

# **Nutrition and Food Security Survey in Hambantota District in 2009**

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## **District profile - Hambantota**

Hambantota district is on the southeast coast of Sri Lanka and is one of the three districts in the Southern province of Sri Lanka.. It has been mainly an agricultural district with paddy cultivation and chena cultivation predominating. In recent years much development activities have commenced in the district with the initiation of the establishment of a harbour and an airport. Hambantota town is the capital of the district and is the centre of salt production in Sri Lanka.

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

Administratively, the district is divided into 12 Divisional Secretary (DS) divisions and 576 Grama Nildhari (GN) divisions. The local government institutions in the province include two Urban Councils and 10 Pradeshiya Sabhas<sup>1</sup>.

The province includes a land area of approximately 579 sq.km. with a population of 576,26 (estimated for 2006) with a population density of 228.0 persons per square kilometre.. Of them, 4.1 percent reside in urban sector with 95.7 percent in the rural sector and 0.2 percent in the estate sector ).

Of the total land area, 70.7 percent is under varied types of forest cover, 3.6 percent being covered with water sources. Paddy cultivations covers 9.9 percent of the land area with 4.4 percent covered by other crops.

Health services in the western sector is provided by the 32 institutions in the state sector include 1 District General Hospital, 4 Base Hospitals, 4 District Hospitals, 4 Peripheral Units, 7 Rural Hospitals and 11 Central Dispensaries. Preventive and promotive health services are provided through 11 Health Unit areas with Medical Officers of Health and field level health staff<sup>2</sup>. In addition, private sector western type of health services and services providing Auyrveda treatment are also available in the district.

The literacy rate among males is 90.3 percent with that for females being 87.0 .Percentage of households below the poverty line is 21.5 . The median income level of Rs.16,784. compares well with that at national level (Rs.16,735)<sup>3</sup>.

**A cross sectional descriptive study** was carried out to assess the nutritional status of under five children and women in the 15 – 49 year age group and their correlates.

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<sup>1</sup> Department of Census and Statistics, District Statistical Handbook 2007.

<sup>2</sup> Ministry of Health Care and Nutrition , Sri Lanka, Annual Health Bulletin

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

## 1. Method

### 1.1. Selection of households

A sample of 608 households from the district of Hambantota 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 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. A 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.

**i. 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**

### **I**

A total of 608 households were included in the survey, with 3.5 percent of households being in the urban sector and 96.5 percent in the rural sector and none in the estate sector

Of the total 2,717 individuals who were usually resident in the selected households, 733 (27.0 percent) were women aged between 15.0 and 49.9 years. Children aged between 5.0 and 14.9 years was 16.3 percent and 10.8 percent were children aged less than 5 years. There were 182 children aged between 2.0-4.9 years, 6.7 percent of the total population.

### **I**

#### **2.1. Nutritional Status**

##### **2.1.1. Nutritional status of children**

##### **Prevalence of malnutrition**

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). .

Of the of 293 children under five years were i included in the survey, As shown in Table 4.1, among all children in the age group 0–59 months, 15.4 percent were stunted, 13.1 percent wasted and 23.1 percent were underweight (Table1) . Severe stunting was seen among 3.7 percent of the total group, with the comparable figures for severe wasting and severe underweight being 2.2 percent and 5.8 percent respectively. There were 1.1.percent of children with weight for height values more than +2 SD.

Comparisons made between sub groups are based on relatively low numbers within each such group, hence have to be interpreted with caution.

The prevalence of stunting ( height for age  $<-2$  SD) was high during the first six months of life and does not show any consistent pattern with increasing age. Prevalence of underweight was relatively low during the first year even though this percentage during the first 6 months was higher than the second six months.

The percentage of children with wasting and underweight were higher among males compared to females. Comparison between sectors is not possible as only four children in the urban sector belonged to ny category of undernutrition.

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 second year of life (7.8 percent), marginally higher among males ( 3.9 percent ) . However, the declining trends seen among the higher maternal educational categories, income levels and wealth quintiles were not consistent.

**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	20.0	4.0	15.4	3.8	0.0	28.0	8.0	27
6-11	4.2	0.0	4.2	0.0	0.0	12.5	0.0	25
12-23	19.6	7.8	7.8	2.0	2.0	18.9	5.7	55
24-35	12.7	2.8	13.9	2.8	0.0	30.1	6.8	75
36-47	14.9	6.4	14.9	2.1	2.1	17.0	8.5	49
48-59	18.2	0.0	18.2	1.8	0.0	25.5	3.6	56
Sex of child								
Male	15.5	3.9	17.1	1.6	0.8	24.6	4.6	136
Female	15.3	3.5	9.6	2.7	0.7	21.8	6.8	151
Sector								
Urban	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4
Rural	15.6	3.7	13.3	2.2	0.7	23.4	5.9	283
Estate								
Mother's education								
No schooling	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
Primary	10.0	5.0	20.0	0.0	0.0	35.0	5.0	20
Secondary	15.3	2.8	13.7	2.7	0.0	25.7	10.8	77

Background characteristic	Height-for- age (%)		Weight-for-height (%)			Weight-for-age (%)		Total No of Children
	<-2SD	<-3SD	<-2SD	<-3SD	≥+2SD	<-2SD	<-3SD	
Passed O' Level	18.9	4.4	11.0	3.3	1.1	23.1	6.6	91
Higher	8.1	1.6	11.3	1.6	0.0	15.9	0.0	66
<b>Monthly household income</b>								
< 9,000	18.4	4.6	14.8	4.5	1.1	27.0	9.0	90
9,000 – 13,999	16.9	5.1	6.9	0.0	1.7	27.1	3.4	62
14,000 – 19,999	12.1	1.7	20.3	1.7	0.0	22.4	3.4	63
20,000 – 31,999	14.6	4.9	14.3	2.4	0.0	18.6	9.3	43
≥ 32,000	11.5	0.0	0.0	0.0	0.0	7.7	0.0	26
<b>Wealth index quintile</b>								
Poorest	18.8	6.3	16.7	4.2	0.0	32.7	10.2	49
Second	12.5	2.5	17.9	5.1	0.0	30.8	7.7	40
Middle	22.2	4.4	8.7	0.0	2.2	20.0	4.4	49
Fourth	12.7	1.6	15.4	3.1	0.0	26.9	7.5	70
Richest	13.0	3.9	9.1	0.0	1.3	11.7	1.3	79
<b>Overall</b>	15.4	3.7	13.1	2.2	0.7	23.1	5.8	287

### 2.1.2. Anaemia in children

The haemoglobin levels of 249 children in the age group 6–59 months were assessed using the 'haemocue' method (cut off point - Hb <11.0 gms %). As shown in Table 2 the prevalence of anaemia in this group was 21.3 percent, with the highest percentage during the latter half of infancy (43.5 percent), and declining with increasing age, with the 48–59 months age group showing the lowest prevalence (5.5 percent). Male children showed a higher prevalence (24.4 percent) than females (18.5 percent). There was a decline in the prevalence of anaemia with increasing maternal education with no consistent pattern seen in relation to indicators of income and wealth.

**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
<b>Age of child (months)</b>		
6-11	43.5	23
12-23	36.5	52
24-35	21.9	73
36-47	10.9	46
48-59	5.5	55

<b>Sex of child</b>		
Male	24.4	119
Female	18.5	130
<b>Sector</b>		
Urban	.0	4
Rural	21.6	245
Estate		
<b>Mother's education</b>		
No schooling	100.0	1
Primary	27.8	18
Secondary	21.4	70
Passed O' Level	22.9	83
Higher	20.0	55
<b>Monthly household income</b>		
< 9,000	23.2	82
9,000 – 13,999	26.8	56
14,000 – 19,999	21.6	51
20,000 – 31,999	10.8	37
≥ 32,000	19.0	21
<b>Wealth index quintile</b>		
Poorest	22.7	44
Second	32.4	37
Middle	20.0	40
Fourth	16.9	59
Richest	18.8	69
<b>Overall</b>	21.3	249

### 2.1.3. 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 21.5 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 12 – 23 months at the time of the study had the highest prevalence of LBW of 26.4 percent.

The prevalence was higher among female newborns than males. The prevalence in the urban sector ( 27.2 percent) was higher than that of the rural sector( 21.5 percent). 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  $2.89 \pm 0.49$  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	18.5	81.5	2.85	.43	27
6-11	12.5	87.5	2.98	.50	25
12-23	26.4	73.6	2.85	.48	55
24-35	22.2	77.8	2.91	.56	75
36-47	19.1	80.9	2.89	.50	49
48-59	23.2	76.8	2.86	.43	56
Sex of child					
Male	15.2	84.8	2.98	.46	136
Female	27.2	72.8	2.80	.50	151
Residence					
Urban	25.0	75.0	2.94	.38	4
Rural	21.5	78.5	2.88	.49	283
Mother's education					
No schooling		100.0	3.70	.	1
Primary	31.6	68.4	2.82	.50	20
Secondary	18.7	81.3	2.89	.46	77
Passed O' Level	20.9	79.1	2.87	.51	91
Higher	21.2	78.8	2.98	.47	66
Monthly household income (n=2592)					
< 9,000	20.7	79.3	2.84	.43	90
9,000 – 13,999	31.7	68.3	2.81	.58	62
14,000 – 19,999	8.3	91.7	3.04	.41	63
20,000 – 31,999	23.3%	76.7	2.97	.47	43
≥ 32,000	23.1	76.9	2.76	.58	26
Wealth index quintile					
Poorest	25.5	74.5	2.79	.40	49
Second	25.6	74.4	2.75	.50	40
Middle	19.1	80.9	2.94	.47	49
Fourth	21.7	78.3	2.95	.52	70

Background characteristic	Birth Weight				Number of children
	< 2500g (%)	≥ 2500g (%)	Mean (kg)	SD	
Richest	18.2	81.8	2.92	.51	79
<b>Overall</b>	21.5	78.5	2.89	.49	287

## 2.2. Nutritional status of women of 15-49 years

### 2.2.1. Non pregnant women ( using Body Mass Index )

A total of 222 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 , 20.4 percent had BMI less than 18.5, 22.3 percent with values between 25 and 29 (overweight ) and 4.7 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 (57.1 percent) with a substantial decline in the age groups 20-29 years ( 29.0 percent) and 30-39 years (12.7 percent). Of all non-pregnant women studied, 27.0 percent were either overweight or obese. This percentage increased with increasing age, most marked after 30 years of age. There were only 2 women in the urban sector who had low BMI.

