Nutrition and Food Security Survey in NuwaraEliya District in 2009

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District profile - Nuwara Eliya

Nuwara Eliya district is one of the three districts in the Central province of Sri Lanka. Situated at 1,868 metres above sea level and an area where tea plantations are in abundance. Nuwara Eliya 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 Nuwara Eliya district is given in Figure 1.

The district includes areas with a wide range of agricultural practices. In addition to tea plantations, this district is one of the main vegetable growing areas.

Administratively, the district is divided into 5 Divisional Secretary (DS) divisions and 491 Grama Nildhari (GN) divisions. The local government institutions in the province include one Municipal Council (MC) , 2 Urban Councils and 5 Pradeshiya Sabahas[1]. The district includes a land area of approximately 1,741 sq.km. with a population of 742,000. (estimated for 2007).

Of the employed population within the province, 67.4..percent are engaged in agriculture, with the percentages employed in the service and industrial sectors being 23.7 percent. and 8.9 percent respectively.).

Western type of health services are provided y by the state sector, thrpugh 1 Base Hospital, 15 District Hospitals, 1 Peripheral Unit, 8 Rural Hospitals. 3 Central Dispensary /Maternity Homes and 21 Central Dispensaries. Preventive and promotive health services are provided through 19 Health Unit areas with Medical Officers of Health and field staff[2] .

The literacy rate among males is 88.2 percent with that for females being 79.4 percent. The percentage of households below the poverty line is 27.5 . The median income level of Rs. 11194. Is lower than that at national level (Rs.16,735)[3].

1.Methods

1.1. Selection of households

A sample of 574 households from the district of Nuwara Eliya were included in he 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

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[1] Department of Census and Statistics District Statistical Handbook 2007 ,
[2] Ministry of Health , Sri Lanka, Annual Health Bulletin
[3] Department of Census and Statistics, Household Income and Expenditure Survey 2006 /07.

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 measuresments 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

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A total of 574 households from the Nuwara Eliya district were included in the survey. Of them , 46.7 percent were in the rural sector, 8.4 percent in the urban sector and 44.9 percent in the estate sector.

2.1 Nutritional status of children

2.1.1 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). .

A total of 345 children under five years were i included in the survey. As shown in Table 1, among all children in the age group 0–59 months, 40.9 percent were stunted, 11.0 percent wasted and 36.1 percent were underweight . Severe stunting was seen among 12.3 percent of the total group, with the comparable figures for severe wasting and severe underweight being 3.0 percent and 5.5 percent respectively. The percentage of children with weight for height values more than +2 SD was 0.3 percent.

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 highest during the second six months of life and shows high values in the higher age groups even though there was no consistent pattern. The prevalence of wasting was highest in the 36 – 47 month age group with no consistent pattern with age. . Prevalence of underweight was relatively low during the first 6 months, with a tendency to have higher values with increasing age. .

The percentage of children with stunting, wasting and underweight were higher among females.. Comparison between sectors show that the prevalence of all three indicators – stunting, wasting and underweight - was highest in the estate sector, with the urban sector showing the lowest prevalence.

There was no pattern seen in the prevalence of stunting, wasting and underweight in relation to monthly household income and wealth quintiles. However, there seems to be a decln9ing prevalence of all indicators, with increasing level of maternnal education.

Prevalence of severe stunting, was highest in the fourth year of life (18.5 percent), among females (13.4 percent), markedly higher in the estate sector (16.8 percent), with lower levels reported among the higher maternal educational categories and higher income levels. Regarding severe wasting, the prevalence was high in the first 6 months of life, in the estate sector, with no consistent pattern seen in relation to maternal educational status and the two indicators of economic status.

Table 1 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	15.0	5.0	9.5	4.8	4.8	22.7	4.5	33
6-11	58.3	12.5	8.0	0.0	0.0	30.8	3.8	27
12-23	42.9	11.4	8.7	4.3	0.0	21.4	2.9	81
24-35	32.4	7.4	11.8	4.4	0.0	34.8	5.8	75
36-47	45.8	18.1	14.1	2.8	0.0	46.5	8.5	76
48-59	44.7	14.9	10.6	0.0	0.0	53.2	6.4	53
Sex of child								
Male	37.1	11.4	9.0	3.0	0.0	32.5	5.3	188
Female	45.5	13.4	13.4	3.0	0.7	40.4	5.9	157
Sector								
Urban	27.0	8.1	5.4	2.7	0.0	21.6	0.0	38
Rural	35.1	6.2	9.3	1.0	0.0	35.4	3.0	113
Estate	47.3	16.8	13.2	4.2	0.6	39.6	8.3	194
Mother's education								
No schooling	70.6	17.6	5.9	0.0	0.0	52.9	0.0	20
Primary	45.2	28.6	19.0	7.1	0.0	50.0	9.5	47
Secondary	49.0	14.4	11.4	1.9	1.0	32.7	7.5	116
Passed O' Level	27.8	5.6	6.9	2.8	0.0	29.7	4.1	81
Higher	20.8	0.0	4.3	0.0	0.0	17.4	0.0	30
Monthly household income								
< 9,000	44.4	15.9	15.9	4.8	0.8	36.5	10.3	142
9,000 – 13,999	40.2	10.3	5.7	1.1	0.0	34.8	2.2	99

Background characteristic	Height-for- age (%)		Weight-for-height (%)			Weight-for-age (%)		Total No of Children
	<-2SD	<-3SD	<-2SD	<-3SD	≥+2SD	<-2SD	<-3SD	
14,000 – 19,999	33.3	12.8	5.3	2.6	0.0	31.6	2.6	45
20,000 – 31,999	32.3	6.5	9.7	0.0	0.0	38.7	0.0	37
≥ 32,000	44.4	0.0	22.2	11.1	0.0	33.3	11.1	12
Wealth index quintile								
Poorest	53.5	18.2	12.1	3.0	1.0	50.0	7.0	110
Second	38.6	14.8	11.2	3.4	0.0	31.1	7.8	106
Middle	37.7	6.6	9.8	3.3	0.0	31.7	3.2	68
Fourth	19.4	0.0	9.7	0.0	0.0	22.6	0.0	37
Richest	31.8	9.1	9.5	4.8	0.0	23.8	4.8	24
Overall	40.9	12.3	11.0	3.0	0.3	36.1	5.6	345

2.1. 2. Anaemia in children

The haemoglobin levels of 280 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 24.3 percent, with the highest percentage during the latter half of infancy (42.3 percent), and declining with increasing age, with the 48–59 months age group showing the lowest prevalence (2.2 percent). Male children showed a higher prevalence(25.6 percent) than females(22.6).
There was no consistent pattern in the prevalence of anaemia with increasing maternal education and 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
Age of child (months)		
6-11	42.3	26
12-23	38.6	70
24-35	23.9	67
36-47	18.1	72
48-59	2.2	45
Sex of child		
Male	25.6	156
Female	22.6	124
Sector		
Urban	27.3	33
Rural	18.0	89

Estate	27.2	158
Mother's education		
No schooling	12.5	16
Primary	27.5	40
Secondary	27.7	101
Passed O' Level	18.5	65
Higher	14.3	21
Monthly household income		
< 9,000	31.5	111
9,000 – 13,999	18.4	87
14,000 – 19,999	22.2	36
20,000 – 31,999	17.9	28
≥ 32,000	22.2	9
Wealth index quintile		
Poorest	26.3	95
Second	26.5	83
Middle	21.2	52
Fourth	22.6	31
Richest	15.8	19
	24.3	280
Overall		

2.1.3. Birth weight

The birth weights were obtained form 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 was 27.1 percent. 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 33.3 percent.

