	16	100.0	11	90.9	90.9	0.0
	Rural	169	94.1	128	93.0	70	88.6	85.7	5.6
	Estate	31	87.1	28	85.7	14	71.4	71.4	13.3
Maternal education	no schooling	3	100.0	3	33.3	1	100.0	100.0	0.0
	primary	14	85.7	12	83.3	5	60.0	60.0	40.0
	Secondary	55	89.1	43	95.3	24	87.5	79.2	4.0
	Passed GCE (O/L)	75	94.7	60	91.7	29	93.1	93.1	6.7
	Higher	44	97.7	32	96.9	25	80.0	80.0	4.0
Monthly household income	up to 9000	115	93.9	95	91.6	48	85.4	83.3	8.0
	9000-13999	32	96.9	28	100.0	15	86.7	86.7	0.0
	14000-19999	25	88.0	18	94.4	12	91.7	83.3	0.0
	20000-31999	32	90.6	24	83.3	15	80.0	80.0	13.3
	32000 +	13	100.0	6	100.0	4	100.0	100.0	0.0
Wealth quintile of household	Poorest	53	98.1	46	91.3	22	95.5	95.5	4.3
	Second	54	88.9	43	90.7	24	75.0	70.8	8.3
	Middle	46	89.1	36	91.7	22	90.9	86.4	8.7
	Fourth	39	94.9	27	96.3	17	82.4	82.4	5.9
	Richest	26	100.0	20	95.0	10	90.0	90.0	0.0
Overall		218	93.6	172	92.4	95	86.3	84.2	6.2

Table A 13 : Source of care provider for children who had diarrhoea or respiratory illness during 2 weeks preceding survey, by background characteristics

background characteristic		Source of provider (%)			Number of children who had diarrhoea or respiratory illness in previous 2 weeks
		Gov. sector	Private sector	Other	
Age of child in months	<6	57.1	42.9	0.0	9
	6-11	61.5	38.5	0.0	14
	12-23	63.0	37.0	0.0	29
	24-35	81.0	19.0	0.0	21
	36-47	64.3	28.6	7.1	22
	48-59	66.7	27.8	5.6	18
Sex of child	Male	63.8	31.9	4.3	55
	Female	69.8	30.2	0.0	58
Residence	Urban	75.0	12.5	12.5	8
	Rural	63.9	36.1	0.0	81
	Estate	75.0	20.0	5.0	24
Mother's education	No schooling	100.0	0.0	0.0	3
	Primary	77.8	22.2	0.0	11
	Secondary	81.5	18.5	0.0	24
	Passed O' Level	55.9	41.2	2.9	38
	Higher	53.3	46.7	0.0	23
Monthly household income	up to 9000	75.9	22.4	1.7	60
	9000-13999	58.3	41.7	0.0	15
	14000-19999	75.0	25.0	0.0	10
	20000-31999	41.2	52.9	5.9	21
	32000 +	50.0	50.0	0.0	6
Wealth quintile of household	Poorest	89.3	10.7	0.0	29
	Second	71.4	28.6	0.0	37
	Middle	64.7	35.3	0.0	17
	Fourth	44.4	44.4	11.1	19
	Richest	33.3	66.7	0.0	11
Overall		67.0	31.0	2.0	113

Table A 14 : Percent of pregnant mothers who attended antenatal clinics, and who received “poshana malla”, “thriposha” and Iron tablets, by background characteristics.

background characteristic		Regular ANC Visits*		“poshana malla”,		“thriposha”		Iron tablets			Total No. of Pregnant women
		Percent	Total No of Mothers	Percent	Total No of Mothers	Percent	Total No of Mothers	percent received tablets	Of the received, percent took daily	Total No of Mothers	
Residence	Urban	94.7	19	27.8	18	83.3	18	100.0	100.0	19	20
	Rural	66.7	3	0.0	3	66.7	3	66.7	50.0	3	3
	Estate	0.0	0	0.0	0	0.0	0	0.0	0.0	0	0
Maternal education	no schooling	100.0	1	0.0	0	0.0	0	100.0	100.0	1	1
	primary	100.0	1	0.0	1	100.0	1	100.0	100.0	1	1
	Secondary	50.0	4	25.0	4	50.0	4	75.0	100.0	4	4
	Passed GCE (O/L)	100.0	13	33.3	12	91.7	12	100.0	92.3	13	13
	Higher	100.0	3	0.0	4	75.0	4	100.0	100.0	3	4
Monthly household income	up to 9000	91.7	12	36.4	11	81.8	11	91.7	91.7	12	13
	9000-13999	100.0	2	50.0	2	50.0	2	100.0	100.0	2	2
	14000-19999	66.7	3	0.0	3	66.7	3	100.0	100.0	3	3
	20000-31999	100.0	3	0.0	3	100.0	3	100.0	100.0	3	3
	32000 +	100.0	1	0.0	1	100.0	1	100.0	100.0	1	1
Wealth quintile of household	Poorest	100.0	2	100.0	2	100.0	2	100.0	100.0	2	2
	Second	100.0	6	0.0	5	80.0	5	100.0	83.3	6	6
	Middle	80.0	5	20.0	5	80.0	5	80.0	100.0	5	5
	Fourth	83.3	6	20.0	5	60.0	5	100.0	100.0	6	6
	Richest	100.0	3	25.0	4	100.0	4	100.0	100.0	3	4
Overall		90.9	22	23.8	21	81.0	21	95.5	95.5	22	23

*(First visits were excluded)

Table A 15: Percentage of lactating mothers who received “thriposha” and Vitamin A by background characteristics

background characteristic		“thriposha” (child <6 months)		Vitamin A mega dose (child <24 months)	
		Percent	Total No of Women	Percent	Total No of Women
Sector	Urban	100.0	2	66.7	3
	Rural	84.2	19	89.6	48
	Estate	50.0	2	50.0	4
Maternal education	no schooling	0.0	0	100.0	1
	primary	100.0	1	33.3	3

background characteristic		"thripasha" (child <6 months)		Vitamin A mega dose (child <24 months)	
		Percent	Total No of Women	Percent	Total No of Women
	Secondary	83.3	6	86.7	15
	Passed GCE (O/L)	87.5	8	85.0	20
	Higher	83.3	6	92.9	14
Monthly household income	up to 9000	76.9	13	90.0	30
	9000-13999	100.0	4	75.0	8
	14000-19999	100.0	1	71.4	7
	20000-31999	75.0	4	88.9	9
	32000 +	100.0	1	100.0	1
Wealth quintile of household	Poorest	75.0	8	92.3	13
	Second	75.0	4	76.9	13
	Middle	100.0	5	72.7	11
	Fourth	100.0	5	93.8	16
	Richest	0.0	1	100.0	2
Overall		82.6	23	85.5	55