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
	thin (BMI<18.5)	Normal (BMI=18.5-24.9)	Overweight BMI=25.0-29.0)	Obese (BMI>30.0)	
<b>Age group (years)</b>					
15-19	57.1	42.9	0.0	0.0	7
20-29	29.0	58.0	10.1	2.9	72
30-39	12.7	51.0	30.4	5.9	108
40-49	18.2	48.5	27.3	6.1	35
<b>Sector</b>					
Urban	100.0	0.0	0.0	0.0	2
Rural	19.6	53.1	22.5	4.8	220
Estate	0.0	0.0	0.0	0.0	
<b>Women's education level</b>					
no schooling	0.0	0.0	100.0	0.0	1
Primary	20.0	60.0	20.0	0.0	16

Background Characteristics	BMI category (%)				Total women
	thin (BMI<18.5)	Normal (BMI=18.5-24.9)	Overweight (BMI=25.0-29.0)	Obese (BMI>30.0)	
Secondary	18.2	45.5	27.3	9.1	68
Passed GCE (O/L)	24.3	55.4	16.2	4.1	76
Higher	17.0	58.5	22.6	1.9	58
<b>Monthly household income</b>					
< 9,000	24.3	43.2	29.7	2.7	75
9,000 – 13,999	18.4	49.0	26.5	6.1	50
14,000 – 19,999	13.5	59.5	18.9	8.1	40
20,000 – 31,999	17.2	62.1	13.8	6.9	32
≥ 32,000	12.5	81.3	6.3	0.0	17
<b>Wealth index quintiles</b>					
Poorest	30.0	47.5	22.5	0.0	40
Second	10.3	51.7	27.6	10.3	31
Middle	27.0	43.2	29.7	0.0	38
Fourth	20.0	52.0	20.0	8.0	55
Richest	14.5	63.6	16.4	5.5	58
<b>Overall</b>	20.4	52.6	22.3	4.7	222

### 2.2.2. Pregnant women ( using Mid Upper Arm Circumference ( MUAC)

Nutritional status of the 25 pregnant women were assessed using MUAC. This assessment indicated that of this group 8.0 percent were under nourished.

### 2.2.3. Anaemia in women

Three groups of women were included in this component of the study : i). pregnant women (25) ii.) lactating women (110) iii.) all non pregnant women including lactating women (215).

As shown in Table xxxx, overall prevalence of anaemia among this group was 20.0 percent. Comparisons between subgroups was not possible due to limitations in numbers.

Among lactating women, the overall prevalence was 16.4 percent, lower than among the pregnant women with the highest values in the age group 40- 49 years.

The overall prevalence among this group was 21.4 percent , showing the highest prevalence in the 40 – 49 year age group.

**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
<b>Age group (years)</b>						
< 20	23.1	13	0.0	5	0.0	7
20-29	18.2	11	11.9	42	21.7	69
30-39	0.0	1	10.4	48	13.3	105
40-49	23.1	13	53.3	15	50.0	34
<b>Residence</b>						
Urban	0.0		0.0	1	0.0	2
Rural	20.0	25	16.5	109	21.6	213
Estate						
<b>Women's education level</b>						
no schooling	0.0		100.0	1	100.0	1
Primary	0.0		9.1	11	13.3	15
Secondary	40.0	10	29.4	34	27.3	66
Passed GCE (O/L)	9.1	11	10.3	29	21.3	75
Higher	0.0	3	9.1	33	16.1	56
<b>Monthly household income</b>						
< 9,000	30.0	10	17.9	39	24.0	75
9,000 – 13,999	50.0	2	16.0	25	20.4	49
14,000 – 19,999	14.3	7	0.0	19	18.4	38
20,000 – 31,999	0.0	4	25.0	16	20.0	30
≥ 32,000	0.0	2	40.0	5	23.5	17
<b>Wealth quintile of household</b>						
Poorest	25.0	4	34.8	23	30.0	40
Second	80.0	5	13.3	15	16.7	30
Middle	0.0	3	6.3	16	27.0	37
Fourth	0.0	6	10.7	28	15.4	52
Richest	0.0	7	14.3	28	19.6	56
<b>Overall</b>	20.0	25	16.4	110	21.4	215

## II.

**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, 20.7 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, 4.90 percent of children who reported to have had diarrhea during the specified period. Of them, 33.4 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, 96.6 percent were breast fed within the first hour of birth and 96.7 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, the percentage of children 6-8 months who were given breast milk and solid / semi solid foods for the total sample was 92.9 percent. In the total sample, 15.3 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, 97.7 percent of the children were given grains/roots/tubers, while 75 to 85 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 (16.5 percent), dairy products (28.5) food cooked with oil or fat were low (29.6 percent). Of this group, 29.6 percent had been given fortified food (commercially available cereals) with a much higher percentage (78.8 percent) having been given sugary food (chocolates, sweets, candies, cakes, biscuits etc.).

Of the 6-11 months of age group, none received eggs, and 20.0 percent food cooked with oil or fat. These percentages increased with age, even though there was no consistent pattern.

#### **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 FANTA<sup>4</sup>) . As shown in Table A 4, for all children in this age group, the IDDS was 4.6 . There was an increasing trend in the IDDS with increasing levels of maternal education.

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 5.5. Based on this value, the percentage of children yet to achieve the target was assessed. This percentage was 73.8 for the total sample. The percentage decreased with increasing income categories. .

Information on Minimum meal frequency, 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 5.5. For 93.2 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, 4.9 percent were looked after by a child under the age of 10 years, during the week preceding the interview.

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

### **2.5.2. Childhood education**

As shown in Table A 7, of the children aged 36-59 months, 4.5 percent had attended an early childhood educational programme and 98.9 percent of the children who have completed 5 years by 31<sup>st</sup> 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 ).

Information related to play items is given in Table A 9. None of the children were used as 'child labour'.

## **2.6. Use of health services**

### **2.6.1. Attendance at Child Welfare Clinic**

As shown in Table A 10, 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 thripasha 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 11).

### **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 12 , 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 13 . Of the mothers who attended ANC, 72.7 percent received iron tablets of whom 82.4 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 13).

Of the lactating mothers with a child under 6 months of age, 87.0 percent had received “thriposha” (Table A 14) and vitamin A mega dose has been given to 74.1 percent, after childbirth.

#### **2.6.7. 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 15). 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 16, 45.9 percent of the households had improved sources of water. The households with piped water inside the dwelling increased with increasing wealth quintiles, from 6.3 percent in the lowest quintile to 73.8 percent in the highest quintile. A similar increase was seen as the income increases. About 55 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 46.9 percent of the households included in the study. 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 (Table A 17).

### **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 18, the percentage of households using sanitary means of excreta disposal was 90.6 percent There is an increasing pattern of use is seen with the increase in household wealth index, ranging from 85.0 percent in the poorest to 100 percent in the richest.

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

Table A 19 shows the distribution of households that use both improved sources of drinking water and sanitary means of excreta disposal. For the district sample, 79.6 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 20 and A 21 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 22 and A 23 .

Table A 22 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 35.2 percent of all households. Only 56.9 percent of households consumed nuts/pulses, with a higher percentage in the urban sector (68.7 percent) .Of all households, 89.0 percent consumed meat/ poultry/ fish or dry fish, and this percentage showed a marked variation across sectors, income and wealth categories. Consumption of eggs was low , 33.3 percent. Only 68.07 percent 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 87.4. Consumption of oils and fats were 72.0 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 23. 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 24 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 25 . This table indicates that the mean HDDS for the total group was 7.5. The values ranged from 7.0 in the lowest income group to 8.4 in the highest income group

The HDDS obtained by the households in the highest wealth quintile (8.1) 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, 61.6 percent of the total household monthly income was spent on food, and 38.4 percent on other goods and services (Table A 26).

Proportion of households by type of food groups by source is given in Table A 27. Food availability at household, food stocks and food aid are given in tables A 28, 29 and 30 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 31 ). 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, 20.2 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 ( 17.8 percent) and purchased food on credit (17.4 percent). Between 10-15 percent, had borrowed food or reduced meal size. The main non-food strategies adopted were : borrowing money from relatives/neighbours (20.2 percent), pawning jewellery (17.2 percent) and using savings (12.2. percent).

The distribution of the households that adopted a specific food-related coping strategy by background characteristics is shown in Table A 32. 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 33, 27.3 percent of households had taken loans within the preceding month which were used for: income generation activities (38.9 percent), repair damaged house ( 18.5 percent), purchase food (13.6 percent), and repay loans(6.8 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..

#### **2.8.5.1. Household food consumption adequacy score (HFCAS)**

As shown in Table A 34, the mean HFCAS for all households was 62.7(SD=11.7). The score was marginally lower in rural sector (62.6) compared to the urban (66.9). Study of HFCAS categories indicates that none of the households had poor food consumption, 1.6 percent were borderline and 98.4 percent , had adequate food consumption. .

#### **2.8.5.2. 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 35. Of these households, 0.4 percent were found to be 'severely food insecure' with comparable percentages for 'moderately insecure' and 'secure' were 16.0 and 83.5 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 insecure households decreased with increasing number of members in the household from 18.0 percent in households with 1-2 persons to 9.3 percent in those with 7 or more (Table A 36).

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 downward trend of food insecurity from 40.0 percent in household heads with 'no schooling' to zero in the highest educational category. Similar trends were shown with increasing levels of household income (from 31.7 percent to zero percent) and increasing wealth quintiles (from 44.4 percent to 3.1 percent). However, these observations have to be interpreted with caution as numbers in some of the such categories are small.