The prevalence was higher among female newborns than males. There was a marked inter sectoral difference, with the prevalence in the estate sector (33.6 percent) being more than double that in the urban sector (14.7 percent). There is a decline 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 2.72 ± 0.44 kg with no clear pattern observed between age groups, districts, and maternal educational levels. However, an upward trend was observed in relation to increasing income levels and higher 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	25.0	75.0	2.72	.34	33
6-11	28.6	71.4	2.63	.60	27
12-23	23.0	77.0	2.79	.45	81
24-35	30.5	69.5	2.72	.43	75
36-47	24.1	75.9	2.70	.47	76
48-59	33.3	66.7	2.66	.31	53
Sex of child					
Male	24.0	76.0	2.75	.45	188
Female	31.2	68.8	2.67	.41	157
Residence					
Urban	14.7	85.3	2.85	.47	38
Rural	21.4	78.6	2.78	.43	113
Estate	33.6	66.4	2.64	.42	194
Mother's education					
No schooling	33.3	66.7	2.68	.34	20
Primary	37.5	62.5	2.61	.50	47
Secondary	28.3	71.7	2.71	.50	116
Passed O' Level	27.7	72.3	2.79	.44	81
Higher	10.0	90.0	2.76	.30	30
Monthly household income (n=2592)					
< 9,000	32.7	67.3	2.60	.41	142
9,000 – 13,999	24.4	75.6	2.82	.48	99
14,000 – 19,999	29.7	70.3	2.67	.37	45
20,000 – 31,999	16.0	84.0	2.88	.42	37
≥ 32,000	30.0	70.0	2.65	.28	12
Wealth index quintile					
Poorest	34.9	65.1	2.61	.46	110
Second	29.2	70.8	2.68	.36	106
Middle	31.6	68.4	2.73	.38	68
Fourth	3.8	96.2	3.00	.50	37
Richest	8.3	91.7	2.82	.45	24
Overall	27.1	72.9	2.72	.44	345

2.2. Nutritional status of women of 15-49 years

2..2.1 Non pregnant women (using Body Mass Index)

A total of 191 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 the total sample of non-pregnant women, 22.5 percent had BMI less than 18.5, 11.8 percent with values between 25 and 29 (overweight) and 5.9 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 (50.0 percent) with a substantial decline in the age groups 20-29 years (24.3 percent) and 30-39 years (14.3 percent). Of all non-pregnant women studied, 17.7 percent were either overweight or obese. This percentage increased with increasing age, most marked after 30 years of age.

Marked inter-sectoral differences were seen, with the estate sector showing the highest percentage (34.5 percent) women with BMI less than 18.5, compared to 10.0 percent in the urban sector. Conversely, in the urban sector, there was a high percentage of women who were overweight (16.7 percent) and obese (16.7 percent).

There was a declining pattern in the prevalence of mothers with low BMI with higher wealth quintiles. The prevalence of overweight and obesity showed an increase with higher levels of 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	50.0	50.0	0.0	0.0	4
20-29	24.3	62.1	11.7	1.9	106
30-39	14.3	61.9	12.7	11.1	63
40-49	35.3	41.2	11.8	11.8	18
Sector					
Urban	10.0	56.7	16.7	16.7	31
Rural	13.7	65.8	12.3	8.2	74
Estate	34.5	56.0	9.5	0.0	86
Women's education level					
no schooling	30.0	60.0	0.0	10.0	10
primary	36.4	63.6	0.0	0.0	23
Secondary	21.3	60.0	12.0	6.7	75
Passed GCE (O/L)	21.4	53.6	19.6	5.4	58
Higher	10.5	68.4	10.5	10.5	20
Monthly household income					
< 9,000	27.4	58.9	6.8	6.8	77

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)	
9,000 – 13,999	22.2	50.0	22.2	5.6	54
14,000 – 19,999	11.1	70.4	11.1	7.4	27
20,000 – 31,999	12.5	68.8	12.5	6.3	16
≥ 32,000	20.0	80.0	0.0	0.0	5
Wealth index quintiles					
Poorest	28.3	62.3	7.5	1.9	53
Second	25.9	59.3	7.4	7.4	55
Middle	23.8	59.5	11.9	4.8	44
Fourth	8.0	60.0	16.0	16.0	26
Richest	7.7	53.8	38.5	0.0	13
Overall	22.5	59.9	11.8	5.9	191

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

Nutritional status of the 20 pregnant women were assessed using MUAC. Of this group, percent were identified as being undernourished.

2.2.3 Anaemia in women

Three groups of women were included in this component of the study : I). pregnant women (20) ii.) lactating women (511) iii.) all l non pregnant women including lactating women (188).

Pregnant women
As shown in Table 6, overall prevalence of anaemia among this group was 10.0 percent. Comparisons between subgroups require cautious interpretation due to limited number of pregnant women included in each of the sub-categories.

Lactating women
Among lactating women, the overall prevalence was 19.6 percent, higher than among the pregnant women.

All non-pregnant women
The overall prevalence of anaemia among this group was 23.9 percent , showing an increasing trend with increasing age. Inter-sectoral differences was similar to that among the lactating women with the estate sector showing highest value (33.6 percent) .

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

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	50.0	2	0.0	1	25.0	4
20-29	7.1	14	22.2	36	28.2	103
30-39	0.0	4	15.4	13	19.0	63
40-49	0.0		0.0	1	16.7	18
Residence						
Urban	0.0	1	0.0	6	16.1	31
Rural	15.4	13	6.7	15	13.7	73
Estate	0.0	6	30.0	30	35.7	84
Women's education level						
no schooling	50.0	2	33.3	3	30.0	10
primary	0.0	4	42.9	7	36.4	22
Secondary	11.1	9	20.0	20	28.0	75
Passed GCE (O/L)	0.0	5	14.3	14	19.3	57
Higher	50.0	2	0.0	3	10.5	19
Monthly household income						
< 9,000	11.1	9	28.6	28	25.7	74
9,000 – 13,999	0.0	1	6.7	15	22.2	54
14,000 – 19,999	0.0	4	0.0	2	18.5	27
20,000 – 31,999	0.0	3	50.0	2	37.5	16
≥ 32,000	0.0	2	0.0	1	20.0	5
Wealth quintile of household						
Poorest	0.0	6	12.5	16	17.0	53
Second	33.3	6	30.0	20	29.6	54
Middle	0.0	3	18.2	11	28.6	42
Fourth	0.0	1	0.0	2	23.1	26
Richest	0.0	4	0.0	2	15.4	13
Overall	10.0	20	19.6	51	23.9	188

2.3. Childhood Illnesses

Diarrhoea and respiratory infections are the two common illnesses that lead to increased morbidity and mortality among children under 5 years. The present study sought information from respondents related to the occurrence of these two illnesses during the two weeks preceding the interview.

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, 18.8 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 diarrhoea 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 diarrhoea, information on giving oral dehydration fluid using the packet 'Jeewani' during the episode of diarrhoea, was inquired into. Of the total group, 11.0 percent of children who reported to have had diarrhoea during the specified period. Of them, 38.9 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 . Of all children 99.2 percent were ' ever breastfed'. Of them, 89.5 percent were breast fed within the first hour of birth and 84.3 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, 27.6 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, 93.3 percent of the children were given grains/roots/tubers, while 60 to 70 percent were given vitamin A rich fruits and vegetables, other fruits and vegetables. Consumption of meat fish/ poultry/ organ meats was 52.6 percent. Those given eggs and dairy products were low, 21.5 and 17.6 percent respectively. Foods cooked with oil or fat were given to 39.1 percent of children and 18.7 percent had been given fortified food (commercially available cereals) with a much higher percentage (763 percent) having been given sugary food (chocolates, sweets, candies, cakes, biscuits etc.).

2.4.5. 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.

2,4.6. 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[4]) . As shown in Table A 4, for all children in this age group, the IDDS was 4.0 (SD =1.7) .

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 4.7 Based on this value, the percentage of children yet to achieve the target was assessed. This percentage was 80.4 for the total sample.

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 5.3. For 92.7 percent of children, an adult was engaged in more than three activities that promoted early

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[4] FANTA

learning, during the 3 days preceding the survey. Considering the children under 5 years of age, 6.2 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, 64.7 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 and100 percent of all children 5-10 years of age were attending Primary School (Table A 8).