Table A 16 : "Samurdhi" beneficiaries" among women 15-49 years by background characteristics

background characteristic		Pregnant		Lactating		Non-pregnant & non-lactating	
		Percent	Total No of Women	Percent	Total No of Women	Percent	Total No of Women
Residence	Urban	15.0	20	0.0	4	11.5	26
	Rural	0.0	3	10.7	103	18.6	86
	Estate	0.0	0	12.5	8	0.0	15
Maternal education	no schooling	100.0	1	25.0	4	100.0	1
	primary	100.0	1	20.0	5	11.1	9
	Secondary	0.0	4	11.4	35	32.0	25
	Passed GCE (O/L)	7.7	13	8.7	46	14.0	50
	Higher	0.0	4	8.7	23	4.9	41
Monthly household income	up to 9000	23.1	13	13.4	67	23.2	56
	9000-13999	0.0	2	0.0	15	22.2	18
	14000-19999	0.0	3	11.1	9	9.1	11
	20000-31999	0.0	3	5.6	18	0.0	21
	32000 +	0.0	1	0.0	5	0.0	6

background characteristic		Pregnant		Lactating		Non-pregnant & non-lactating	
		Percent	Total No of Women	Percent	Total No of Women	Percent	Total No of Women
Wealth quintile of household	Poorest	0.0	2	20.0	25	34.6	26
	Second	16.7	6	7.1	28	13.3	30
	Middle	40.0	5	15.4	26	22.2	27
	Fourth	0.0	6	4.3	23	0.0	24
	Richest	0.0	4	0.0	13	0.0	20
Overall		13.0	23	10.4	115	15.0	127

Table A 17 : Distribution of households according to main source of drinking water, and households with improved source of water, by background characteristics

Background Characteristics		Main source of drinking water								Unimproved sources	Improved source of drinking water*
		Improved sources									
		Piped into dwelling	Piped into yard or plot	Public tap /standpipe	Tubewell/ borehole	Protected well	Protected spring	Rainwater collection	Bottled water		
Sector	Urban	57.6	9.1	1.5	0.0	12.1	3.0	0.0	0.0	16.7	83.3
	Rural	15.0	13.2	1.4	2.2	11.6	13.8	0.2	0.0	42.6	57.4
	Estate	1.6	3.3	36.1	0.0	6.6	6.6	0.0	0.0	45.9	54.1
Income group	< 9,000	5.8	12.0	5.8	2.3	11.1	12.9	0.3	0.0	49.7	50.3
	9,000 -13,999	25.8	16.5	5.2	0.0	11.3	7.2	0.0	0.0	34.0	66.0
	14,000 – 19,999	32.2	8.5	5.1	1.7	8.5	13.6	0.0	0.0	30.5	69.5
	20,000 – 31,999	38.5	8.8	1.1	2.2	12.1	9.9	0.0	0.0	27.5	72.5
	≥ 32,000	42.4	9.1	0.0	0.0	15.2	18.2	0.0	0.0	15.2	84.8
Wealth index quintiles	Poorest	3.1	12.5	10.2	2.3	6.3	6.3	0.0	0.0	58.6	41.4
	Second	5.2	15.7	6.7	2.2	11.9	14.9	0.0	0.0	43.3	56.7
	Middle	10.3	14.5	3.6	1.8	10.3	16.4	0.0	0.0	43.0	57.0
	Fourth	27.8	8.7	1.7	0.9	18.3	13.9	0.0	0.0	28.7	71.3
	Richest	63.5	3.5	0.0	1.2	9.4	4.7	0.0	0.0	17.6	82.4
Overall		18.2	11.8	4.8	1.8	11.2	12.0	0.2	0.0	40.2	59.8

Table A 18 : Distribution of households according to drinking water treatment methods used, by background characteristics*

Background Characteristics		Water treatment method used in the household								Appropriate water treatment method *	Total No of household
		None	Boil	Add bleach/chlorine	Strain through a cloth	Use water filter	Solar disinfection	Let it stand and settle	Other		
Sector	Urban	6.1	92.4	13.6	22.7	3.0	0.0	0.0	0.0	92.4	66
	Rural	6.4	84.2	3.6	45.4	4.6	0.0	0.0	0.2	86.0	500
	Estate	14.8	82.0	1.6	29.5	0.0	0.0	0.0	0.0	82.0	61
Wealth index quintiles	Poorest	17.2	67.2	0.0	43.0	0.0	0.0	0.0	0.0	67.2	342
	Second	6.0	84.3	5.2	47.8	2.2	0.0	0.0	0.0	85.1	97
	Middle	5.5	90.9	4.8	43.6	3.0	0.0	0.0	0.6	92.1	59
	Fourth	3.5	90.4	6.1	39.1	4.3	0.0	0.0	0.0	93.0	91
	Richest	2.4	92.9	7.1	28.2	14.1	0.0	0.0	0.0	96.5	33
Income group	< 9,000	10.2	78.1	4.4	44.4	2.3	0.0	0.0	0.0	79.2	128
	9,000 – 13,999	3.1	92.8	5.2	39.2	4.1	0.0	0.0	1.0	94.8	134
	14,000 – 19,999	1.7	96.6	0.0	33.9	5.1	0.0	0.0	0.0	98.3	165
	20,000 – 31,999	5.5	90.1	6.6	37.4	5.5	0.0	0.0	0.0	91.2	115
	≥ 32,000	3.0	93.9	6.1	45.5	15.2	0.0	0.0	0.0	97.0	85
Overall		7.2	84.8	4.5	41.5	4.0	0.0	0.0	0.2	86.3	627