## ANNEX I

**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 <i>Jeewanee</i> *
		Respiratory illness	Diarrhoea		
<b>Age of child (months)</b>					
<6	27	7.4	7.4	2	0.0
6-11	25	20.0	0.0	0	0.0
12-23	55	21.8	3.6	2	50.0
24-35	74	24.3	5.4	4	66.7
36-47	48	16.7	8.3	4	25.0
48-59	56	25.0	3.6	2	0.0
<b>Sex of child</b>					
Male	136	19.9	3.7	5	40.0
Female	149	21.5	6.0	9	28.6
<b>Sector</b>					
Urban	4	0.0	0.0	0	0.0
Rural	281	21.0	5.0	14	33.3
Estate					
<b>Mother's education</b>					
No schooling	1	0.0	0.0	0	0.0
Primary	20	35.0	15.0	3	33.3
Secondary	76	22.4	2.6	2	50.0
Passed O' Level	91	18.7	4.4	4	33.3
Higher	65	16.9	6.2	4	33.3
<b>Monthly household income</b>					
< 9,000	89	19.1	3.4	3	0.0
9,000 – 13,999	62	32.3	6.5	4	50.0
14,000 – 19,999	63	23.8	3.2	2	50.0
20,000 – 31,999	43	11.6	9.3	4	33.3

background characteristic	Total number of children	% reported symptoms of		Total No. of children reported Diarrhoea	% Given Jeewanee *
		Respiratory illness	Diarrhoea		
≥ 32,000	25	8.0	4.0	1	0.0
<b>Wealth quintile</b>					
Poorest	49	22.4	0.0	0	0.0
Second	40	22.5	10.0	4	25.0
Middle	48	31.3	0.0	0	0.0
Fourth	69	15.9	5.8	4	60.0
Richest	79	16.5	7.6	6	25.0
<b>Overall</b>	285	20.7	4.9	14	33.3

**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	
<b>Age of child in months</b>							
<6	100.0	100.0	100.0	100.0	0.0	0.0	27
6-11	100.0	95.5	100.0	100.0	0.0	20.0	25
12-23	100.0	95.5	93.2	100.0	0.0	18.5	55
<b>Sex of child</b>							
Male	100.0	97.8	95.5	100.0	87.5	18.8	52
Female	100.0	95.7	97.8	100.0	100.0	12.0	55
<b>Residence</b>							
Urban	100.0	100.0	100.0	100.0	0.0	0.0	1
Rural	100.0	96.7	96.6	100.0	92.9	15.5	106
Estate							
<b>Maternal education</b>							
no schooling							
Primary	100.0	100.0	87.5	100.0	100.0	10.0	10
Secondary	100.0	100.0	100.0	100.0	100.0	27.8	19
Passed GCE (O/L)	100.0	100.0	100.0	100.0	100.0	17.4	28
Higher	100.0	100.0	100.0	100.0	100.0	3.4	30
<b>Monthly household income</b>							
< 9,000	100.0	100.0	96.2	100.0	100.0	10.0	31
9,000 – 13,999	100.0	100.0	100.0	100.0	100.0	18.8	18
14,000 – 19,999	100.0	100.0	92.0	100.0	100.0	11.1	29

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	
20,000 – 31,999	100.0	100.0	100.0	100.0	75.0	7.1	17
≥ 32,000	100.0	66.7	100.0	100.0	100.0	50.0	11
<b>Wealth quintile of household</b>							
Poorest	100.0	100.0	91.7	100.0	100.0	12.5	18
Second	100.0	100.0	100.0	100.0	80.0	16.7	13
Middle	100.0	100.0	85.7	100.0	0.0	0.0	16
Fourth	100.0	100.0	100.0	100.0	100.0	16.7	28
Richest	100.0	89.3	100.0	100.0	100.0	22.6	32
<b>Overall</b>	100.0	96.7	96.6	100.0	92.9	15.3	107

**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	Legumes/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
<b>Age of child in months</b>										
6-11	92.0	52.0	72.0	52.0	12.0		64.0	20.0	12.0	52.0
12-23	98.2	52.7	80.0	81.8	29.1	27.3	83.6	34.5	41.8	85.5
24-35	97.3	45.3	73.3	69.3	30.7	14.7	84.0	25.3	29.3	81.3
36-47	98.0	63.3	81.6	79.6	28.6	18.4	87.8	30.6	38.8	81.6
48-59	100.0	62.5	73.2	83.9	32.1	14.3	91.1	33.9	12.	78.6
<b>Sex of child</b>										
Male	99.2	45.5	78.0	77.2	32.5	18.7	80.5	22.8	26.0	74.8
Female	96.4	62.8	74.5	73.7	24.8	14.6	87.6	35.8	30.7	82.5
<b>Residence</b>										
Urban	100.0	50.0	100.0	75.0	50.0	25.0	75.0	25.0		100.0
Rural	97.7	54.7	75.8	75.4	28.1	16.4	84.4	29.7	28.9	78.5
Estate										
<b>Maternal education</b>										
no schooling	100.0		100.0			100.0	100.0		100.0	
primary	100.0	50.0	66.7	55.6	16.7	5.6	77.8	22.2	16.7	88.9
Secondary	95.8	47.9	66.2	69.0	25.4	16.9	76.1	18.3	26.8	69.0

background characteristic	Grain s/Roo ts/Tub ers	Legu me/N uts	Vit A rich fruits and veget ables	Other fruits and veget ables	Dairy produ ct/Mil k / yogur t/ chees e*	Eggs	Meat/f ish/Po ultry/ organ meats	Food cooke d with oil or Fat	Fortifi ed Food	Sugar y Food
Passed GCE (O/L)	98.8	58.8	76.5	77.6	32.9	18.8	87.1	32.9	30.6	80.0
Higher	98.2	52.6	87.7	86.0	33.3	10.5	93.0	40.4	29.8	82.5
<b>Monthly household income</b>										
< 9,000	97.6	39.8	69.9	69.9	18.1	16.9	72.3	20.5	28.9	66.3
9,000 – 13,999	98.2	54.4	68.4	68.4	28.1	24.6	86.0	31.6	31.6	87.7
14,000 – 19,999	98.2	67.9	89.3	92.9	35.7	12.5	92.9	26.8	32.1	80.4
20,000 – 31,999	97.4	65.8	81.6	76.3	34.2	5.3%	86.8	36.8	15.8	84.2
≥ 32,000	95.7	60.9	82.6	69.6	39.1	26.1	95.7	47.8	30.4	87.0
<b>Wealth quintile of household</b>										
Poorest	100.0	47.7	61.4	72.7	13.6	11.4	81.8	25.0	34.1	75.0
Second	94.7	39.5	60.5	68.4	18.4	15.8	65.8	13.2	28.9	63.2
Middle	97.7	63.6	75.0	68.2	29.5	18.2	86.4	27.3	31.8	84.1
Fourth	96.7	50.8	82.0	82.0	26.2	14.8	88.5	29.5	29.5	85.2
Richest	98.6	64.4	89.0	79.5	43.8	20.5	90.4	42.5	21.9	80.8
<b>Overall</b>	97.7	54.6	76.2	75.4	28.5	16.5	84.2	29.6	28.5	78.8

(\*Breast milk was not included)

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

Background characteristic	IDDS (range 0-8)		% of individuals yet to achieve the target	Total number of children
	Mean	SD		
<b>Age of child in months</b>				
6-11	3.6	1.8	88.0	22
12-23	4.9	1.4	70.9	39
24-35	4.4	1.5	76.0	57
36-47	4.9	1.4	73.5	36
48-59	4.9	1.3	67.9	38
<b>Sex of child</b>				
Male	4.5	1.4	78.0	96
Female	4.7	1.6	70.1	96
<b>Residence</b>				
Urban	5.0	2.0	25.0	1
Rural	4.6	1.5	74.6	191
Estate	.	.		

Background characteristic	IDDS (range 0-8)		% of individuals yet to achieve the target	Total number of children
	Mean	SD		
<b>Maternal education</b>				
no schooling	4.0	.	100.0	1
Primary	3.9	1.4	94.4	17
Secondary	4.2	1.6	78.9	56
Passed GCE (O/L)	4.8	1.3	75.3	64
Higher	5.0	1.4	63.2	36
<b>Monthly household income</b>				
< 9,000	4.0	1.2	92.8	77
9,000 – 13,999	4.6	1.7	66.7	38
14,000 – 19,999	5.2	1.2	66.1	37
20,000 – 31,999	4.8	1.7	63.2	24
≥ 32,000	5.2	1.6	56.5	13
<b>Wealth quintile of household</b>				
Poorest	4.1	1.3	90.9	40
Second	3.8	1.5	92.1	35
Middle	4.7	1.3	79.5	35
Fourth	4.7	1.6	72.1	44
Richest	5.3	1.4	52.1	38
<b>Overall</b>	4.6	1.5	73.8	192

**Table A 5 :. Minimum meal frequency, minimum 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				
<b>Age group in months</b>						
6-8	75.0	0.0	3.4	64.3	42.9	14
9-11	44.4	100.0	3.5	45.5	27.3	11
12-14	60.0	0.0	5.4	100.0	42.9	7
15-17	50.0	80.0	4.2	81.0	52.4	21
18-20	76.9	66.7	4.8	87.5	75.0	16
21-23	100.0	66.7	4.2	72.7	72.7	11
<b>Sex of child</b>						
Male	64.5	62.5	4.1	74.4	56.4	39
Female	68.8	55.6	4.2	75.6	51.2	41