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, 81.7 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, 71.8, 69.4, 47.1 and percent received advice on growth, nutrition and early childhood development respectively. Of this group, 8.0 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,74.2 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 68.9 and 55.9 percent respectively. Considering all children aged   36 months and ove49.5 percent had been given 3 mega doses of Vitamin A (Table A 12). .

2.5.3. 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 , 62.8 percent of the total group used services from the government sector, 29.2 percent from the private sector and 7.3 percent from other sectors.

2.5.4. Use of services at antenatal clinics
A total of 84.2 percent of the pregnant mothers had attended antenatal clinics regularly as shown in Table A 14 . All mothers who attended the ANC of whom 82.4. percent used the tablets daily.

2.5.5. 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, 80.0 percent received Thriposaha and 10.0 percent had received "poshana malla" (Table A 14).

Of the lactating mothers with a child under 6 months of age, 93.8 percent had received "thriposha" (Table A 15) and vitamin A mega dose has been given to 60.7 percent, after childbirth.

2.5.6. *Samurdhi* beneficiaries

In the households included in the study, there were a total of 137 non pregnant, non lactating women in the age group 15 – 49 years. Of this group, 15.7 percent received *Samurdhi* benefits , being members of households that were beneficiaries under the *Samurdhi* programme. (Table A 16).
Percentage beneficiaries among the pregnant women and lactating women were 14.8 percent and 14.3 percent respectively.

2.6. Water and Sanitation

2.6.1. Use of improved water sources

As shown in Table A 17, 59.6 percent of the households had improved sources of water. The households with piped water inside the dwelling increased with increasing wealth quintiles, from 4.3 percent in the lowest quintile to 894.6 percent in the highest quintile. A similar increase was seen as the income increases.
About 88.0 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 85.9 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

2.6.2. 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 82.2 percent

2.6.3. 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, 49.8 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.

2.7.Food Security and Coping Strategies

2,7,1, 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 more than 95 percent and was consistent across all sub groups studied. Bread and wheat products were consumed by 71.6 percent of all households.

Only 56.1 percent of households consumed nuts/pulses. Of all households, 65.8 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 , 28.5 percent. A total of 57.9 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 83.9. Oils and fats were consumed in 96.0 percent of the households 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.

2.7.2. 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 7.6 (SD 1.7). The values ranged from 6.9. in the lowest wealth quintile to 8.9 n the highest.

The HDDS obtained by the households in the highest wealth quintile category (8.9) 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 69.3 .The percentage showed a consistent decline with increasing income and wealth quintiles.

2.7.3. 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, 50.2 percent of the total household monthly income was spent on food, and 24.1 percent on other goods and services (Table A 27).

Food groups by their 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.

2.7.4. 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, 240.6 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 (32.8 percent) and purchased food on credit (19.8 percent). Between 20-25 percent, had borrowed food or reduced meal size. The main non-food strategies adopted were : borrowing money from relatives/neighbours (19.8 percent), pawning jewellary (23.2 percent) and using savings (13.3 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, 46.1 percent of households had taken loans within the preceding month which were used for: purchase food (51.9 percent), income generation activities (10.6 percent) and medical costs (8.7 percent).

2.7.5. 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..

2.7.5.1.Household food consumption adequacy score (HFCAS)

As shown in Table A 35, the mean HFCAS for all households was 68.5 (SD 18.0) . The scores differed between sectors showing high values in the urban and estate sector (72.1 and 72.8 percent respectively) with a lower value in the e estate sector , 63.8.   Study of HFCAS categories indicates that 1. 2 percent of the households had poor food consumption ,2. 5 percent were borderline and 96.3 percent , had adequate food consumption. .

2.7.5.2. 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= 271) are presented in Table 36. Of these households, 0.7 percent were found to be 'severely food insecure' with comparable percentages for 'moderately insecure' and 'secure' were 12.2 and 87.1 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. TAs shown in Table A 37, the percentage of secure households was highest I those with 4 – 6 persons(89.9 percent) with the lowest in those with over 7 persons (81.3 percent).

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	31	12.9	16.1	5	20.0
6-11	27	25.9	7.4	2	0.0
12-23	81	19.8	7.4	6	50.0
24-35	74	16.2	17.6	13	33.3
36-47	75	17.3	12.0	9	44.4
48-59	48	22.9	4.2	2	100.0
Sex of child					
Male	183	23.0	9.8	18	35.3
Female	153	13.7	12.4	19	42.1
Sector					
Urban	38	18.4	5.3	2	0.0
Rural	110	17.3	8.2	9	0.0
Estate	188	19.7	13.8	26	56.0
Mother's education					
No schooling	20	15.0	10.0	2	50.0
Primary	44	18.2	18.2	8	25.0
Secondary	111	20.7	11.7	13	58.3
Passed O' Level	81	14.8	8.6	7	42.9
Higher	30	13.3	13.3	4	0.0
Monthly household income					
< 9,000	136	16.9	14.7	20	30.0
9,000 – 13,999	99	20.2	10.1	10	44.4
14,000 – 19,999	43	27.9	7.0	3	100.0
20,000 – 31,999	37	5.4	2.7	1	0.0
≥ 32,000	12	25.0	16.7	2	50.0
Wealth quintile					

background characteristic	Total number of children	% reported symptoms of		Total No. of children reported Diarrhoea	% Given *Jeewanee* *
		Respiratory illness	Diarrhoea		
Poorest	105	21.9	15.2	16	43.8
Second	103	22.3	8.7	9	22.2
Middle	68	14.7	8.8	6	60.0
Fourth	37	16.2	10.8	4	0.0
Richest	23	4.3	8.7	2	100.0
Overall	336	18.8	11.0	37	38.9

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	93.9	96.9	100.0	0.0	10.3	33
6-11	100.0	100.0	76.9	92.3	0.0	44.4	27
12-23	98.5	73.1	90.9	100.0	0.0	28.2	81
Sex of child							
Male	100.0	83.6	88.9	97.2	100.0	31.2	81
Female	98.1	85.2	90.4	100.0	100.0	22.8	60
Residence							
Urban	100.0	66.7	100.0	100.0	100.0	30.8	13
Rural	100.0	91.7	97.1	97.1	100.0	22.0	43
Estate	98.7	83.5	84.6	98.7	100.0	30.0	85
Maternal education							
no schooling	100.0	100.0	100.0	100.0	100.0	0.0	6
Primary	100.0	73.3	80.0	100.0	100.0	14.3	15
Secondary	97.9	80.9	87.0	97.8	100.0	20.4	52
Passed GCE (O/L)	100.0	86.2	100.0	100.0	100.0	35.5	32
Higher	100.0	80.0	88.9	100.0	100.0	27.3	12
Monthly household income							
< 9,000	100.0	92.7	92.7	100.0	100.0	21.2	57
9,000 – 13,999	100.0	76.5	85.3	94.1	100.0	27.5	40
14,000 – 19,999	100.0	76.5	94.1	100.0	0.0	42.1	20
20,000 – 31,999	100.0	85.7	84.6	100.0	100.0	18.8	16
≥ 32,000	100.0	75.0	75.0	100.0	0.0	75.0	4
Wealth quintile of household							

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	
Poorest	100.0	87.9	87.9	97.0	100.0	33.3	35
Second	98.0	86.3	86.0	98.0	100.0	21.2	55
Middle	100.0	80.0	91.7	100.0	100.0	25.9	28
Fourth	100.0	75.0	100.0	100.0	100.0	42.9	14
Richest	100.0	83.3	100.0	100.0	0.0	25.0	9
Overall	99.2	84.3	89.5	98.4	100.0	27.6	141