Table A 19 : Distribution of household members according to type of toilet used by the household, by background characteristics

Background Characteristics		Type of toilet facility used by household					Percentage of population using sanitary means of excreta disposal *	Number of households
		Flush	Pit	Temporary	No toilet	Missing		
Sector	Urban	98.5	0.0	0.0	1.5	0.0	98.5	66
	Rural	95.4	2.0	1.0	1.4	0.2	95.4	500
	Estate	95.1	0.0	0.0	4.9	0.0	95.1	61
Wealth index quintiles	Poorest	84.4	3.9	3.1	8.6	0.0	84.4	342
	Second	96.3	3.0	0.7	0.0	0.0	96.3	97
	Middle	99.4	0.6	0.0	0.0	0.0	99.4	59
	Fourth	100.0	0.0	0.0	0.0	0.0	100.0	91
	Richest	98.8	0.0	0.0	0.0	1.2	98.8	33
Income group	< 9,000	93.6	2.6	1.5	2.3	0.0	93.6	128
	9,000 – 13,999	96.9	1.0	0.0	2.1	0.0	96.9	134
	14,000 – 19,999	98.3	0.0	0.0	0.0	1.7	98.3	165
	20,000 – 31,999	98.9	0.0	0.0	1.1	0.0	98.9	115
	≥ 32,000	100.0	0.0	0.0	0.0	0.0	100.0	85
Overall		95.7	1.6	0.8	1.8	0.2	95.7	627

Table A 20 : Distribution of households using both improved drinking water sources and sanitary means of excreta disposal, by background characteristics

Background Characteristics		Percentage of household population using improved sources of drinking water *	Percentage of household population using sanitary means of excreta disposal **	Percentage of household population using improved sources of drinking water and using sanitary means of excreta disposal	Number of household
Sector	Urban	83.3	98.5	81.8	66
	Rural	57.4	95.4	55.6	500
	Sector	54.1	95.1	50.8	61
Wealth index quintiles	Poorest	41.4	84.4	34.4	128
	Second	56.7	96.3	54.5	134
	Middle	57.0	99.4	57.0	165
	Fourth	71.3	100.0	71.3	115
	Richest	82.4	98.8	82.4	85
Income group	< 9,000	50.3	93.6	47.7	342
	9,000 – 13,999	66.0	96.9	62.9	97
	14,000 – 19,999	69.5	98.3	69.5	59
	20,000 – 31,999	72.5	98.9	72.5	91
	≥ 32,000	84.8	100.0	84.8	33
Overall		59.8	95.7	57.9	627

Table A 21 :. Distribution of households according to duration to and from the source of drinking water, by background characteristics.

Background Characteristics	Time to source of drinking water				Mean time to source of drinking water (excluding those on premises)	Number of households	
	Water on premises	Less than 15 minutes	15 minutes to less than 30 minutes	More than 30 minutes			
Sector	Urban	90.9	4.5	3.0	0.0	9.0	66
	Rural	59.8	27.6	8.0	3.4	10.9	500
	Estate	31.1	27.9	18.0	21.3	19.3	61
Wealth							

Background Characteristics		Percentage of household population using improved sources of drinking water *	Percentage of household population using sanitary means of excreta disposal **	Percentage of household population using improved sources of drinking water and using sanitary means of excreta disposal	Number of household		
index quintiles	Poorest	28.9	41.4	13.3	13.3	15.2	342
	Second	56.0	26.1	13.4	4.5	12.4	97
	Middle	59.4	27.9	8.5	2.4	10.2	59
	Fourth	78.3	16.5	2.6	2.6	8.6	91
	Richest	91.8	5.9	1.2	0.0	7.4	33
Income group	< 9,000	44.7	34.8	11.7	7.3	12.6	128
	9,000 – 13,999	72.2	18.6	5.2	3.1	11.9	134
	14,000 – 19,999	83.1	10.2	5.1	0.0	8.9	165
	20,000 – 31,999	79.1	13.2	4.4	2.2	11.5	115
	≥ 32,000	93.9	6.1	0.0	0.0	11.7	85
Overall		60.3	25.2	8.5	4.8	12.3	627

%

Table A 22 Distribution of households according to the person collecting water used in the household, by background characteristics

Background Characteristics		Person collecting drinking water					Number of households
		Adult man	Adult woman	Male child (under 15)	Female child (under 15)	Other	
Sector	Urban	10.5	89.5	0.0	0.0	0.0	66
	Rural	6.9	88.7	1.7	0.4	2.2	500
	Estate	10.4	87.5	0.0	0.0	2.1	61
Wealth index quintiles	Poorest	6.2	90.7	1.0	1.0	1.0	128
	Second	12.3	80.0	3.1	0.0	4.6	134
	Middle	9.0	88.5	1.3	0.0	1.3	165
	Fourth	0.0	100.0	0.0	0.0	0.0	115
	Richest	10.5	84.2	0.0	0.0	5.3	85
Income group	< 9,000	7.8	87.4	1.9	0.5	2.4	342
	9,000 – 13,999	7.7	92.3	0.0	0.0	0.0	97
	14,000 – 19,999	0.0	100.0	0.0	0.0	0.0	59
	20,000 – 31,999	10.3	89.7	0.0	0.0	0.0	91
	≥ 32,000	0.0	80.0	0.0	0.0	20.0	33
Overall		7.7	88.6	1.3	0.3	2.0	627

Table A 23 : Proportion of households by type of foods consumed at least once in the day or night preceding the interview , by to background characteristics