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				
<b>Residence</b>						
Urban	0.0	0.0	2.0	0.0	0.0	1
Rural	67.7	58.8	4.2	75.9	54.4	79
Estate	0.0	0.0	.	0.0	0.0	
<b>Maternal education</b>						
no schooling	0.0	0.0	.	0.0	0.0	
Primary	50.0	50.0	3.9	75.0	37.5	8
Secondary	54.5	50.0	2.9	38.5	23.1	13
Passed GCE (O/L)	62.5	66.7	4.4	77.3	54.5	22
Higher	80.0	100.0	4.6	90.5	76.2	21
<b>Monthly household income</b>						
< 9,000	57.9	60.0	3.8	70.8	50.0	24
9,000 – 13,999	72.7	50.0	3.9	53.8	46.2	13
14,000 – 19,999	78.9	66.7	4.6	86.4	68.2	22
20,000 – 31,999	40.0	100.0	3.8	66.7	33.3	12
≥ 32,000	100.0	25.0	5.1	100.0	62.5	8
<b>Wealth quintile of household</b>						
Poorest	62.5	60.0	4.0	61.5	46.2	13
Second	60.0	0.0	2.7	36.4	27.3	11
Middle	66.7	100.0	4.1	72.7	54.5	11
Fourth	68.8	100.0	4.6	89.5	68.4	19
Richest	70.0	33.3	4.7	88.5	57.7	26
<b>Overall</b>	66.7	58.8	4.2	75.0	53.8	80

**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			

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			
<b>Age in months</b>							
24-35	5.0	85.0	1.8	58.3	60	5.0	60
36-47	5.7	97.5	1.8	57.5	40	5.0	40
48-59	6.0	100.0	2.1	67.4	46	6.5	46
<b>Sex of child</b>							
Male	5.5	94.1	2.2	69.1	68	4.9	81
Female	5.5	92.3	1.7	53.8	78	4.8	104
<b>Residence</b>	0.0	0.0	0.0	0.0	0	0.0	0
Urban	6.0	100.0	4.0	100.0	2	0.0	2
Rural	5.5	93.1	1.9	60.4	144	4.9	183
Estate	0.0	0.0	0.0	0.0	0	0.0	0
<b>Maternal education</b>							
no schooling	6.0	100.0	0.0	0.0	1	0.0	1
Primary	5.0	87.5	1.1	37.5	8	0.0	12
Secondary	5.5	95.1	1.8	65.9	41	6.4	47
Passed GCE (O/L)	5.5	90.9	2.0	63.6	55	4.5	66
Higher	5.8	100.0	2.4	63.3	30	4.5	44
<b>Monthly household income</b>							
< 9,000	5.1	86.0	1.6	48.0	50	3.3	61
9,000 – 13,999	5.6	97.2	2.2	72.2	36	4.3	46
14,000 – 19,999	5.9	100.0	2.2	72.0	25	9.1	33
20,000 – 31,999	5.5	91.7	1.7	58.3	24	6.9	29
≥ 32,000	5.8	100.0	2.4	60.0	10	0.0	15
<b>Wealth quintile of household</b>							
Poorest	4.8	83.3	0.7	33.3	24	8.8	34
Second	5.0	87.5	2.4	83.3	24	3.7	27
Middle	5.7	92.6	2.1	66.7	27	3.1	32
Fourth	5.8	97.1	2.1	58.8	34	7.1	42
Richest	5.9	100.0	2.0	62.2	37	2.0	50
<b>Overall</b>	5.5	93.2	1.9	61.0	146	4.9	185

**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
<b>Age group in months</b>				
36-47	58.5	4.2	1.5	53
48-59	63.8	4.1	1.4	47
<b>Sex of child</b>				
Male	60.4	4.2	1.3	48
Female	61.5	4.1	1.6	52
<b>Residence</b>				
Urban	41.7	5.0	0.0	12
Rural	63.6	4.1	1.5	88
<b>Maternal education</b>				
no schooling	100.0	5.0	0.0	1
primary	57.1	4.5	0.6	7
Secondary	66.7	4.3	1.0	27
Passed GCE (O/L)	60.4	4.0	1.7	48
Higher	37.5	5.0	0.0	8
<b>Monthly household income</b>				
< 9,000	66.2	4.1	1.4	68
9,000 – 13,999	58.8	5.0	0.0	17
14,000 – 19,999	37.5	2.3	2.5	8
20,000 – 31,999	50.0	3.5	2.1	4
≥ 32,000	0.0			2
<b>Wealth quintile of household</b>				
Poorest	69.8	3.8	1.6	43
Second	58.6	4.6	0.9	29
Middle	50.0	3.6	2.1	16
Fourth	42.9	5.0	0.0	7
Richest	60.0	5.0	0.0	5
<b>Overall</b>	61.0	4.1	1.5	100

**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 <sup>st</sup> of Jan 2009
<b>Sex of child</b>				
Male	97.9	140	100	8
Female	100.0	131	100	14
<b>Residence</b>				
Urban	100.0	4	0	0
Rural	98.9	267	100	22
Estate				
<b>Monthly household income</b>				
< 9,000	98.7	79	100	6
9,000 – 13,999	100.0	50	100	1
14,000 – 19,999	100.0	44	100	2
20,000 – 31,999	96.6	29	100	2
≥ 32,000	100.0	13		
<b>Wealth quintile of household</b>				
Poorest	95.5	44	100	1
Second	100.0	39	100	5
Middle	100.0	54	100	6
Fourth	98.5	65	100	5
Richest	100.0	69	100	5
<b>Overall</b>	98.9	271	100	22

**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	88.3	91.7	88.1	94.9	86.7	60
36-47	90.0	97.4	92.5	95.0	95.0	40
48-59	87.0	95.7	93.5	97.8	93.5	46
Sex of child						
Male	83.8	92.6	92.6	97.1	92.6	68
Female	92.3	96.1	89.6	94.8	89.7	78
Residence						
Urban	50.0		50.0	100.0	0.0	2
Rural	88.9	95.8	91.6	95.8	92.4	144

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	
Estate							
<b>Maternal education</b>							
no schooling		100.0	100.0	100.0	100.0	100.0	1
Primary		75.0	87.5	87.5	75.0	75.0	8
Secondary		90.2	95.1	92.7	95.1	92.7	41
Passed GCE (O/L)		87.3	96.4	90.7	96.3	92.7	55
Higher		93.3	93.1	90.0	100.0	90.0	30
<b>Monthly household income</b>							
< 9,000		86.0	94.0	91.8	91.8	88.0	50
9,000 – 13,999		83.3	94.4	94.4	94.4	88.9	36
14,000 – 19,999		88.0	96.0	92.0	100.0	96.0	25
20,000 – 31,999		95.8	95.8	87.5	100.0	100.0	24
≥ 32,000		100.0	88.9	80.0	100.0	80.0	10
<b>Wealth quintile of household</b>							
Poorest		83.3	95.8	82.6	82.6	79.2	24
Second		91.7	100.0	95.8	95.8	100.0	24
Middle		77.8	92.6	92.6	96.3	88.9	27
Fourth		94.1	88.2	91.2	100.0	91.2	34
Richest		91.9	97.2	91.9	100.0	94.6	37
<b>Overall</b>		88.4	94.5	91.0	95.9	91.1	178

**Table A10 : 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	100.0	92.3	92.0	92.0	92.0	0.0	
	6-11	88.0	100.0	100.0	100.0	95.2	12.0	25
	12-23	94.5	100.0	100.0	100.0	96.2	12.7	55
	24-35	93.3	100.0	100.0	98.6	94.4	4.0	75
	36-47	95.9	91.1	82.6	82.6	80.0	6.1	49
	48-59	96.4	94.2	94.3	94.2	92.3	7.1	56

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		
		%	%					
Sex of child	Male	96.3	97.7	96.1	95.3	91.3	4.9	123
	Female	93.4	95.8	94.4	94.4	92.2	10.2	137
Residence	Urban	100.0	100.0	100.0	100.0	100.0	0.0	4
	Rural	94.7	96.6	95.1	94.7	91.6	7.8	256
	Estate							
Maternal education**	no schooling	100.0	100.0	100.0	100.0	92.2	0.0	1
	Primary	90.0	95.8	93.3	93.3	96.8	5.6	18
	Secondary	92.2	96.6	95.9	94.4	92.1	8.5	71
	Passed GCE (O/L)	97.8	96.9	93.3	85.4	100.0	7.1	85
	Higher	98.5	100.0	96.9	95.3	96.2	7.0	57
Monthly household income*** (	up to 9000	98.9	97.6	97.6	97.6	93.8	9.6	83
	9000-13999	94.7	93.2	93.1	93.1	91.4	3.5	57
	14000-19999	96.7	98.3	98.3	98.3	94.9	7.1	56
	20000-31999	97.6	95.1	92.7	92.7	90.2	10.5	38
	32000 +	91.7	84.0	84.0	84.0	84.0	8.7	23
Wealth quintile of household	Poorest	91.8	97.8	95.5	95.5	95.5	9.1	44
	Second	92.5	94.9	92.3	92.3	92.3	2.6	38
	Middle	91.8	100.0	97.9	97.9	97.9	9.1	44
	Fourth	97.1	94.1	94.0	92.4	92.4	8.2	61
	Richest	97.5	97.3	95.9	95.9	95.9	8.2	73
Overall		94.8	96.7	96.7	94.8	91.8	7.7	260

**Table A 11 : 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	110	94.50	91	93.4	51	84.3	82.4	3.8
	Female	125	92.80	103	86.4	50	78.0	78.0	10.2