Table A 3 : Percentage of children aged 6-59 months, who were given food items belonging to the different food groups,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	70.4	37.0	55.6	37.0	11.1	22.2	25.9	14.8	22.2	59.3
12-23	96.3	50.6	66.7	69.1	19.8	22.2	50.6	37.0	24.7	84.0
24-35	96.0	49.3	60.0	68.0	18.7	22.7	56.0	52.0	14.7	73.3
36-47	97.4	57.9	75.0	65.8	15.8	21.1	52.6	40.8	14.5	76.3
48-59	90.6	52.8	64.2	60.4	18.9	18.9	64.2	34.0	20.8	77.4
Sex of child										
Male	93.7	54.6	64.9	67.8	19.0	21.8	51.7	39.7	19.0	80.5
Female	92.8	47.1	66.7	58.7	15.9	21.0	53.6	38.4	18.8	71.0
Residence										
Urban	94.3	37.1	71.4	68.6	28.6	31.4	71.4	80.0	22.9	80.0
Rural	92.0	49.0	80.0	73.0	18.0	18.0	55.0	30.0	25.0	68.0
Estate	93.8	55.4	56.5	57.6	15.3	21.5	47.5	36.2	14.7	80.2
Maternal education										
no schooling	89.5	31.6	63.2	42.1	10.5	10.5	26.3	36.8		84.2
primary	85.7	52.4	54.8	52.4	2.4	26.2	38.1	31.0	19.0	59.5
Secondary	96.3	52.3	66.1	57.8	20.2	22.9	58.7	41.3	19.3	78.0
Passed GCE (O/L)	95.8	61.1	75.0	76.4	27.8	26.4	56.9	48.6	23.6	80.6
Higher	92.3	46.2	76.9	84.6	19.2	11.5	69.2	42.3	23.1	76.9
Monthly household income										
< 9,000	89.4	47.2	62.6	57.7	8.1	23.6	23.6	35.8	15.4	73.2

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
9,000 – 13,999	97.8	51.6	62.6	57.1	17.6	14.3	14.3	48.4	15.4	76.9
14,000 – 19,999	97.7	54.5	75.0	86.4	29.5	34.1	34.1	27.3	27.3	84.1
20,000 – 31,999	90.9	57.6	78.8	81.8	33.3	18.2	18.2	45.5	33.3	81.8
≥ 32,000	100.0	54.5	72.7	54.5	36.4	18.2	18.2	45.5	18.2	81.8
Wealth quintile of household										
Poorest	92.1	42.6	57.4	58.4	5.9	17.8	50.5	27.7	16.8	72.3
Second	94.6	45.7	60.9	62.0	13.0	26.1	53.3	35.9	19.6	79.3
Middle	95.1	70.5	78.7	67.2	31.1	23.0	54.1	54.1	13.1	68.9
Fourth	91.4	54.3	71.4	68.6	17.1	20.0	51.4	51.4	28.6	85.7
Richest	91.3	56.5	78.3	78.3	52.2	17.4	56.5	43.5	26.1	87.0
Overall	93.3	51.3	65.7	63.8	17.6	21.5	52.6	39.1	18.9	76.3

(*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**		
Age of child in months				
6-11	2.7	1.8	96.3	26
12-23	4.1	1.7	77.8	63
24-35	4.2	1.6	81.3	61
36-47	4.3	1.4	77.6	59
48-59	4.0	2.0	79.2	42
Sex of child				
Male	4.1	1.7	77.0	134
Female	3.9	1.7	84.8	117
Residence				
Urban	4.8	1.7	57.1	20
Rural	4.2	1.7	81.0	81
Estate	3.8	1.7	84.7	150
Maternal education				
no schooling	3.1	1.7	94.7	18
Primary	3.4	1.9	88.1	37
Secondary	4.2	1.6	81.7	89

Background characteristic	IDDS (range 0-8)		% of individuals yet to achieve the target	Total number of children
	Mean	SD		
Passed GCE (O/L)	4.7	1.4	69.4	50
Higher	4.4	1.8	73.1	19
Monthly household income				
< 9,000	3.8	1.7	85.4	105
9,000 – 13,999	4.1	1.6	83.5	76
14,000 – 19,999	4.6	1.6	72.7	32
20,000 – 31,999	4.5	2.0	63.6	21
≥ 32,000	4.2	1.5	72.7	8
Wealth quintile of household				
Poorest	3.5	1.6	93.1	94
Second	3.9	1.6	82.6	76
Middle	4.7	1.5	68.9	42
Fourth	4.3	1.9	77.1	27
Richest	4.7	2.1	52.2	12
Overall	4.0	1.7	80.4	251

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				
Age group in months						
6-8	20.0	.	1.5	10.0	.	10
9-11	29.4	.	3.2	35.3	11.8	17
12-14	38.9	.	3.6	48.0	20.0	25
15-17	44.4	.	3.9	61.5	15.4	13
18-20	33.3	36.4	3.8	61.5	26.9	26
21-23	28.6	20.0	3.8	58.8	17.6	17
Sex of child						
Male	36.2	25.0	3.5	49.3	19.4	67
Female	27.6	10.0	3.4	48.8	14.6	41
Residence						
Urban	33.3	25.0	3.8	50.0	10.0	10
Rural	35.0	20.0	3.6	53.3	16.7	30
Estate	32.0	18.8	3.4	47.1	19.1	68
Maternal education						
no schooling	0.0	0.0	2.4	20.0	0.0	5

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				
Primary	57.1	.	2.9	40.0	20.0	10
Secondary	28.1	27.3	3.3	40.0	11.1	45
Passed GCE (O/L)	43.8	14.3	4.5	78.3	26.1	23
Higher	25.0	50.0	3.5	75.0	37.5	8
Monthly household income						
< 9,000	31.3	.	3.3	50.0	15.8	38
9,000 – 13,999	35.0	16.7	3.3	34.4	12.5	32
14,000 – 19,999	33.3	28.6	4.3	63.2	21.1	19
20,000 – 31,999	37.5	50.0	3.9	75.0	41.7	12
≥ 32,000	0.0	0.0	4.0	66.7	0.0	3
Wealth quintile of household						
Poorest	14.3	20.0	2.9	38.5	15.4	26
Second	41.9	12.5	3.3	41.5	17.1	41
Middle	38.5	12.5	4.0	61.9	19.0	21
Fourth	42.9	60.0	3.4	50.0	25.0	12
Richest	25.0	.	4.6	87.5	12.5	8
Overall	32.9	20.0	3.5	49.1	17.6	108

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	5.4	95.2	2.0	58.1	62	0.0	62
36-47	5.4	92.5	2.2	52.2	67	9.0	67
48-59	5.4	89.8	2.0	55.1	49	12.2	49
Sex of child							
Male	5.5	94.8	2.1	58.3	96	4.0	125
Female	5.3	90.2	2.0	51.2	82	9.1	99
Residence							
Urban	5.8	100.0	2.9	60.9	23	3.7	27
Rural	5.3	90.6	2.1	59.4	64	3.6	84
Estate	5.4	92.3	1.9	50.5	91	8.8	113
Maternal education							
no schooling	3.4	50.0	1.4	40.0	10	0.0	11
primary	5.6	92.3	2.3	69.2	26	7.1	28
Secondary	5.4	91.2	2.5	54.4	57	7.8	77
Passed GCE (O/L)	5.7	100.0	2.2	63.6	44	5.2	58
Higher	5.5	94.4	1.6	50.0	18	0.0	21
Monthly household income							
< 9,000	5.3	90.7	2.5	65.3	75	9.2	87
9,000 – 13,999	5.4	91.7	1.5	43.8	48	3.1	64
14,000 – 19,999	5.7	95.7	1.2	34.8	23	9.1	33
20,000 – 31,999	5.6	94.4	3.2	72.2	18	0.0	23
≥ 32,000	5.3	100.0	2.0	50.0	8	11.1	9
Wealth quintile of household							
Poorest	5.0	82.5	1.7	52.4	63	8.2	73
Second	5.6	97.8	2.2	53.3	45	8.3	60
Middle	5.6	97.2	2.2	55.6	36	4.2	48
Fourth	5.7	100.0	2.8	65.0	20	4.0	25
Richest	5.9	100.0	2.0	57.1	14	0.0	18