Background Characteristic	Food Groups										
	Rice	Wheat	Nuts/pulses	vegetables	fruits	meat/poultry/fish	eggs	milk/dairy products	oils/fats	Coconut	Sugar
No. of members in family											
1-3	99.4	56.6	56.9	91.6	72.5	74.8	19.6	84.1	94.2	90.9	98.1
4-6	99.8	53.9	53.6	91.6	72.1	71.7	21.0	92.0	96.9	91.3	98.8
≥ 7	100.0	44.1	66.7	88.9	71.4	74.1	33.3	90.0	96.3	88.9	100.0
Sector											
Urban	100.0	63.6	61.9	93.9	77.4	83.3	29.1	96.6	93.9	100.0	100.0
Rural	99.8	48.8	54.5	91.6	72.6	72.6	19.2	89.4	96.8	90.5	98.4
Estate	98.4	75.0	56.9	86.7	59.5	60.8	31.8	84.2	93.2	85.2	100.0
Religion of the HH Head											
Buddhist	99.6	46.6	57.3	91.9	74.4	73.9	20.9	90.6	96.6	91.0	98.4
Hindu	100.0	76.0	44.3	89.6	60.0	60.0	24.5	85.1	95.4	92.4	100.0
Islam	100.0	77.3	42.9	86.4	55.0	81.0	10.5	89.5	100.0	95.5	100.0
Catholic	100.0	81.3	77.8	86.4	70.6	77.8	42.9	84.6	81.8	81.8	100.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Monthly household income											
< 9,000	99.7	51.7	48.5	92.0	67.3	64.5	17.9	83.1	95.0	86.0	98.2
9,000 – 13,999	99.0	55.7	56.0	89.7	75.0	83.0	20.5	92.2	96.9	95.9	97.9
14,000 – 19,999	100.0	55.0	56.1	86.4	75.0	84.5	20.4	96.4	98.3	98.3	100.0
20,000 – 31,999	100.0	56.5	66.7	92.3	81.4	76.7	32.9	96.4	97.8	97.8	100.0
≥ 32,000	100.0	54.2	90.6	97.0	80.6	90.6	21.7	96.9	97.0	97.0	100.0
Wealth quintile											
Poorest	98.4	54.3	52.8	85.6	59.6	57.3	20.7	72.5	92.9	80.0	96.1
Second	100.0	50.0	50.4	91.0	69.4	69.1	19.8	84.0	94.7	87.9	99.3
Middle	100.0	57.9	50.6	92.7	72.2	72.1	18.5	91.0	96.4	93.3	100.0
Fourth	100.0	48.8	58.7	92.2	79.5	78.2	22.0	95.8	100.0	96.5	99.1
Richest	100.0	56.9	71.4	96.5	81.0	90.5	29.7	98.8	97.6	100.0	98.8
Overall %	99.7	53.7	55.6	91.3	72.1	72.6	21.7	89.9	96.1	91.0	98.7
Total No.	626	402	572	624	567	574	438	446	623	620	626

Table A 24: Proportion of households by type of foods consumed in 5 days and more preceding the interview, by background characteristics

Background Characteristic	Food Groups										
	Rice	Wheat	Nuts/pulses	vegetables	fruits	meat/poultry/fish	eggs	milk/dairy products	oils/fats	Coconut	Sugar
No. of members in family											
1-3	98.1	14.8	18.7	85.8	31.6	31.6	4.5	54.8	82.6	75.5	97.4
4-6	98.3	16.8	17.7	86.6	41.2	33.6	5.5	64.0	89.4	79.5	97.4
≥ 7	100.0	14.5	21.8	85.5	36.4	34.5	9.1	65.5	92.7	87.3	98.2
Sector											
Urban	98.5	36.4	31.8	87.9	48.5	34.8	10.6	81.8	84.8	98.5	97.0
Rural	98.2	10.4	17.4	87.2	40.4	35.6	4.4	60.4	88.6	77.6	97.2
Estate	100.0	41.0	11.5	77.0	11.5	11.5	9.8	52.5	86.9	71.7	100.0
Religion of the HH Head											
Buddhist	98.4	9.1	19.9	87.6	42.3	37.0	5.1	62.4	87.6	78.3	97.0
Hindu	98.5	49.3	10.4	82.1	16.4	11.9	10.4	58.2	91.0	83.6	98.5
Islam	95.5	59.1	9.1	81.8	22.7	31.8	0.0	77.3	90.9	95.2	100.0
Catholic	100.0	27.3	22.7	77.3	31.8	22.7	9.1	50.0	86.4	68.2	100.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Monthly household income											
< 9,000	97.1	13.2	14.3	84.5	28.9	21.9	2.9	45.6	86.8	71.8	96.2
9,000 – 13,999	100.0	21.6	20.6	88.7	37.1	33.0	6.2	70.1	91.8	82.5	97.9
14,000 – 19,999	100.0	18.6	16.9	86.4	44.1	54.2	8.5	86.4	88.1	91.5	100.0
20,000 – 31,999	100.0	20.9	25.3	89.0	60.4	50.5	14.3	85.7	87.9	91.2	98.9
≥ 32,000	100.0	12.1	39.4	93.9	66.7	66.7	3.0	93.9	93.9	93.9	100.0
Wealth quintile											
Poorest	94.5	12.5	14.1	77.3	20.3	10.9	3.1	25.8	82.8	62.7	93.8

Background Characteristic	Food Groups										
	Rice	Wheat	Nuts/pulses	vegetables	fruits	meat/poultry/fish	eggs	milk/dairy products	oils/fats	Coconut	Sugar
Second	98.5	10.4	14.9	85.1	36.6	21.6	3.7	57.5	87.3	70.9	97.8
Middle	100.0	21.8	17.0	87.3	36.4	33.9	3.6	64.8	89.1	84.8	98.8
Fourth	99.1	15.7	14.8	87.8	44.3	43.5	5.2	78.3	91.3	86.1	98.3
Richest	100.0	20.0	37.6	97.6	64.7	69.4	16.5	95.3	90.6	96.5	98.8
Overall %	98.4	16.1	18.3	86.3	38.4	33.2	5.6	61.9	88.0	79.2	97.4
Total No.	627	627	627	627	627	627	627	627	627	625	627

Table A 25: Percentage of household members (in broad age groups) who consume three or more main meals a day, by background characteristics