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	
Residence	Urban	4	100.00	3	100.0	3	100.0	100.0	0.0
	Rural	231	93.50	191	89.5	98	80.6	79.6	7.1
	Estate	0	0.00	0	0.0	0	0.0	0.0	0.0
Maternal education	no schooling	1	100.00	1	100.0	6	66.7	66.7	14.3
	Primary	14	85.70	10	70.0	32	75.0	71.9	6.5
	Secondary	63	90.50	58	87.9	37	83.8	83.8	8.1
	Passed GCE (O/L)	81	95.10	68	92.6	22	86.4	86.4	4.5
	Higher	54	98.10	44	90.9	6	66.7	66.7	14.3
Monthly household income	up to 9000	76	92.10	64	87.5	29	75.9	75.9	6.9
	9000-13999	54	96.30	46	91.3	24	79.2	75.0	4.2
	14000-19999	47	93.60	36	86.1	24	91.7	91.7	8.0
	20000-31999	34	94.10	29	96.6	13	92.3	92.3	7.7
	32000 +	21	90.50	16	87.5	10	70.0	70.0	10.0
Wealth quintile of household	Poorest	40	92.50	36	91.7	17	76.5	76.5	11.8
	Second	31	90.30	27	88.9	15	73.3	73.3	13.3
	Middle	41	100.00	32	96.9	20	80.0	80.0	0.0
	Fourth	57	93.00	46	91.3	19	94.7	94.7	5.3
	Richest	66	92.40	53	83.0	30	80.0	76.7	6.5
Overall		235	93.60	194	89.7	101	81.2	80.2	6.9

**Table A 12: 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	20.0	60.0	20.0	7
	6-11	37.5	62.5	0.0	9
	12-23	55.0	40.0	5.0	23
	24-35	51.5	45.5	3.0	34
	36-47	52.9	47.1	0.0	21
	48-59	48.1	44.4	7.4	28

background characteristic		Source of provider (%)			Number of children who had diarrhoea or respiratory illness in previous 2 weeks
		Gov. sector	Private sector	Other	
Sex of child	Male	44.4	48.1	7.4	59
	Female	53.6	44.6	1.8	63
Residence	Urban	0.0	0.0	0.0	122
	Rural	49.1	46.4	4.5	
	Estate	0.0	0.0	0.0	
Mother's education	No schooling	100.0	0.0	0.0	1
	Primary	92.3	7.7	0.0	13
	Secondary	40.5	54.1	5.4	37
	Passed O' Level	44.8	55.2	0.0	35
	Higher	42.9	52.4	4.8	26
Monthly household income	up to 9000	57.6	36.4	6.1	35
	9000-13999	60.0	36.7	3.3	34
	14000-19999	38.7	54.8	6.5	31
	20000-31999	41.7	58.3	0.0	15
	32000 +	0.0	100.0	0.0	7
Wealth quintile of household	Poorest	68.8	31.3	0.0	17
	Second	52.9	47.1	0.0	20
	Middle	41.7	50.0	8.3	24
	Fourth	60.7	35.7	3.6	35
	Richest	28.0	64.0	8.0	26
Overall		49.1	46.4	4.5	122

**Table A 13 : Percent of pregnant mothers who attended antenatal clinics, and who received “poshana malla”, “thripasha” and Iron tablets, by background characteristics.**

background characteristic		Regular ANC Visits*		“poshana malla”,		“thripasha”		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										25
	Rural	91.3	23	27.8	18	55.6	18	72.7	82.4	22	

background characteristic		Regular ANC Visits*		“poshana malla”,		“thripasha”		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	
Maternal education	Estate	0.0	0	0.0	0	0.0	0	0.0	0.0	0	0
	no schooling	0.0	0	0.0	0	0.0	0	0.0	0.0	0	0
	Primary	0.0	0	0.0	0	0.0	0	0.0	0.0	0	0
	Secondary	90.0	10	37.5	8	62.5	8	88.9	77.8	9	10
	Passed GCE (O/L)	88.9	9	28.6	7	42.9	7	55.6	80.0	9	11
	Higher	100.0	3	0.0	2	50.0	2	100.0	100.0	3	3
Monthly household income	up to 9000	90.0	10	42.9	7	71.4	7	50.0	83.3	10	10
	9000-13999	100.0	2	0.0	1	0.0	1	100.0	50.0	2	2
	14000-19999	83.3	6	25.0	4	25.0	4	80.0	100.0	5	7
	20000-31999	100.0	3	25.0	4	75.0	4	100.0	66.7	3	4
	32000 +	100.0	2	0.0	2	50.0	2	100.0	100.0	2	2
Wealth quintile of household	Poorest	100.0	4	33.3	3	100.0	3	50.0	100.0	4	4
	Second	100.0	5	25.0	4	50.0	4	80.0	60.0	5	5
	Middle	100.0	3	0.0	1	100.0	1	100.0	100.0	3	3
	Fourth	60.0	5	40.0	5	20.0	5	50.0	100.0	4	6
	Richest	100.0	6	20.0	5	60.0	5	83.3	80.0	6	7
Overall		91.3	23	27.8	18	55.6	18	72.7	82.4	22	25

\*(First visits were excluded)

**Table A 14 : Percentage of lactating mothers who received “thripasha” and Vitamin A by background characteristics**

background characteristic		“thripasha” (child <6 months)		Vitamin A mega dose (child <24 months)	
		Percent	Total No of Women	Percent	Total No of Women
Sector	Urban	0.0	0	0.0	1
	Rural	87.0	23	75.5	53
Maternal education	no schooling	0.0	0	0.0	0
	primary	100.0	2	71.4	7
	Secondary	100.0	5	73.3	15
	Passed GCE (O/L)	83.3	6	78.6	14

background characteristic		“thripasha” (child <6 months)		Vitamin A mega dose (child <24 months)	
		Percent	Total No of Women	Percent	Total No of Women
	Higher	77.8	9	70.6	17
Monthly household income	up to 9000	100.0	7	68.4	19
	9000-13999	100.0	4	90.9	11
	14000-19999	80.0	5	76.9	13
	20000-31999	100.0	4	50.0	8
	32000 +	33.3	3	100.0	3
Wealth quintile of household	Poorest	100.0	3	72.7	11
	Second	100.0	2	71.4	7
	Middle	100.0	4	66.7	6
	Fourth	87.5	8	88.2	17
	Richest	66.7	6	61.5	13
Overall		87.0	23	74.1	54

**Table A 15: “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	0.0	0	0.0	1	0.0	1
	Rural	28.0	25	34.8	112	26.9	108
	Estate	0.0	0	0.0	0	0.0	0
Maternal education	no schooling	0.0	0	100.0	1	0.0	0
	primary	0.0	0	50.0	12	75.0	4
	Secondary	40.0	10	27.8	36	25.0	32
	Passed GCE (O/L)	27.3	11	34.5	29	29.8	47
	Higher	0.0	3	33.3	33	12.0	25
Monthly household income	up to 9000	30.0	10	51.3	39	41.7	36
	9000-13999	0.0	2	34.6	26	33.3	24
	14000-19999	28.6	7	10.0	20	15.0	20
	20000-31999	50.0	4	25.0	16	18.8	16
	32000 +	0.0	2	40.0	5	0.0	12
Wealth quintile of household	Poorest	50.0	4	60.9	23	41.2	17
	Second	20.0	5	43.8	16	53.3	15

background characteristic	Pregnant		Lactating		Non-pregnant & non-lactating	
	Percent	Total No of Women	Percent	Total No of Women	Percent	Total No of Women
Middle	0.0	3	41.2	17	42.9	21
Fourth	33.3	6	31.0	29	15.4	26
Richest	28.6	7	7.1	28	3.3	30
Overall	28.0	25	34.5	113	26.6	109

**Table A 16 :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	85.7	14.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
	Rural	35.6	25.9	12.3	1.5	11.4	0.2	0.0	0.0	13.1	86.9
	Estate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Income group	< 9,000	25.8	33.0	13.7	3.0	7.7	0.0	0.0	0.0	16.7	83.3
	9,000 -13,999	30.4	28.6	11.6	0.0	16.1	0.0	0.0	0.0	13.4	86.6
	14,000 – 19,999	47.6	20.0	11.4	1.0	11.4	0.0	0.0	0.0	8.6	91.4
	20,000 – 31,999	52.6	14.7	9.5	1.1	13.7	1.1	0.0	0.0	7.4	92.6
	≥ 32,000	66.7	11.1	4.4	0.0	11.1	0.0	0.0	0.0	6.7	93.3
Wealth index quintiles	Poorest	6.3	39.6	26.0	2.1	10.4	0.0	0.0	0.0	15.6	84.4
	Second	11.0	40.7	14.3	3.3	9.9	0.0	0.0	0.0	20.9	79.1
	Middle	20.9	27.8	11.3	2.6	16.5	0.9	0.0	0.0	20.0	80.0
	Fourth	47.3	22.6	8.9	0.7	11.6	0.0	0.0	0.0	8.9	91.1
	Richest	73.8	9.4	5.0	0.0	7.5	0.0	0.0	0.0	4.4	95.6
Overall		37.3	25.5	11.8	1.5	11.0	0.2	0.0	0.0	12.7	87.3

**Table A 17 : 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	95.2	90.5	0.0	9.5	9.5	0.0	0.0	0.0	95.2	21
	Rural	62.4	45.3	7.5	9.2	8.9	0.5	5.8	0.2	53.3	587
	Estate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
Wealth index quintiles	Poorest	58.3	37.5	15.6	11.5	1.0	1.0	2.1	0.0	50.0	96
	Second	54.9	37.4	12.1	6.6	2.2	0.0	4.4	0.0	46.2	91
	Middle	53.9	41.7	5.2	11.3	7.8	0.0	4.3	0.0	44.3	115
	Fourth	65.1	50.7	4.8	6.8	11.6	0.7	6.8	0.7	57.5	146
	Richest	76.9	58.1	3.1	10.0	15.6	0.6	8.1	0.0	67.5	160
Income group	< 9,000	54.9	39.5	8.6	8.2	3.9	0.9	5.6	0.0	45.9	233
	9,000 – 13,999	61.6	48.2	4.5	9.8	8.9	0.0	1.8	0.0	54.5	112
	14,000 – 19,999	69.5	53.3	3.8	10.5	11.4	0.0	4.8	0.0	61.9	105
	20,000 – 31,999	71.6	51.6	9.5	8.4	12.6	1.1	10.5	1.1	61.1	95
	≥ 32,000	84.4	62.2	6.7	8.9	22.2	0.0	6.7	0.0	75.6	45
<b>Overall</b>		63.5	46.9	7.2	9.2	8.9	0.5	5.6	0.2	54.8	608