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	5.3	92.7	1.4	55.1	178	6.3	224

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	52.2	5.1	1.2	67
48-59	81.6	5.0	0.9	49
Sex of child				
Male	64.5	5.0	1.2	62
Female	64.8	5.1	0.8	54
Residence				
Urban	66.7	5.3	0.7	15
Rural	69.2	4.7	0.7	39
Estate	61.3	5.2	1.2	62
Maternal education				
no schooling	71.4	5.5	1.0	7
primary	47.1	5.9	1.0	17
Secondary	66.7	5.0	1.1	42
Passed GCE (O/L)	62.5	4.7	1.1	24
Higher	81.8	5.0	0.0	11
Monthly household income				
< 9,000	60.8	5.2	1.2	51
9,000 – 13,999	64.5	4.9	1.2	31
14,000 – 19,999	68.8	4.9	0.3	16
20,000 – 31,999	58.3	4.9	0.4	12
≥ 32,000	100.0	5.0	0.0	3
Wealth quintile of household				
Poorest	70.5	5.2	1.0	44
Second	51.7	4.8	1.6	29
Middle	68.2	5.2	0.8	22
Fourth	54.5	5.0	0.0	11
Richest	80.0	4.9	0.3	10

Background characteristic	Percent attending Preschool or Daycare	Mean	SD	Total number of children
Overall	64.7	5.0	1.0	116

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 31st of Jan 2009
Sex of child				
Male	98.8	22	98.8	22
Female	99.3	13	99.3	13
Residence				
Urban	100.0	5	100.0	5
Rural	99.3	15	99.3	15
Estate	98.6	15	98.6	15
Monthly household income				
< 9,000	100.0	11	100.0	11
9,000 – 13,999	98.2	3	98.2	3
14,000 – 19,999	100.0	1	100.0	1
20,000 – 31,999	100.0	4	100.0	4
≥ 32,000	100.0	11		
Wealth quintile of household				
Poorest	99.1	13	99.1	13
Second	98.8	6	98.8	6
Middle	98.5	8	98.5	8
Fourth	100.0	6	100.0	6
Richest	100.0	2	100.0	2
Overall	99.1	35	99.1	35

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	

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	83.9	82.3	71.0	93.5	82.3	62
36-47	89.4	87.9	68.2	86.4	80.6	67
48-59	76.6	85.1	80.9	89.4	77.6	49
Sex of child						
Male	83.0	83.0	69.1	90.4	78.1	96
Female	85.2	87.7	76.5	88.9	82.9	82
Residence						
Urban	72.7	54.5	54.5	77.3	95.5	23
Rural	84.4	87.5	87.5	81.3	93.8	64
Estate	86.5	91.0	91.0	65.2	85.4	91
Maternal education						
no schooling	80.0	100.0	100.0	60.0	90.0	10
primary	84.0	84.0	56.0	72.0	65.4	26
Secondary	83.6	85.5	74.5	92.7	84.2	57
Passed GCE (O/L)	79.5	79.5	77.3	97.7	79.5	44
Higher	94.4	88.9	77.8	94.4	88.9	18
Monthly household income						
< 9,000	84.9	84.9	72.6	87.7	80.0	75
9,000 – 13,999	83.0	89.4	72.3	87.2	77.1	48
14,000 – 19,999	78.3	65.2	73.9	91.3	69.6	23
20,000 – 31,999	88.9	94.4	88.9	94.4	94.4	18
≥ 32,000	100.0	100.0	50.0	100.0	100.0	8
Wealth quintile of household						
Poorest	82.5	93.7	71.4	82.5	82.5	63
Second	81.8	84.1	63.6	93.2	75.6	45
Middle	91.2	79.4	82.4	94.1	83.3	36
Fourth	80.0	70.0	80.0	90.0	75.0	20
Richest	85.7	85.7	71.4	100.0	85.7	14
Overall	84.0	85.1	72.6	89.7	80.3	178

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

	paid work	unpaid work	mean hours per week	paid work	unpaid work	year
Age group in years						
9-11	1.2	6.0	2.0	1.2	6.0	83.0
12-14	1.0	3.1	3.3	1.0	2.1	96.0
Sex of child						
Male	0.8	3.1	1.7	0.8	2.3	131.0
Female	0.7	3.9	3.3	0.7	3.9	153.0
Residence						
Urban	3.6	7.1	2.0	3.6	7.1	28.0
Rural	0.0	3.1	1.7	0.0	2.3	131.0
Estate	0.8	3.2	4.5	0.8	3.2	125.0
Monthly household income						
< 9,000	1.2	4.8	3.3	1.2	4.8	83.0
9,000 – 13,999	2.3	4.5	2.0	2.3	2.3	44.0
14,000 – 19,999	0.0	2.9	1.0	0.0	2.9	35.0
20,000 – 31,999	0.0	0.0	0.0	0.0	0.0	29.0
≥ 32,000	0.0	0.0	0.0	0.0	0.0	5.0
Wealth quintile of household						
Poorest	1.1	1.1	8.0	1.1	1.1	90.0
Second	0.0	4.3	3.0	0.0	4.3	69.0
Middle	1.6	3.1	1.7	1.6	3.1	64.0
Fourth	0.0	5.3	.	0.0	5.3	38.0
Richest	0.0	8.7	1.0	0.0	4.3	23.0
Overall	0.7	3.5	2.6	0.7	3.2	284.0

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 Thriposha*	Total No. of Children
		%	%	Growth	Nutritional status	ECCD		
Age group in months	<6	72.7	93.1	72.4	69.0	37.9	0.0	
	6-11	85.2	95.5	65.2	69.6	39.1	3.7	27
	12-23	87.7	97.4	73.3	73.0	55.4	7.4	81
	24-35	85.3	95.6	77.9	70.6	52.2	12.0	75
	36-47	77.6	88.7	73.5	70.6	47.1	7.9	76
	48-59	77.4	100.0	60.0	60.0	35.6	5.7	53
Sex of child	Male	83.0	95.3	71.4	65.7	46.2	8.6	174
	Female	80.3	94.3	72.1	73.9	48.2	7.2	138
Residence	Urban	94.7	97.2	50.0	42.1	16.2	17.1	35
	Rural	86.7	97.1	87.3	84.3	64.7	13.0	100
	Estate	76.3	93.0	67.3	66.5	43.1	3.4	177
Maternal education**	no schooling	80.0	94.7	50.0	60.0	45.0	10.5	19
	primary	57.4	81.6	61.1	63.9	34.3	9.5	42
	Secondary	81.0	96.1	71.6	64.4	36.6	9.2	109
	Passed GCE (O/L)	91.4	98.7	74.0	74.4	61.5	6.9	72
	Higher	93.3	92.6	81.5	74.1	63.0	11.5	26
Monthly household income*** (	up to 9000	76.1	92.7	66.1	65.0	40.3	8.1	123
	9000-13999	82.8	93.5	67.4	61.3	38.7	7.7	91
	14000-19999	88.9	97.6	78.6	78.0	58.5	9.1	44
	20000-31999	91.9	100.0	85.3	85.3	67.6	9.1	33
	32000 +	91.7	100.0	100.0	100.0	72.7	9.1	11
Wealth quintile of household	Poorest	83.6	94.8	67.4	70.2	38.3	6.9	101
	Second	67.9	92.6	75.3	69.9	45.2	8.7	92
	Middle	91.2	96.8	66.7	66.7	57.1	4.9	61
	Fourth	86.5	96.9	72.7	63.6	37.5	8.6	35
	Richest	100.0	95.8	87.5	79.2	75.0	17.4	23
Overall		81.7	94.8	71.8	69.4	47.1	8.0	**????12**