Background Characteristic	5-17 years		18-59 years		60 years or above	
	male	female	male	female	male	female
No. of members in family						
1-3	95.2	93.5	94.6	95.4	83.3	86.2
4-6	98.1	98.5	97.1	97.3	94.7	98.1
≥ 7	100.0	100.0	100.0	100.0	92.3	100.0
Sector						
Urban	100.0	100.0	98.4	98.4	100.0	100.0
Rural	97.5	97.7	96.6	96.9	89.1	94.4
Estate	100.0	100.0	96.3	98.2	100.0	92.9
Monthly household income (LKR)						
< 9,000	96.2	96.5	94.0	94.7	84.4	88.6
9,000 – 13,999	100.0	100.0	100.0	100.0	100.0	100.0
14,000 – 19,999	100.0	100.0	100.0	100.0	100.0	100.0
20,000 – 31,999	100.0	100.0	100.0	100.0	100.0	100.0
≥ 32,000	100.0	100.0	100.0	100.0	85.7	100.0
Wealth quintile						
Poorest	95.9	91.9	86.3	87.0	77.8	78.6
Second	97.9	100.0	98.4	99.2	93.3	95.0
Middle	98.0	100.0	99.4	100.0	90.9	96.2
Fourth	100.0	100.0	100.0	100.0	93.3	100.0
Richest	100.0	100.0	100.0	100.0	100.0	100.0
Overall %	98.1	98.1	96.8	97.1	91.3	94.9

Table A 26 : Household dietary diversity score according to background characteristics

Background Characteristic	Household diversity score		% of households yet to achieve the target	No of households
	mean	SD		
No. of members in Household				
1-3	7.6	1.7	64.5	155
4-6	7.7	1.6	64.5	417
≥ 7	7.8	1.7	65.5	55
Sector				
Urban	8.6	1.4	39.4	66
Rural	7.6	1.6	67.0	500
Estate	7.3	1.7	72.1	61
Religion of the HH Head				
Buddhist	7.7	1.6	64.2	508
Hindu	7.4	1.7	70.1	67
Islam	8.1	1.6	45.5	22
Catholic	7.7	2.0	68.2	22
Other	.	.		
Monthly household income				
< 9,000	7.1	1.7	78.4	342
9,000 – 13,999	8.1	1.4	57.7	97
14,000 – 19,999	8.4	1.3	50.8	59
20,000 – 31,999	8.6	1.3	41.8	91
≥ 32,000	8.9	1.1	27.3	33
Wealth quintile				
Poorest	6.5	1.8	86.7	128
Second	7.4	1.5	72.4	134
Middle	7.8	1.4	66.1	165
Fourth	8.3	1.3	53.9	115
Richest	9.0	1.1	30.6	85
overall	7.7	1.6	64.6	627

Table A 27 :: Average monthly expenditure for food, services, health, education and productive assets, by background characteristics

Background characteristic	Average monthly expenditure in LKR						Total	Number of households
	food	liquor/tobacco	Utility services	health	education	productive assets		
No. of members in family								
1-3	39.6	3.7	6.9	5.6	1.3	42.9	18728	33
4-6	65.0	4.5	10.2	5.4	5.3	9.6	15469	158
≥ 7	9.8	1.2	1.7	1.0	0.8	85.6	123166	38
Residence								
Urban	73.1	0.9	15.0	3.6	7.4	0.0	16562	18
Rural	22.8	1.9	3.8	2.3	1.8	67.3	43231	185
Estate	76.0	7.7	6.4	5.7	4.2	0.0	12516	26
Religion of household Head								
Buddhist	22.7	1.5	5.1	2.3	1.8	66.6	43670	186
Hindu	73.2	12.8	4.2	4.1	5.7	0.0	15518	24
Islam	72.9	0.0	14.7	3.1	9.3	0.0	15020	6
Catholic and other Christian	45.9	8.0	38.5	3.0	4.6	0.0	17853	9
Education of household Head								
No schooling	77.0	0.0	8.3	7.7	7.0	0.0	10324	6
Primary	75.4	3.6	10.4	6.8	3.9	0.0	13174	34
Secondary	64.7	4.3	8.1	5.5	5.1	12.4	15180	88
Passed O' Level	19.2	2.0	3.9	1.9	1.7	71.2	53598	96
Higher	67.9	6.3	11.1	9.2	5.5	0.0	15821	3
Monthly household income								
< 9,000	74.1	4.5	7.4	6.9	3.6	3.4	12094	126
9,000 – 13,999	49.5	3.9	8.6	4.3	6.1	27.5	19542	34
14,000 – 19,999	72.5	2.7	12.9	7.2	4.6	0.0	15234	21
20,000 – 31,999	13.7	1.7	3.2	1.3	1.4	78.7	89319	37
≥ 32,000	60.5	7.7	20.2	5.1	6.5	0.0	23127	10
Wealth quintile								
Poorest	65.3	8.7	7.4	5.0	4.1	9.4	12366	57
Second	41.6	2.7	5.2	4.8	3.4	42.4	21831	60
Middle	59.5	3.6	8.3	4.9	4.9	18.8	17729	47
Fourth	9.5	0.7	2.0	1.0	0.7	86.2	120922	41
Richest	63.5	8.0	16.2	4.7	6.5	1.2	20980	24

Background characteristic	Average monthly expenditure in LKR							Number of households
	food	liquor/tobacco	Utility services	health	education	productive assets	Total	
Overall	23.1	1.9	3.8	2.1	1.9	67.2	43302	229
% of the Total Expenditure								

Table A 28: Food groups by the main and secondary sources

Background Characteristic	Food Groups											
	Rice	Wheat	Nuts/pulses	vegetables	fruits	meat/poultry	fish	eggs	milk/dairy products	oils/fats	Coconut	Sugar
Main source												
Own production	24.8	2.5	3.7	37.3	32.6	0.4	93.3	3.0	4.0	1.4	7.7	0.5
Purchase	68.2	92.0	90.2	58.7	62.6	0	4.0	92.2	87.7	91.8	86.0	92.2
Purchase on credit	5.0	4.5	4.7	1.4	0.9	0.9	0.0	2.1	4.7	5.3	3.7	5.3
Traded goods or services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Borrowed	0.2	0.0	0.0	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Gift from family or relatives	1.6	0.7	1.0	1.6	2.8	2.6	1.2	1.1	1.8	0.5	1.8	0.5
Food aid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash assistance	0.2	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.3
Other	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0