**Table A 18 : 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	100.0	0.0	0.0	0.0	0.0	100.0	21
	Rural	90.3	3.2	2.2	2.0	2.2	90.3	587
	Estate	0.0	0.0	0.0	0.0	0.0	0	0
Wealth index quintiles	Poorest	85.0	5.2	3.4	3.4	3.0	85.0	233
	Second	90.2	3.6	2.7	1.8	1.8	90.2	112
	Middle	94.3	1.0	1.0	1.0	2.9	94.3	105
	Fourth	96.8	2.1	0.0	0.0	1.1	96.8	95
	Richest	100.0	0.0	0.0	0.0	0.0	100.0	45
Income group	< 9,000	66.7	10.4	10.4	10.4	2.1	66.7	96
	9,000 – 13,999	84.6	6.6	3.3	2.2	3.3	84.6	91
	14,000 – 19,999	97.4	0.9	0.0	0.0	1.7	97.4	115
	20,000 – 31,999	95.9	1.4	0.0	0.0	2.7	95.9	146
	≥ 32,000	98.8	0.0	0.0	0.0	1.3	98.8	160
Overall		90.6	3.1	2.1	2.0	2.1	90.6	608

**Table A 19 : 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	100.0	100.0	100.0	21
	Rural	86.9	90.3	78.9	587
	Sector	0.0	0.0	0.0	0
Wealth index quintiles	Poorest	83.3	85.0	70.8	233
	Second	86.6	90.2	79.5	112
	Middle	91.4	94.3	85.7	105
	Fourth	92.6	96.8	89.5	95

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
Richest		93.3	100.0	93.3	45
Income group	< 9,000	84.4	66.7	59.4	96
	9,000 – 13,999	79.1	84.6	65.9	91
	14,000 – 19,999	80.0	97.4	77.4	115
	20,000 – 31,999	91.1	95.9	87.0	146
	≥ 32,000	95.6	98.8	94.4	160
<b>Overall</b>		<b>87.3</b>	<b>90.6</b>	<b>79.6</b>	<b>608</b>

**Table A 20 : 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	100.0	0.0	0.0	0.0	0	21
	Rural	61.5	28.3	2.2	0.5	5.1	587
	Estate						
Wealth index quintiles	Poorest	58.8	30.5	3.9	0.9	6.4	233
	Second	58.9	31.3	1.8	0.0	4.1	112
	Middle	67.6	20.0	1.9	0.0	4.6	105
	Fourth	67.4	24.2	0.0	0.0	2.8	95
	Richest	77.8	15.6	0.0	2.2	5.5	45
Income group	< 9,000	45.8	39.6	8.3	3.1	8.4	96
	9,000 – 13,999	51.6	34.1	2.2	0.0	4.5	91
	14,000 – 19,999	48.7	40.9	1.7	0.0	4.4	115
	20,000 – 31,999	69.9	22.6	0.7	0.0	3.0	146
	≥ 32,000	83.1	10.6	0.0	0.0	3.4	160
<b>Overall</b>		<b>62.8</b>	<b>27.3</b>	<b>2.1</b>	<b>0.5</b>	<b>5.1</b>	<b>608</b>
%							

**Table A 21: 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	0.0	100.0	0.0	0.0	0.0	21
	Rural	11.4	87.7	0.4	0.4	11.4	587
	Estate	0.0	0.0	0.0	0.0	0.0	0
Wealth index quintiles	Poorest	17.1	81.0	1.0	1.0	17.1	233
	Second	7.8	92.2	0.0	0.0	7.8	112
	Middle	10.7	89.3	0.0	0.0	10.7	105
	Fourth	3.7	96.3	0.0	0.0	3.7	95
	Richest	0.0	100.0	0.0	0.0	0.0	45
Income group	< 9,000	17.2	81.0	1.7	0.0	17.2	96
	9,000 – 13,999	10.3	89.7	0.0	0.0	10.3	91
	14,000 – 19,999	9.7	88.7	0.0	1.6	9.7	115
	20,000 – 31,999	10.6	89.4	0.0	0.0	10.6	146
	≥ 32,000	4.2	95.8	0.0	0.0	4.2	160
<b>Overall</b>		11.3	87.8	0.4	0.4	11.3	608

**Table A 22 : 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
<b>No. of members in family</b>						
1-3	100.0	84.6	97.6	97.7	96.6	97.7
4-6	97.1	98.3	98.6	98.6	96.9	95.5
≥ 7	100.0	100.0	98.5	98.5	100.0	100.0
<b>Sector</b>						
Urban	100.0	100.0	100.0	100.0	100.0	100.0
Rural	97.7	97.6	98.3	98.3	97.4	97.1
Estate	0.0	0.0	0.0	0.0	0.0	0.0
<b>Monthly household income (LKR)</b>						
< 9,000	97.8	96.3	96.5	96.7	100.0	94.4
9,000 – 13,999	97.8	97.7	99.1	99.0	90.0	100.0

Background Characteristic	5-17 years		18-59 years		60 years or above	
	male	female	male	female	male	female
14,000 – 19,999	95.2	97.6	99.0	99.0	93.8	94.7
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	100.0	100.0
<b>Wealth quintile</b>						
Poorest	94.6	88.6	92.1	92.8	94.1	91.7
Second	100.0	100.0	98.8	98.8	100.0	94.4
Middle	95.2	97.9	100.0	100.0	88.9	95.7
Fourth	98.1	100.0	98.6	98.6	100.0	100.0
Richest	100.0	100.0	100.0	100.0	100.0	100.0
<b>Overall %</b>	97.8	97.7	98.4	98.4	97.5	97.3

**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
<b>No. of members in family</b>											
1-3	100.0	36.6	53.6	90.1	67.5	83.1	39.8	90.5	64.2	100.0	99.4
4-6	100.0	35.8	56.6	89.2	69.3	90.4	30.2	86.0	73.9	100.0	100.0
≥ 7	100.0	28.6	66.7	96.8	61.7	96.8	35.0	86.8	83.3	100.0	100.0
<b>Sector</b>											
Urban	100.0	50.0	61.1	100.0	76.2	90.0	26.7	90.0	66.7	100.0	100.0
Rural	100.0	34.7	56.8	89.9	67.7	89.0	33.5	87.2	72.7	100.0	99.8
Estate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Religion of the HH Head</b>											
Buddhist	100.0	31.8	57.1	90.6	68.6	88.8	31.6	87.0	72.2	100.0	99.8
Hindu	100.0	100.0	50.0	50.0	0.0	50.0	0.0	50.0	50.0	100.0	100.0
Islam	100.0	64.7	66.7	94.4	61.1	94.7	61.5	94.4	94.7	100.0	100.0
Catholic	100.0	100.0	0.0	100.0	0.0	0.0	0.0	100.0	0.0	100.0	100.0
<b>Monthly household income</b>											
< 9,000	100.0	37.1	53.8	87.5	56.9	82.4	35.9	82.8	68.7	100.0	99.6
9,000 – 13,999	100.0	45.7	51.0	85.5	71.3	95.5	34.5	89.2	76.0	100.0	100.0
14,000 – 19,999	100.0	12.8	55.4	92.4	78.2	94.2	36.7	89.2	74.5	100.0	100.0
20,000 – 31,999	100.0	26.7	62.1	96.8	75.6	88.3	25.9	88.8	78.6	100.0	100.0

Background Characteristic	Food Groups										
	Rice	Wheat	Nuts/pulses	vegetables	fruits	meat/poultry/fish	eggs	milk/dairy products	oils/fats	Coconut	Sugar
≥ 32,000	100.0	55.0	79.1	95.6	75.6	97.8	25.8	90.7	72.1	100.0	100.0
<b>Wealth quintile</b>											
Poorest	100.0	29.6	51.8	88.4	45.9	78.3	35.0	83.7	68.1	100.0	100.0
Second	100.0	50.0	44.4	83.3	62.7	84.1	28.6	78.3	65.8	100.0	98.9
Middle	100.0	27.7	54.3	92.2	69.4	89.2	20.0	85.3	72.1	100.0	100.0
Fourth	100.0	40.6	61.0	93.1	70.6	92.3	38.6	88.9	73.7	100.0	100.0
Richest	100.0	30.7	64.5	91.2	77.9	95.0	36.9	91.4	77.2	100.0	100.0
<b>Overall %</b>	100.0	35.2	56.9	90.2	68.0	89.0	33.2	87.4	72.5	100.0	99.8
<b>Total No.</b>	608	247	557	604	562	593	328	427	534	607	603

**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
<b>No. of members in family</b>											
1-3	100.0	5.2	12.2	82.6	30.2	65.1	3.5	57.0	26.2	98.3	92.4
4-6	99.5	4.6	16.4	83.0	23.5	72.0	2.7	55.5	39.5	99.7	94.1
≥ 7	100.0	6.2	16.9	87.7	30.8	75.4	6.2	58.5	47.7	98.5	92.3
<b>Sector</b>											
Urban	100.0	4.8	19.0	85.7	23.8	85.7	4.8	71.4	19.0	100.0	100.0
Rural	99.7	4.9	15.2	83.3	26.2	69.8	3.2	55.7	37.2	99.1	93.2
Estate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Religion of the HH Head</b>											
Buddhist	99.7	3.6	15.6	84.4	26.3	70.4	2.8	55.1	35.8	99.1	93.8
Hindu	100.0	50.0	0.0	50.0	0.0	50.0	0.0	0.0	50.0	100.0	100.0
Islam	100.0	31.6	5.3	68.4	21.1	73.7	21.1	84.2	68.4	100.0	78.9
Catholic	100.0	0.0	0.0	100.0	0.0	100.0	0.0	100.0	100.0	100.0	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
<b>Monthly household income</b>											
< 9,000	100.0	5.2	11.2	82.0	14.6	55.4	3.0	39.9	30.9	99.6	88.8
9,000 – 13,999	99.1	8.0	10.7	79.5	33.9	71.4	1.8	58.0	41.4	100.0	97.3
14,000 – 19,999	99.0	1.0	17.1	83.8	29.5	83.8	3.8	69.5	41.0	99.0	95.2
20,000 – 31,999	100.0	2.1	22.1	87.4	34.7	83.2	3.2	69.5	42.1	98.9	96.8
≥ 32,000	100.0	11.1	31.1	88.9	40.0	86.7	6.7	82.2	44.4	97.8	93.3