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	157	76.4	124	67.7	59	55.9	49.2	8.1
	Female	122	71.3	101	70.3	52	55.8	50.0	12.7
Residence	Urban	34	91.2	30	80.0	15	66.7	60.0	0.0
	Rural	90	72.2	79	69.6	39	64.1	59.0	15.4
	Estate	155	71.6	116	65.5	57	47.4	40.4	9.5
Maternal education	no schooling	16	62.5	14	57.1	6	33.3	33.3	14.3
	primary	33	66.7	29	62.1	16	37.5	37.5	20.0
	Secondary	98	67.3	75	62.7	42	52.4	42.9	12.2
	Passed GCE (O/L)	68	86.8	56	80.4	24	79.2	70.8	7.1
	Higher	25	92.0	24	79.2	10	80.0	80.0	0.0
Monthly household income	up to 9000	109	67.0	88	69.3	48	56.3	33.3	11.1
	9000-13999	80	78.8	64	60.9	32	43.8	37.5	5.6
	14000-19999	42	88.1	33	81.8	15	66.7	42.9	11.8
	20000-31999	29	72.4	25	64.0	11	72.7	70.8	14.3
	32000 +	11	63.6	8	62.5	3	33.3	80.0	33.3
Wealth quintile of household	Poorest	89	73.0	77	70.1	43	46.5	33.3	18.2
	Second	80	68.8	52	61.5	26	50.0	37.5	3.8
	Middle	56	73.2	48	70.8	19	78.9	42.9	0.0
	Fourth	31	80.6	29	65.5	12	50.0	70.8	25.0
	Richest	23	91.3	19	84.2	11	72.7	80.0	0.0
Overall		279	74.2	225	68.9	111	55.9	49.5	10.3

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

	Source of provider (%)			Number of children who had diarrhoea or respiratory illness in previous 2 weeks
background characteristic	Gov. sector	Private sector	Other	

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	88.9	11.1	0.0	12
	6-11	71.4	28.6	0.0	16
	12-23	63.6	27.3	9.1	33
	24-35	63.3	30.0	6.7	34
	36-47	60.7	32.1	3.6	31
	48-59	47.8	34.8	17.4	24
Sex of child	Male	60.9	28.7	9.2	94
	Female	66.0	30.0	4.0	56
Residence	Urban	52.4	42.9	0.0	23
	Rural	64.1	30.8	5.1	43
	Estate	64.9	24.7	10.4	84
Mother's education	No schooling	71.4	0.0	28.6	9
	Primary	71.4	19.0	9.5	23
	Secondary	60.5	34.9	2.3	47
	Passed O' Level	52.8	36.1	11.1	39
	Higher	50.0	50.0	0.0	12
Monthly household income	up to 9000	71.7	24.5	3.8	60
	9000-13999	65.9	24.4	9.8	46
	14000-19999	42.9	33.3	19.0	21
	20000-31999	54.5	45.5	0.0	11
	32000 +	42.9	57.1	0.0	8
Wealth quintile of household	Poorest	77.3	13.6	9.1	50
	Second	75.6	17.1	7.3	45
	Middle	31.8	63.6	0.0	24
	Fourth	61.9	33.3	4.8	22
	Richest	11.1	66.7	22.2	9
Overall		62.8	29.2	7.3	150

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	0.0	1	0.0	1	0.0	1	100.0	100.0	1	1
	Rural	83.3	12	0.0	4	100.0	4	100.0	81.8	11	14
	Estate	83.3	6	20.0	5	80.0	5	100.0	80.0	5	6
Maternal education	no schooling	0.0	0	0.0	0	0.0	0	0.0	0.0	0	0
	primary	0.0	1	0.0	1	0.0	1	0.0	0.0	0	2
	Secondary	100.0	5	50.0	2	100.0	2	100.0	80.0	5	5
	Passed GCE (O/L)	77.8	9	0.0	4	75.0	4	100.0	75.0	8	9
	Higher	100.0	4	0.0	3	100.0	3	100.0	100.0	4	5
Monthly household income	up to 9000	80.0	10	25.0	4	50.0	4	100.0	66.7	9	10
	9000-13999	100.0	1	0.0	1	100.0	1	100.0	100.0	1	1
	14000-19999	75.0	4	0.0	1	100.0	1	100.0	100.0	3	4
	20000-31999	100.0	2	0.0	2	100.0	2	100.0	100.0	2	3
	32000 +	100.0	2	0.0	2	100.0	2	100.0	100.0	2	2
Wealth quintile of household	Poorest	85.7	7	0.0	3	100.0	3	100.0	83.3	6	7
	Second	60.0	5	0.0	3	66.7	3	100.0	75.0	4	6
	Middle	100.0	3	50.0	2	50.0	2	100.0	66.7	3	3
	Fourth	100.0	4	0.0	1	100.0	1	100.0	0.0	4	1
	Richest	85.7	7	0.0	1	100.0	1	100.0	100.0	6	4
Overall		84.2	19	10.0	10	80.0	10	100.0	82.4	17	21

*(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	75.0	4
	Rural	87.5	8	45.5	11
	Estate	100.0	6	69.2	13
Maternal education	no schooling	100.0	1	100.0	2
	primary	100.0	2	25.0	4

background characteristic		"thriposha" (child <6 months)		Vitamin A mega dose (child <24 months)	
		Percent	Total No of Women	Percent	Total No of Women
	Secondary	100.0	5	55.6	9
	Passed GCE (O/L)	100.0	5	77.8	9
	Higher	100.0	1	100.0	1
Monthly household income	up to 9000	100.0	10	66.7	21
	9000-13999	80.0	5	50.0	6
	14000-19999	0.0	0	0.0	0
	20000-31999	100.0	1	0.0	1
	32000 +	0.0	0	0.0	0
Wealth quintile of household	Poorest	80.0	5	55.6	9
	Second	100.0	6	60.0	10
	Middle	100.0	5	62.5	8
	Fourth	0.0	0	0.0	0
	Richest	0.0	0	100.0	1
Overall		93.8	16	60.7	28

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	0.0	1	16.7	6	8.0	25
	Rural	14.3	14	31.3	16	25.9	58
	Estate	16.7	6	6.3	32	7.4	54
Maternal education	no schooling	0.0	0	33.3	3	28.6	7
	primary	0.0	2	0.0	8	6.7	15
	Secondary	20.0	5	20.0	20	12.7	55
	Passed GCE (O/L)	22.2	9	6.7	15	16.3	43
	Higher	0.0	5	0.0	4	25.0	16
Monthly household income	up to 9000	20.0	10	9.7	31	13.0	46
	9000-13999	0.0	1	20.0	15	23.1	39
	14000-19999	25.0	4	50.0	2	12.0	25
	20000-31999	0.0	3	0.0	2	7.1	14
	32000 +	0.0	2	0.0	1	0.0	4

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	14.3	7	18.8	16	21.6	37
	Second	16.7	6	19.0	21	14.7	34
	Middle	33.3	3	7.7	13	16.1	31
	Fourth	0.0	1	0.0	2	12.5	24
	Richest	0.0	4	0.0	2	0.0	11
Overall		14.3	21	14.8	54	15.3	137

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

		Main source of drinking water									Improved source of drinking water*
		Improved sources									
Background Characteristics		Piped into dwelling	Piped into yard or plot	Public tap /standpipe	Tubewell/ borehole	Protected well	Protected spring	Rainwater collection	Bottled water	Unimproved sources	
Sector	Urban	62.5	10.4	20.8	0.0	0.0	0.0	0.0	0.0	6.3	93.8
	Rural	20.9	15.7	9.0	1.5	9.3	5.2	0.4	0.0	38.1	61.9
	Estate	6.2	5.4	24.0	0.0	1.6	13.6	0.0	0.0	49.2	50.8
Income group	< 9,000	9.8	9.0	18.4	0.4	6.6	9.8	0.0	0.0	45.9	54.1
	9,000 -13,999	15.4	9.2	25.4	1.5	3.1	10.0	0.8	0.0	34.6	65.4
	14,000 – 19,999	30.6	20.0	9.4	1.2	2.4	7.1	0.0	0.0	29.4	70.6
	20,000 – 31,999	25.7	10.8	9.5	0.0	8.1	8.1	0.0	0.0	37.8	62.2
	≥ 32,000	50.0	10.0	10.0	0.0	0.0	0.0	0.0	0.0	30.0	70.0
Wealth index quintiles	Poorest	4.3	13.0	25.5	0.6	2.5	7.5	0.0	0.0	46.6	53.4
	Second	6.3	7.5	21.8	1.1	7.5	8.0	0.0	0.0	47.7	52.3
	Middle	17.3	12.6	9.4	0.8	6.3	15.7	0.0	0.0	37.8	62.2