Table A 29 : Percent of households reported food had run out at some time during the previous 12 months, and months of adequate household food provisioning (MAHFP) by background characteristics

Background characteristic	% household food had run out during past 12 months	Average MAHFP	% yet to achieve the target	No. of Households
No. of members in family				
1-3	38.1	9.5	20.9	155
4-6	43.2	9.1	24.0	417
≥ 7	41.8	9.3	22.9	55
Residence				
Urban	22.7	9.8	18.2	66
Rural	39.4	9.6	19.6	500
Estate	82.0	5.2	57.0	61
Education of household Head				

Background characteristic	% household food had run out during past 12 months	Average MAHFP	% yet to achieve the target	No. of Households
No schooling	70.0	7.1	41.3	40
Primary	59.1	7.7	36.2	115
Secondary	43.0	9.1	23.9	228
Passed O' Level	27.2	10.4	13.1	213
Higher	22.2	11.2	6.5	9
Monthly household income				
< 9,000	53.2	8.4	30.1	342
9,000 – 13,999	45.4	9.1	24.1	97
14,000 – 19,999	27.1	10.4	13.7	59
20,000 – 31,999	15.4	11.2	7.1	91
≥ 32,000	12.1	11.3	6.1	33
Wealth quintile				
Poorest	75.8	6.2	48.4	128
Second	55.2	8.3	30.7	134
Middle	35.8	9.9	17.3	165
Fourth	20.9	11.0	8.0	115
Richest	9.4	11.4	4.9	85
Overall	41.8	9.2	23.1	627

Table A 30 : Current food stock duration, and size compared to last year, by background characteristics

background characteristic	Size of food stock compared to last year				mean No. of days current food stock last	No. of households
	more (%)	same (%)	less (%)	much less (%)		
No. of members in family						
1-3	18.7	41.9	29.0	10.3	7.04	155
4-6	24.3	34.6	27.9	13.2	6.78	416
≥ 7	21.8	30.9	30.9	16.4	6.20	55
Sector						
Urban	26.2	44.6	23.1	6.2	6.71	65
Rural	20.6	37.0	29.0	13.4	6.61	500
Estate	36.1	19.7	29.5	14.8	8.38	61
Education of household Head						
No schooling	20.0	27.5	40.0	12.5	4.44	40
Primary	24.3	31.3	28.7	15.7	5.08	115
Secondary	21.5	34.2	29.4	14.9	7.04	228
Passed O' Level	23.1	42.9	26.4	7.5	7.74	212
Higher	33.3	33.3	11.1	22.2	9.89	9
Monthly household income						
< 9,000	18.4	32.2	32.5	17.0	5.60	342

background characteristic	Size of food stock compared to last year				mean No. of days current food stock last	No. of households
	more (%)	same (%)	less (%)	much less (%)		
9,000 – 13,999	29.9	30.9	26.8	12.4	7.93	97
14,000 – 19,999	25.4	42.4	28.8	3.4	7.31	59
20,000 – 31,999	26.4	51.6	16.5	5.5	9.10	91
≥ 32,000	28.1	40.6	21.9	9.4	8.82	32
Wealth quintile						
Poorest	30.5	25.0	25.8	18.8	4.37	128
Second	16.4	29.9	37.3	16.4	6.25	134
Middle	20.0	33.3	33.9	12.7	6.35	165
Fourth	24.3	49.6	16.5	9.6	7.82	115
Richest	23.8	50.0	23.8	2.4	10.71	84
Overall	22.7	36.1	28.4	12.8	6.79	626

Table A 31: Average number of times a household received food aid in the last 6 months, by background characteristics

Characteristic	Type of food aid (mean no. of times per 6 month)										No. of household
	Not received food aids	WFP /GA	Samurdhi	Food Basket	School feeding	CSB	Thriposha	BP 100	Food for work	Other	
No. of members in family											
1-3	65.2	0.0	4.5	4.0	0.0	0.0	2.2	0.0	0.0	0.0	155
4-6	56.0	0.0	4.4	3.0	34.5	1.0	1.6	0.0	0.0	0.0	417
≥ 7	52.7	0.0	3.8	6.5	90.0	0.0	1.5	0.0	0.0	0.0	55
Sector											
Urban	83.3	0.0	5.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	66
Rural	52.7	0.0	4.3	3.6	45.6	1.0	1.8	0.0	0.0	0.0	500
Estate	73.8	0.0	5.2	2.0	0.0	0.0	1.6	0.0	0.0	0.0	61
Monthly household income											
< 9,000	45.7	0.0	4.3	3.7	62.0	0.0	2.0	0.0	0.0	0.0	342
9,000 – 13,999	67.0	0.0	4.6	2.5	21.0	0.0	1.5	0.0	0.0	0.0	97
14,000 – 19,999	78.0	0.0	5.1	0.0	0.0	0.0	1.2	0.0	0.0	0.0	59
20,000 – 31,999	73.6	0.0	5.5	0.0	21.0	1.0	1.6	0.0	0.0	0.0	91
≥ 32,000	78.8	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	33
Wealth index quintile											
Poorest	41.7	0.0	4.6	3.8	90.0	0.0	1.5	0.0	0.0	0.0	128
Second	50.7	0.0	4.6	3.4	0.0	1.0	1.9	0.0	0.0	0.0	134
Middle	52.7	0.0	4.2	0.0	6.0	0.0	1.8	0.0	0.0	0.0	165
Fourth	77.4	0.0	3.5	0.0	0.0	0.0	1.5	0.0	0.0	0.0	115
Richest	77.6	0.0	3.5	2.0	21.0	0.0	1.8	0.0	0.0	0.0	85
Overall	58.0	0.0	4.4	3.6	45.6	1.0	1.7	0.0	0.0	0.0	627

Table A 32: Percent of households with coping strategy adopted in the previous 30 days, with its frequency