Background Characteristic	Food Groups										
	Rice	Wheat	Nuts/p ulses	vegetables	fruits	meat/ poultr y/fish	eggs	milk/diar y products	oils/fats	Coconut	Sugar
Wealth quintile											
Poorest	100.0	4.2	7.3	85.4	11.5	59.4	2.1	35.4	25.0	96.9	96.9
Second	100.0	7.7	13.2	82.4	22.0	60.4	2.2	35.2	30.8	100.0	95.6
Middle	99.1	3.5	13.0	82.6	23.5	67.8	1.7	50.4	39.5	100.0	91.3
Fourth	99.3	5.5	18.5	84.9	28.8	73.3	1.4	67.1	42.5	100.0	91.8
Richest	100.0	4.4	20.0	81.9	36.9	81.9	7.5	75.0	39.4	98.8	93.1
Overall %	99.7	4.9	15.3	83.4	26.2	70.4	3.3	56.3	36.6	99.2	93.4
Total No.	608	608	608	608	608	608	608	608	607	608	608

**Table A 25 : 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	7.2	1.6	80.8	172
4-6	7.5	1.5	72.8	371
≥ 7	7.9	1.4	64.6	65
Sector				
Urban	8.0	1.7	61.9	21
Rural	7.5	1.5	74.6	587
Estate				
Religion of the HH Head				
Buddhist	7.4	1.5	75.2	577
Hindu	6.0	4.2	50.0	2
Islam	8.8	1.3	42.1	19
Catholic	7.0	0.0	100.0	1
Other				
Monthly household income				
< 9,000	7.0	1.5	84.1	233
9,000 – 13,999	7.6	1.4	72.3	112
14,000 – 19,999	7.8	1.3	69.5	105
20,000 – 31,999	7.8	1.4	66.3	95
≥ 32,000	8.4	1.1	46.7	45
Wealth quintile				
Poorest	6.6	1.5	87.5	96
Second	6.8	1.4	89.0	91
Middle	7.3	1.5	75.7	115
Fourth	7.9	1.3	70.5	146
Richest	8.1	1.3	60.0	160
overall	7.5	1.5	74.2	608

**Table A 26 : Average monthly expenditure for food, services, health, education and productive assets, by background characteristics**

Background characteristic	Average monthly expenditure in LKR							Number of households
	food	liquor/tobacco	Utility services	health	education	productive assets	Total	
No. of members in family								
1-3	59.2	6.7	6.7	5.6	3.2	18.5	12415	43
4-6	14.6	2.1	2.1	1.1	1.2	78.9	69896	160
≥ 7	50.3	3.7	3.7	3.1	2.7	36.5	26134	40
Residence								
Urban	4.1	0.5	0.5	0.5	0.6	93.9	426020	3
Rural	27.6	3.4	3.4	2.0	2.1	61.5	36537	240
Estate								
Religion of household Head								
Buddhist	13.2	1.7	1.7	1.0	1.1	81.4	76236	225
Hindu	100.0	0.0	0.0	0.0	0.0	0.0	3508	1
Islam	51.7	4.2	4.2	3.2	1.4	35.2	22175	13
Catholic and other Christian	94.0	0.0	0.0	2.5	3.5	0.0	12744	1
Education of household Head								
No schooling	92.0	0.0	0.0	4.6	2.1	1.3	9847	5
Primary	69.2	7.5	7.5	4.9	3.2	7.7	13957	39
Secondary	42.6	6.6	6.6	2.8	3.0	38.4	22609	95
Passed O' Level	11.0	0.7	0.7	0.9	1.1	85.6	97245	88
Higher	82.1	0.0	0.0	7.0	10.9	0.0	12299	9
Monthly household income								
< 9,000	60.2	7.2	7.2	4.1	3.8	17.4	13535	82
9,000 – 13,999	67.2	6.8	6.8	4.2	5.6	9.4	13709	55
14,000 – 19,999	43.8	5.4	5.4	2.7	3.6	39.1	26630	46
20,000 – 31,999	26.0	5.4	5.4	2.0	2.4	58.8	42811	36
≥ 32,000	8.1	1.6	1.6	0.8	0.6	87.3	206653	20
Wealth quintile								
Poorest	55.1	9.3	9.3	3.9	3.1	19.2	13520	45
Second	60.2	6.6	6.6	4.8	5.2	16.6	15066	35
Middle	51.9	2.9	2.9	3.0	3.5	35.7	17956	40
Fourth	38.0	4.2	4.2	3.2	4.2	46.1	28194	59
Richest	12.2	3.2	3.2	0.8	0.8	79.7	10404	64

Background characteristic	Average monthly expenditure in LKR							Number of households
	food	liquor/tobacco	Utility services	health	education	productive assets	Total	
							3	
<b>Overall</b>	18.0	2.2	2.2	1.3	1.4	74.8	56592	243

**Table A 27 : 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
<b>Main source</b>												
Own production	26.8	0.8	2.9	18.5	30.9	0.7	6.4	4.9	1.4	14.6	34.3	1.2
Purchase	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Purchase on credit	68.6	95.5	92.3	77.8	66.4	91.7	89.4	90.5	95.1	82.2	60.1	93.9
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	0.3	0.0	0.9	0.8	0.0	0.7	0.3	0.3	0.9	0.6	0.5	0.8
Gift from family or relatives	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Food aid	0.3	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Cash assistance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0

**Table A 28: 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
<b>No. of members in family</b>				
1-3	18.1	7.8	34.9	172
4-6	25.6	10.7	11.1	371
≥ 7	21.5	12.5	-4.4	65
<b>Residence</b>				
Urban	4.8	11.8	1.6	21
Rural	23.7	11.2	6.8	587
Estate	0.0	0.0	0.0	0
<b>Education of household Head</b>				
No schooling	26.3	11.3	6.1	19

Background characteristic	% household food had run out during past 12 months	Average MAHFP	% yet to achieve the target	No. of Households
Primary	32.1	10.9	9.3	135
Secondary	22.6	11.2	6.5	235
Passed O' Level	19.6	11.3	5.6	184
Higher	0.0	12.0	0.0	17
<b>Monthly household income</b>				
< 9,000	30.6	10.9	9.0	233
9,000 – 13,999	30.4	11.1	7.7	112
14,000 – 19,999	15.2	11.5	4.5	105
20,000 – 31,999	10.5	11.7	2.7	95
≥ 32,000	6.7	11.8	1.7	45
<b>Wealth quintile</b>				
Poorest	52.6	9.9	17.1	96
Second	36.3	10.9	8.9	91
Middle	20.9	11.1	7.5	115
Fourth	9.6	11.7	2.3	146
Richest	11.9	11.7	2.5	160
<b>Overall</b>	<b>23.1</b>	<b>11.2</b>	<b>6.7</b>	<b>608</b>

**Table A 29 : 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 (%)		
<b>No. of members in family</b>						
1-3	9.5	54.4	33.1	3.0	4.88	169
4-6	24.5	45.4	29.9	0.3	4.86	368
≥ 7	36.5	36.5	27.0	0.0	4.09	63
<b>Sector</b>						
Urban	33.3	52.4	14.3	0.0	6.14	21
Rural	21.1	46.8	31.1	1.0	4.74	579
Estate						
<b>Education of household Head</b>						
No schooling	10.5	36.8	47.4	5.3	3.42	19
Primary	16.9	50.8	30.0	2.3	3.90	130
Secondary	19.2	48.7	31.6	0.4	4.63	234
Passed O' Level	25.8	44.0	29.7	0.5	5.20	182
Higher	41.2	47.1	11.8	0.0	9.35	17
<b>Monthly household income</b>						
< 9,000	11.8	47.2	40.6	0.4	3.94	229
9,000 – 13,999	25.0	45.5	28.6	0.9	4.34	112

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 (%)		
14,000 – 19,999	29.1	42.7	28.2	0.0	6.12	103
20,000 – 31,999	24.5	52.1	21.3	2.1	5.49	94
≥ 32,000	43.2	40.9	13.6	2.3	6.20	44
<b>Wealth quintile</b>						
Poorest	11.8	53.8	33.3	1.1	3.13	93
Second	22.5	47.2	29.2	1.1	4.43	89
Middle	19.1	40.0	40.0	0.9	4.88	115
Fourth	21.5	47.2	29.9	1.4	5.49	144
Richest	28.3	47.8	23.3	0.6	5.26	159
Overall	21.5	47.0	30.5	1.0	4.78	600

[illegible]

Poorest	37.5	6.0	5.3	4.3	0.0	0.0	2.0	0.0	0.0	96
Second	38.5	0.0	5.5	5.3	1.0	0.0	1.3	0.0	0.0	91
Middle	47.4	5.0	5.2	0.0	3.5	3.0	1.6	0.0	6.0	115
Fourth	64.1	0.0	5.8	3.3	1.8	0.0	2.3	0.0	0.0	146
Richest	79.2	0.0	5.8	4.0	2.7	1.5	2.9	0.0	0.0	160
<b>Overall</b>	56.9	5.5	5.4	4.3	2.1	2.3	2.2	0.0	6.0	608