	None	Boil	Add bleach/chlorine	Strain through a cloth	Use water filter	Solar disinfection	Let it stand and settle	Other			
Fourth	39.7	11.0	6.8	0.0	5.5	4.1	1.4	0.0	31.5	68.5
Richest	84.6	7.7	0.0	0.0	0.0	0.0	0.0	0.0	7.7	92.3
Overall	17.8	10.6	16.7	0.7	5.1	8.5	0.2	0.0	40.4	59.6

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	95.8	87.5	25.0	6.3	0.0	0.0	0.0	0.0	95.8	48
	Rural	93.7	89.6	5.2	27.6	5.6	0.7	9.3	1.1	91.4	268
	Estate	80.6	76.7	3.1	14.0	1.9	0.8	3.1	0.0	78.3	258
Wealth index quintiles	Poorest	81.4	74.5	6.8	23.0	3.1	0.0	1.2	0.6	77.6	161
	Second	88.5	85.6	2.9	19.0	2.9	1.1	4.0	0.6	86.8	174
	Middle	90.6	87.4	6.3	18.1	3.1	0.0	7.9	0.8	89.0	127
	Fourth	91.8	86.3	6.8	15.1	4.1	2.7	6.8	0.0	90.4	73
	Richest	97.4	94.9	12.8	23.1	7.7	0.0	23.1	0.0	97.4	39
Income group	< 9,000	84.8	81.6	4.5	15.2	1.6	0.8	0.8	0.4	84.0	244
	9,000 – 13,999	87.7	84.6	7.7	19.2	4.6	0.0	4.6	0.0	86.2	130
	14,000 – 19,999	92.9	84.7	7.1	28.2	3.5	2.4	12.9	1.2	87.1	85
	20,000 – 31,999	91.9	86.5	6.8	21.6	6.8	0.0	13.5	1.4	89.2	74
	≥ 32,000	90.0	80.0	10.0	30.0	5.0	0.0	20.0	0.0	85.0	20
Overall		88.0	83.	5.9	19.	3.5	0.7	5.7	0.5	85.9	574

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		
			6		7					

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	85.4	8.3	0.0	2.1	4.2	85.4	48
	Rural	86.6	10.8	1.5	0.7	0.4	86.6	268
	Estate	77.1	7.0	1.6	12.4	1.9	77.1	258
Wealth index quintiles	Poorest	72.5	12.7	2.5	9.0	3.3	72.5	244
	Second	83.1	7.7	1.5	7.7	0.0	83.1	130
	Middle	92.9	5.9	0.0	1.2	0.0	92.9	85
	Fourth	94.6	4.1	0.0	1.4	0.0	94.6	74
	Richest	95.0	5.0	0.0	0.0	0.0	95.0	20
Income group	< 9,000	52.8	20.5	5.0	19.9	1.9	52.8	161
	9,000 – 13,999	87.9	8.6	0.0	1.7	1.7	87.9	174
	14,000 – 19,999	97.6	1.6	0.0	0.0	0.8	97.6	127
	20,000 – 31,999	97.3	1.4	0.0	0.0	1.4	97.3	73
	≥ 32,000	100.0	0.0	0.0	0.0	0.0	100.0	39
Overall		82.2	8.9	1.4	6.1	1.4	82.2	574

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	93.8	85.4	79.2	48
	Rural	61.9	86.6	54.1	268
	Sector	50.8	77.1	39.9	258
Wealth index quintiles	Poorest	53.4	52.8	27.3	161
	Second	52.3	87.9	46.0	174
	Middle	62.2	97.6	61.4	127
	Fourth	68.5	97.3	65.8	73
	Richest	92.3	100.0	92.3	39
Income group	< 9,000	54.1	72.5	38.9	244
	9,000 – 13,999	65.4	83.1	56.2	130
	14,000 – 19,999	70.6	92.9	67.1	85
	20,000 – 31,999	62.2	94.6	58.1	74
	≥ 32,000	70.0	95.0	70.0	20
Overall		59.6	82.2	49.8	574

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	72.9	22.9	2.1	0.0	5.1	48
	Rural	36.6	28.7	15.3	4.5	12.5	268
	Estate	11.6	51.6	8.5	5.8	10.0	258
Wealth index quintiles	Poorest	18.9	42.6	13.1	6.6	11.4	244
	Second	24.6	43.8	12.3	2.3	9.6	130
	Middle	50.6	23.5	5.9	4.7	10.9	85
	Fourth	36.5	35.1	9.5	4.1	10.1	74
	Richest	60.0	30.0	0.0	0.0	4.3	20
Income group	< 9,000	17.4	42.9	13.7	8.7	12.6	161
	9,000 – 13,999	13.8	47.7	13.8	4.0	10.2	174
	14,000 – 19,999	29.9	37.8	11.0	1.6	8.9	127
	20,000 – 31,999	50.7	26.0	5.5	5.5	11.5	73
	≥ 32,000	92.3	5.1	0.0	0.0	2.3	39
Overall		28.4%	28.4	38.5	11.1	4.7	574

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	0.0	95.2	0.0	0.0	4.8	480
	Rural	6.8	89.5	0.6	0.6	2.5	146
	Estate	5.1	90.9	0.5	1.5	2.0	480
Wealth index quintiles	Poorest	6.6	89.1	1.1	1.1	2.2	100
	Second	4.5	89.8	0.0	2.3	3.4	114
	Middle	5.0	95.0	0.0	0.0	0.0	106

Background Characteristics		Person collecting drinking water					Number of households
		Adult man	Adult woman	Male child (under 15)	Female child (under 15)	Other	
	Fourth	4.2	93.8	0.0	0.0	2.1	174
	Richest	0.0	100.0	0.0	0.0	0.0	108
Income group	< 9,000	4.8	87.9	1.6	2.4	3.2	26
	9,000 – 13,999	9.0	89.5	0.0	0.0	1.5	42
	14,000 – 19,999	1.2	96.4	0.0	0.0	2.4	94
	20,000 – 31,999	5.4	89.2	0.0	2.7	2.7	144
	≥ 32,000	0.0	100.0	0.0	0.0	0.0	320
Overall		5.5%	5.5	90.6	0.5	1.0	2.4