Coping Strategy	% of households adopted strategy				Total households
	Never	Ever			
		Once in a while (1-2 per week)	Pretty often (3-6 per week)	Daily (>24 days)	
Food-related coping strategy					
a. Relied on less preferred food	53.6	22.2	19.8	4.5	627
b. Borrowed food	76.7	14.5	7.5	1.3	627
c. Purchased food on credit	53.0	21.9	19.5	5.7	627
d. Consumed seeds held for next season	92.2	6.2	1.3	0.3	627
e. Reduced meal size	73.4	17.9	7.7	1.1	627
f. Reduced number of meals per day	76.0	16.5	6.4	1.1	626
g. Restricted consumption for adults	77.8	13.6	6.4	2.2	626
h. Sent children to live with relatives	98.6	1.1	0.2	0.2	626
i. Reduced expenditure on health and education	90.3	4.8	4.0	1.0	626
Non-food coping strategies					
		% of Households		Total Households	
		No	Yes		
j. Sold livestock		98.9	1.1		627
k. Pawned jewellery		76.6	23.4		627
l. Sold agricultural tools, seeds		95.5	4.5		627
m. Sold other assets		98.9	1.1		627
n. Used savings		76.4	23.6		627
o. Borrowed money from relatives/neighbours		73.2	26.8		627
p. Took children out of school to earn income		99.5	0.5		626

Table A 33: Food-related coping strategies adopted during the 30 days preceding the survey, by background characteristics

Background Characteristic	Percent of households adopted strategy at least once during the preceding 30 days									
	No of households adopted coping strategies	Relied on less preferred food	Borrowed food	Purchased food on credit	Consumed seeds held for next season	Reduced meal size	Reduced number of meals per day	Restricted consumption for adults	Sent children to live with relatives	Reduced expenditure on health and education
No. of members in Household										
1-3	73	93.2	41.1	90.4	16.4	54.8	49.3	31.5	1.4	21.9
4-6	219	88.6	46.1	92.7	15.5	52.5	46.6	47.0	3.7	17.4
≥ 7	31	93.5	48.4	83.9	9.7	38.7	38.7	41.9	0.0	22.6
Sector										
Urban	17	100.0	64.7	100.0	5.9	94.1	94.1	70.6	0.0	5.9
Rural	252	88.9	40.9	90.5	19.0	44.0	37.3	35.3	2.0	17.1
Estate	54	92.6	59.3	92.6	0.0	74.1	74.1	70.4	7.4	31.5
Monthly household income										
< 9,000	217	92.6	53.0	92.2	17.5	57.6	53.5	47.5	3.7	19.4
9,000 – 13,999	51	94.1	37.3	94.1	11.8	54.9	47.1	43.1	2.0	25.5
14,000 – 19,999	22	81.8	18.2	81.8	18.2	13.6	13.6	27.3	0.0	22.7
20,000 – 31,999	25	76.0	24.0	88.0	4.0	32.0	20.0	20.0	0.0	0.0
≥ 32,000	7	57.1	14.3	85.7	0.0	28.6	14.3	28.6	0.0	14.3
Wealth quintile										
Poorest	104	94.2	60.6	94.2	21.2	72.1	67.3	59.6	6.7	24.0
Second	95	91.6	45.3	94.7	12.6	53.7	49.5	48.4	2.1	18.9
Middle	81	88.9	34.6	88.9	16.0	34.6	30.9	28.4	0.0	13.6
Fourth	29	89.7	34.5	86.2	6.9	41.4	27.6	24.1	0.0	13.8
Richest	14	57.1	14.3	71.4	0.0	7.1	0.0	7.1	0.0	21.4
overall	323	90.1	45.2	91.3	15.2	51.7	46.4	43.0	2.8	18.9

TableA 34: Households taken loans and reasons for borrowing money, by background characteristics

Background Characteristic	Received loan		Main reason for loan (% of the total received loan)								
	No	%	Purchase food	Medical cost	Repair of damaged house	Transport	Repay loan	support additional members	Marriage	Income generation	other
No. of members in Household											
1-3	44	28.4	22.7	0.0	18.2	2.3	11.4	0.0	2.3	20.5	22.7
4-6	152	36.5	36.4	3.3	17.2	0.7	5.3	0.7	0.0	26.5	9.9
≥ 7	20	36.4	35.0	5.0	5.0	0.0	0.0	0.0	0.0	35.0	20.0
Sector											
Urban	22	33.3	36.4	0.0	18.2	0.0	0.0	0.0	4.5	36.4	4.5
Rural	156	31.2	20.6	3.9	19.4	0.6	8.4	0.0	0.0	31.0	16.1
Estate	38	62.3	84.2	0.0	2.6	2.6	0.0	2.6	0.0	0.0	7.9
Monthly household income											
< 9,000	130	38.0	40.3	3.9	11.6	1.6	4.7	0.8	0.0	26.4	10.9
9,000 – 13,999	38	39.2	28.9	0.0	10.5	0.0	10.5	0.0	0.0	34.2	15.8
14,000 – 19,999	16	27.1	31.3	6.3	31.3	0.0	6.3	0.0	6.3	12.5	6.3
20,000 – 31,999	22	24.2	13.6	0.0	36.4	0.0	4.5	0.0	0.0	22.7	22.7
≥ 32,000	8	24.2	0.0	0.0	25.0	0.0	12.5	0.0	0.0	25.0	37.5
Wealth quintile											
Poorest	63	49.2	56.5	1.6	6.5	1.6	3.2	0.0	0.0	17.7	12.9
Second	47	35.1	38.3	6.4	12.8	0.0	8.5	2.1	0.0	21.3	10.6
Middle	52	31.5	28.8	3.8	17.3	0.0	5.8	0.0	1.9	32.7	9.6
Fourth	33	28.7	9.1	0.0	24.2	0.0	6.1	0.0	0.0	39.4	21.2
Richest	21	24.7	4.8	0.0	38.1	4.8	9.5	0.0	0.0	23.8	19.0
overall	627	34.4	33.5	2.8	16.3	0.9	6.0	0.5	0.5	26.0	13.5

Table A 35 : Household Food Consumption Adequacy Score (HFCAS) and prevalence of household food insecurity status, by background characteristics