**Table A 31 : 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	82.2	10.7	6.3	0.8	608
b.	Borrowed food	88.3	7.4	4.1	0.2	608
c.	Purchased food on credit	82.6	11.2	5.6	0.7	608
d.	Consumed seeds held for next season	100.0	99.0	0.8	0.2	608
e.	Reduced meal size	91.4	5.6	2.5	0.5	608
f.	Reduced number of meals per day	92.3	4.1	3.1	0.5	608
g.	Restricted consumption for adults	100.0	91.8	5.3	3.0	608
h.	Sent children to live with relatives	98.5	1.2	0.2	0.2	608
i.	Reduced expenditure on health and education	100.0	95.9	3.1	1.0	608
Non-food coping strategies				% of Households		Total Households
				No	Yes	
j.	Sold livestock			0.0	100.0	607
k.	Pawned jewellery			0.0	0.0	608
l.	Sold agricultural tools, seeds			92.9	7.1	608
m.	Sold other assets			97.4	2.6	608
n.	Used savings			99.8	0.2	608
o.	Borrowed money from relatives/neighbours			95.4	4.6	608
p.	Took children out of school to earn income			89.6	10.4	607

**Table A 32 : Food-related coping strategies adopted during the 30 days preceding the survey, by background characteristics (Take at least once who adopted out of total)**

Background	Percent of households adopted strategy at least once during the preceding 30 days
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Characteristic	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
<b>No. of members in Household</b>										
1-3	28	89.3	57.1	78.6	3.6	60.7	60.7	32.1	0.0	25.0
4-6	81	87.7	58.0	87.7	6.2	35.8	30.9	44.4	9.9	18.5
≥ 7	14	85.7	57.1	92.9	0.0	42.9	35.7	35.7	7.1	21.4
<b>Sector</b>										
Urban	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural	123	87.8	57.7	86.2	4.9	42.3	38.2	40.7	7.3	20.3
Estate										
<b>Monthly household income</b>										
< 9,000	59	96.6	61.0	78.0	6.8	54.2	54.2	54.2	11.9	32.2
9,000 – 13,999	31	87.1	61.3	96.8	3.2	25.8	22.6	32.3	0.0	12.9
14,000 – 19,999	16	62.5	37.5	87.5	6.3	31.3	18.8	31.3	6.3	12.5
20,000 – 31,999	10	80.0	50.0	90.0	0.0	40.0	10.0	10.0	10.0	0.0
≥ 32,000	2	100.0	100.0	100.0	0.0	50.0	50.0	0.0	0.0	0.0
<b>Wealth quintile</b>										
Poorest	43	93.0	74.4	79.1	7.0	53.5	58.1	55.8	9.3	27.9
Second	32	81.3	53.1	90.6	9.4	34.4	34.4	37.5	9.4	21.9
Middle	24	91.7	45.8	91.7	0.0	41.7	37.5	45.8	4.2	25.0
Fourth	15	80.0	33.3	80.0	0.0	26.7	0.0	6.7	6.7	0.0
Richest	9	88.9	66.7	100.0	0.0	44.4	22.2	22.2	0.0	0.0
<b>overall</b>	123	87.8	57.7	86.2	4.9	42.3	38.2	40.7	7.3	20.3

**Table A 33 : Households taken loans and reasons for borrowing money, by background characteristics**

Background	Received loan	Main reason for loan (% of the total received loan)
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Characteristic	No	%	Purchase food	Medical cost	Repair of damaged house	Transport	Repay loan	support additional members	Marriage	Income generation	other
<hr/>											
<b>No. of members in Household</b>											
1-3	35	20.8	13.9	2.8	16.7	0.0	11.1	0.0	0.0	38.9	16.7
4-6	112	30.5	14.7	5.5	19.3	0.9	6.4	0.0	0.9	34.9	17.4
≥ 7	17	26.2	5.9	0.0	17.6	0.0	0.0	0.0	0.0	64.7	11.8
<b>Sector</b>											
Urban	3	14.3	0.0	0.0	33.3	0.0	33.3	0.0	0.0	33.3	0.0
Rural	161	27.8	13.8	4.4	18.2	0.6	6.3	0.0	0.6	39.0	17.0
Estate											
<b>Monthly household income</b>											
< 9,000	81	35.2	16.3	7.5	11.3	0.0	7.5	0.0	1.3	40.0	16.3
9,000 – 13,999	31	27.9	16.7	0.0	20.0	3.3	6.7	0.0	0.0	36.7	16.7
14,000 – 19,999	24	23.3	8.3	4.2	29.2	0.0	8.3	0.0	0.0	29.2	20.8
20,000 – 31,999	16	17.2	0.0	0.0	31.3	0.0	0.0	0.0	0.0	62.5	6.3
≥ 32,000	10	22.2	10.0	0.0	30.0	0.0	10.0	0.0	0.0	20.0	30.0
<b>Wealth quintile</b>											
Poorest	26	27.1	24.0	8.0	4.0	0.0	8.0	0.0	0.0	44.0	12.0
Second	28	31.8	25.0	3.6	21.4	0.0	3.6	0.0	0.0	35.7	10.7
Middle	40	35.1	20.0	5.0	17.5	2.5	7.5	0.0	0.0	32.5	15.0
Fourth	34	23.4	0.0	6.3	21.9	0.0	6.3	0.0	0.0	34.4	31.3
Richest	36	22.9	2.7	0.0	24.3	0.0	8.1	0.0	2.7	48.6	13.5
<b>overall</b>	164	27.3	13.6	4.3	18.5	0.6	6.8	0.0	0.6	38.9	16.7

**Table A 34 : 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	61.3	11.8	0.0	2.3	97.7	172
4-6	62.9	11.3	0.0	1.6	98.4	371
≥ 7	65.7	12.8	0.0	0.0	100.0	65
Residence						
Urban	66.8	11.7	0.0	0.0	100.0	21
Rural	62.6	11.7	0.0	1.7	98.3	587
Estate	0	0	0.0	0.0	0.0	0
Religion of household Head						
Buddhist	62.2	11.2	0.0	1.7	98.3	577
Hindu	63.0	27.6	0.0	0.0	100.0	2
Islam	77.5	15.8	0.0	0.0	100.0	19
Catholic and other Christian	68.5	0	0.0	0.0	100.0	1
Education of household Head						
No schooling	58.6	11.0	0.0	0.0	100.0	19
Primary	60.9	13.0	0.0	1.5	98.5	135
Secondary	62.9	12.2	0.0	1.7	98.3	235
Passed O' Level	63.8	10.2	0.0	2.2	97.8	184
Higher	67.1	8.3	0.0	0.0	100.0	17
Monthly household income						
< 9,000	59.0	12.0	0.0	3.0	97.0	233
9,000 – 13,999	63.3	11.3	0.0	0.9	99.1	112
14,000 – 19,999	64.4	10.6	0.0	0.0	100.0	105
20,000 – 31,999	65.7	9.9	0.0	1.1	98.9	95
≥ 32,000	70.5	10.9	0.0	2.2	97.8	45
Wealth quintile						
Poorest	55.8	11.9	0.0	5.2	94.8	96
Second	60.1	11.6	0.0	1.1	98.9	91

Background characteristic	Mean (SD) HFCAS Score*		HFCAS Score Category (%)			No. of households
			Poor	Borderline	Adequate	
Middle	59.8	10.9	0.0	2.6	97.4	115
Fourth	65.5	9.6	0.0	0.0	100.0	146
Richest	67.9	10.8	0.0	0.6	99.4	160
<b>Overall</b>	62.7	11.7	0.0	1.6	98.4	608

**Table A 35 : Distribution (No and Percent) of households by food security Levels**

<div>Food Consumption</div> <div>Food Access (Percent expenditure on food)</div>	Poor (0-21)	Borderline (21.01 – 35)	Adequate (> 35.01)
<b>Poor (&gt; 90 %)</b>	0 (0.0)	1 (0.4)	37 (15.2)
<b>Average (75-90 %)</b>	0 (0.0)	2 (0.8)	117 (48.1)
<b>Good (&lt;75 %)</b>	0 (0.0)	0 (0.0)	86 (35.4)

**Table A 36 : Food Security Levels**

Background characteristic	Food Security Level			No. of households
	Food Secure (%)	Moderately Food Secure (%)	Food Insecure (%)	
<b>No. of members in family</b>				
1-3	69.8	27.9	2.3	43
4-6	85.6	14.4	0.0	160
≥ 7	90.0	10.0	0.0	40
<b>Sector</b>				
Urban	100.0	0.0	0.0	3
Rural	83.3	16.3	0.4	240
Estate	0.0	0.0	0.0	0
<b>Education of household Head</b>				
No schooling	60.0	40.0	0.0	5
Primary	82.1	17.9	0.0	39
Secondary	80.0	20.0	0.0	95
Passed O' Level	87.5	11.4	1.1	88
Higher	100.0	0.0	0.0	9
<b>Monthly household income</b>				
< 9,000	68.3	30.5	1.2	82
9,000 – 13,999	85.5	14.5	0.0	55
14,000 – 19,999	93.5	6.5	0.0	46

20,000 – 31,999	94.4	5.6	0.0	36
≥ 32,000	100.0	0.0	0.0	20
<b>Wealth quintile</b>				
Poorest	55.6	42.2	2.2	45
Second	85.7	14.3	0.0	35
Middle	75.0	25.0	0.0	40
Fourth	94.9	5.1	0.0	59
Richest	96.9	3.1	0.0	64
<b>Overall</b>	<b>83.5</b>	<b>16.0</b>	<b>0.4</b>	<b>243</b>

## ANNEX 2

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

Step1: 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 footnote<sup>5</sup>. 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.

<sup>5</sup> Eight food groups were used to calculate the Food consumption adequacy score.

<b>Food group</b>	<b>Food times</b>
1. Staple foods (starches)	Rice, bread / chapati /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

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

Figure X. Assessment of food insecurity levels

<b>Food consumption</b>	<b>Poor</b>	<b>Borderline</b>	<b>Adequate</b>
<b>Food access</b>			
<b>Poor</b>	<i>Severely food insecure</i>	<i>Severely food insecure</i>	<i>Moderately food insecure</i>
<b>Average</b>	<i>Severely food insecure</i>	<i>Moderately food insecure</i>	<i>Food Secure</i>
<b>Good</b>	<i>Moderately food insecure</i>	<i>Food Secure</i>	<i>Food Secure</i>