Background characteristic	Mean (SD) HFCAS Score*		HFCAS Score Category (%)			No. of households
			Poor	Borderline	Adequate	
No. of members in family						
1-3	61.1	(16.0)	0.0	7.1	92.9	155
4-6	62.9	(17.5)	0.2	6.0	93.8	417
≥ 7	64.3	(16.6)	0.0	3.6	96.4	55
Residence						
Urban	71.7	(18.1)	0.0	3.0	97.0	66
Rural	61.2	(16.2)	0.2	6.2	93.6	500
Estate	63.9	(19.5)	0.0	8.2	91.8	61
Religion of household Head						
Buddhist	61.7	(16.2)	0.2	6.5	93.3	508
Hindu	65.7	(20.1)	0.0	4.5	95.5	67
Islam	74.4	(18.5)	0.0	4.5	95.5	22
Catholic and other Christian	63.9	(19.6)	0.0	4.5	95.5	22
Education of household Head						
No schooling	51.5	(16.8)	0.0	20.0	80.0	40
Primary	58.1	(18.2)	0.9	13.0	86.1	115
Secondary	61.8	(16.9)	0.0	4.8	95.2	228
Passed O' Level	68.0	(14.6)	0.0	1.4	98.6	213
Higher	74.7	(12.3)	0.0	0.0	100.0	9
Monthly household income						
< 9,000	56.9	(16.4)	0.3	9.4	90.4	342
9,000 – 13,999	65.6	(16.5)	0.0	4.1	95.9	97
14,000 – 19,999	70.4	(12.6)	0.0	0.0	100.0	59
20,000 – 31,999	72.2	(15.4)	0.0	1.1	98.9	91

Background characteristic	Mean (SD) HFCAS Score*	HFCAS Score Category (%)			No. of households
		Poor	Borderline	Adequate	
≥ 32,000	72.7 (13.9)	0.0	3.0	97.0	33
Wealth quintile					
Poorest	50.5 (17.1)	0.8	17.2	82.0	128
Second	60.3 (15.0)	0.0	4.5	95.5	134
Middle	63.6 (16.2)	0.0	4.2	95.8	165
Fourth	67.0 (13.5)	0.0	2.6	97.4	115
Richest	76.5 (12.5)	0.0	0.0	100.0	85
Overall	62.6 (17.1)	0.2	6.1	93.8	627

Table A 36 :Distribution of households by food security Levels

<i>Food Consumption</i> <i>Food Access (Percent expenditure on food)</i>	Poor (0-21)	Borderline (21.01 – 35)	Adequate (> 35.01)
	Poor (> 90 %)	0 (0.0)	5 (2.2)
Average (75-90 %)	0 (0.0)	3 (1.3)	106 (46.3)
Good (<75 %)	0 (0.0)	3 (1.3)	78 (34.1)

Table A 37 : Distribution of households by food security level by background characteristics

<i>Background characteristic</i>	Food Security Level			<i>No. of households</i>
	Food Secure (%)	Moderately Food Secure (%)	Food Insecure (%)	
No. of members in family				
1-3	63.6	27.3	9.1	33
4-6	83.5	15.2	1.3	158
≥ 7	89.5	10.5	0.0	38
Sector				
Urban	77.8	22.2	0.0	18
Rural	83.8	14.1	2.2	185
Estate	69.2	26.9	3.8	26
Education of household Head				
No schooling	83.3	0.0	16.7	6
Primary	73.5	20.6	5.9	34
Secondary	75.0	22.7	2.3	88
Passed O' Level	91.7	8.3	0.0	96
Higher	66.7	33.3	0.0	3
Monthly household income				
< 9,000	73.0	23.0	4.0	126
9,000 – 13,999	94.1	5.9	0.0	34
14,000 – 19,999	76.2	23.8	0.0	21

20,000 – 31,999	97.3	2.7	0.0	37
≥ 32,000	100.0	0.0	0.0	10
Wealth quintile				
Poorest	71.9	19.3	8.8	57
Second	76.7	23.3	0.0	60
Middle	85.1	14.9	0.0	47
Fourth	90.2	9.8	0.0	41
Richest	95.8	4.2	0.0	24
Overall	81.7	16.2	2.2	229

ANNEX 2

The steps followed in estimating levels of food insecurity were as follows:

Step 1: Calculate a household food consumption adequacy score (HFCAS) based on food groups consumed during 1 week prior to survey, grouped into 3 categories as described in footnote⁵.

Step 2: Estimating the expenditure on food as a percentage of the total household expenditure, and categorizing the households into 3 groups indicating different levels of food access (<75 percent - good; 75 to 90 percent - average and >90 percent - poor food access).

Step 3: Cross-tabulation between food consumption categories and food access categories.

Food insecurity levels were assessed in accordance with the classification given in Figure X.

Figure X. Assessment of food insecurity levels

Food consumption	Poor	Borderline	Adequate
Food access			
Poor	Severely food insecure	Severely food insecure	Moderately food insecure
Average	Severely food insecure	Moderately food insecure	Food Secure
Good	Moderately food insecure	Food Secure	Food Secure

⁵ Eight food groups were used to calculate the Food consumption adequacy score.

Food group	Food times
1. Staple foods (starches)	Rice, bread / chapti /roti
2. Pulses/legumes	Pulses
3. Vegetables	vegetables (including leaves)
4. Fruits	fruits
5. Animal protein	Fish, meat (beef, pork, chicken), eggs
6. Sugar	sugar/ jaggary
7. Dairy products	Curd, milk (liquid or powder)
8. Oil/fats	palm oil, vegetable oil, fats, coconut products (dried copra)

The number of days the food items were consumed during the previous week was summed for the food items in each of the 8 food groups. If the total sum of the number of days of the separate items in a food group was higher than 7 days, the sum is converted to 7. Thus, the maximum score for each food group is 7 days. The food score of each household is calculated as follows:

Simple food score = 2 * staple + 3 * pulses + 1 * vegetables + 1* fruit + 4 * animal protein + 0.5 * sugar + 3 * dairy + 0.5 * oil

The households were grouped according to their scores by applying the standard cut-offs as follows:

- Poor food consumption: simple food score is 0 – 21
- Borderline food consumption: simple food score is 21.01 – 35
- Adequate food consumption: simple food score is 35.01 and higher