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/diary products	oils/fats	Coconut	Sugar
No. of members in family											
1-3	99.2	62.1	53.7	74.6	65.1	69.6	33.0	77.2	95.9	97.6	96.8
4-6	99.7	72.0	58.6	85.3	53.6	66.6	28.5	87.1	95.8	97.8	99.2
≥ 7	97.4	82.6	48.6	86.3	42.4	54.7	21.2	80.4	97.3	93.4	97.4
Sector											
Urban	97.9	81.8	39.6	91.7	48.8	69.6	34.2	89.7	97.9	97.9	100.0
Rural	100.0	53.1	53.7	85.9	69.3	72.8	28.4	85.9	94.6	97.7	98.5
Estate	98.8	84.4	61.7	78.4	37.6	57.3	27.4	80.6	97.2	96.5	98.0
Religion of the HH Head											
Budddhist	100.0	53.3	54.0	84.6	69.1	75.3	26.8	85.6	95.4	98.1	98.5
Hindu	98.2	87.9	62.1	80.6	35.7	51.3	28.1	82.5	97.3	96.4	98.2
Islam	100.0	88.9	30.8	85.2	50.0	75.0	35.0	92.0	96.4	92.9	100.0
Catholic	100.0	65.6	48.3	87.5	52.0	72.4	37.5	72.2	93.8	96.9	96.9
Monthly household income											
< 9,000	98.8	74.5	52.4	83.8	51.6	59.6	27.6	75.6	95.7	96.7	97.9
9,000 – 13,999	100.0	71.4	55.4	79.7	51.4	66.1	28.0	85.6	96.1	96.9	99.2
14,000 – 19,999	98.8	63.2	63.9	86.9	58.9	67.1	26.7	94.4	97.6	96.5	97.6
20,000 – 31,999	100.0	63.5	52.1	87.3	60.6	78.6	30.5	86.2	97.2	100.0	100.0
≥ 32,000	100.0	93.8	68.4	84.2	70.6	76.5	31.3	87.5	100.0	95.0	100.0
Wealth quintile											
Poorest	100.0	71.4	49.7	80.3	37.5	57.8	28.4	72.0	93.5	96.8	96.8
Second	98.8	76.5	54.6	80.0	48.6	60.1	26.2	86.3	95.9	98.3	99.4
Middle	98.4	74.3	62.0	88.5	63.0	67.2	31.9	85.1	99.2	96.0	98.4
Fourth	100.0	57.1	55.9	82.2	68.7	79.4	24.1	87.7	95.7	97.2	98.6
Richest	100.0	67.9	69.2	92.1	83.8	87.2	35.5	97.2	97.4	97.4	100.0
Overall %	99.3	71.6	56.1	83.1	54.9	65.8	28.5	83.9	96.0	97.2	98.4
Total No.	571	482	540	555	470	514	393	411	556	568	566

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

Background	Food Groups

Characteristic	Rice	Wheat	Nuts/pulses	vegetables	fruits	meat/poultry/fish	eggs	milk/diary products	oils/fats	Coconut	Sugar
No. of members in family											
1-3	94.5	26.0	26.0	58.3	33.1	25.2	9.4	56.7	77.2	86.6	96.1
4-6	96.8	44.7	29.6	72.2	24.8	33.7	4.6	57.4	86.0	94.3	95.4
≥ 7	97.4	52.6	28.9	67.1	17.1	25.0	3.9	59.2	88.2	84.2	93.4
Sector											
Urban	97.9	54.2	20.8	91.7	22.9	20.8	6.3	68.8	91.7	87.5	95.8
Rural	94.4	19.4	21.6	75.0	36.9	36.2	6.0	60.1	80.6	93.3	96.6
Estate	98.1	62.4	37.6	57.4	14.3	26.7	5.0	52.7	86.8	89.9	93.8
Religion of the HH Head											
Budddhist	96.3	20.1	21.6	74.0	36.3	37.7	5.9	59.0	81.7	94.1	97.4
Hindu	97.4	65.6	40.1	62.6	15.0	23.8	4.8	56.4	85.0	89.0	92.5
Islam	100.0	64.3	7.1	78.6	17.9	14.3	7.1	78.6	96.4	85.7	100.0
Catholic	87.5	40.6	25.0	59.4	25.0	31.3	9.4	43.8	87.5	87.5	90.6
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	96.7	45.9	28.7	63.1	19.3	20.9	3.7	44.7	82.8	88.5	94.3
9,000 – 13,999	96.2	43.1	25.4	70.8	24.6	28.5	8.5	61.5	90.0	93.1	96.2
14,000 – 19,999	96.5	30.6	32.9	80.0	32.9	36.5	0.0	78.8	85.9	96.5	97.6
20,000 – 31,999	97.3	37.8	31.1	74.3	36.5	54.1	9.5	66.2	82.4	94.6	95.9
≥ 32,000	100.0	50.0	30.0	80.0	40.0	40.0	15.0	70.0	90.0	90.0	100.0
Wealth quintile											
Poorest	91.9	40.4	28.6	65.2	16.1	23.6	2.5	39.1	78.9	87.0	91.9
Second	97.1	47.1	24.7	62.1	19.5	21.8	6.3	57.5	82.8	90.2	96.0
Middle	98.4	46.5	32.3	74.0	33.1	35.4	8.7	65.4	91.3	96.1	96.9
Fourth	98.6	28.8	26.0	75.3	38.4	46.6	4.1	68.5	89.0	93.2	95.9
Richest	100.0	30.8	41.0	79.5	43.6	53.8	7.7	87.2	82.1	94.9	100.0
Overall %	96.3	41.6	28.7	68.5	25.6	30.7	5.6	57.5	84.3	91.3	95.3
Total No.	574	574	574	574	574	574	574	574	574	574	574

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	86.7	100.0	98.0	99.0	89.5	94.4
4-6	95.7	96.4	97.6	97.4	98.0	100.0

Background Characteristic	5-17 years		18-59 years		60 years or above	
	male	female	male	female	male	female
≥ 7	93.8	97.5	97.3	97.3	100.0	100.0
Sector						
Urban	100.0	95.8	95.6	95.8	100.0	100.0
Rural	94.8	98.9	97.9	98.3	92.1	97.9
Estate	93.3	94.8	97.8	97.5	100.0	100.0
Monthly household income (LKR)						
< 9,000	94.9	96.6	96.2	96.3	95.5	100.0
9,000 – 13,999	90.4	93.9	97.5	97.6	93.8	95.2
14,000 – 19,999	97.1	100.0	98.7	98.7	100.0	100.0
20,000 – 31,999	96.6	96.4	100.0	100.0	100.0	100.0
≥ 32,000	100.0	100.0	100.0	100.0	100.0	100.0
Wealth quintile						
Poorest	91.4	93.2	92.8	92.9	94.7	100.0
Second	98.2	98.3	98.7	98.7	96.3	96.7
Middle	95.9	97.5	100.0	100.0	96.0	100.0
Fourth	96.0	100.0	100.0	100.0	100.0	100.0
Richest	94.1	100.0	100.0	100.0	100.0	100.0
Overall %	94.7	96.8	97.6	97.7	96.4	99.0

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	7.5	1.8	72.4	127
4-6	7.7	1.7	68.2	371
≥ 7	7.4	1.7	69.7	76
Sector				
Urban	8.1	1.4	62.5	48
Rural	7.6	1.8	65.7	268
Estate	7.5	1.7	74.4	258
Religion of the HH Head				
Budddhist	7.6	1.7	68.5	273
Hindu	7.6	1.7	70.9	227
Islam	8.1	1.2	67.9	28
Catholic	7.6	2.0	65.6	32
Other	.	.		
Monthly household income				
< 9,000	7.3	1.7	79.5	244
9,000 – 13,999	7.7	1.6	69.2	130
14,000 – 19,999	8.0	1.4	61.2	85
20,000 – 31,999	8.0	2.0	56.8	74
≥ 32,000	8.4	1.7	35.0	20
Wealth quintile				
Poorest	6.9	1.8	82.0	161
Second	7.6	1.6	75.3	174
Middle	8.0	1.6	63.0	127
Fourth	7.9	1.7	56.2	73
Richest	8.9	1.2	35.9	39
overall	7.6	1.7	69.3	574

Table A 27: . Average monthly expenditure for food, services, health, education and productive assets, by background characteristics (add Total income as total of means)

Background characteristic	Average monthly expenditure in LKR	Number

	food	liquor/tobacco	Utility services	health	education	productive assets	Total	of households
No. of members in family								
1-3	50.3	0.0	12.1	10.5	4.8	22.2	14547	45
4-6	49.1	5.9	9.2	5.6	3.4	26.8	18822	179
≥ 7	58.0	0.0	12.7	6.5	3.5	19.4	21321	48
Residence								
Urban	44.5	0.0	9.5	6.0	3.7	36.4	22811	31
Rural	51.7	6.3	12.2	6.4	4.6	18.8	17549	97
Estate	63.8	0.0	11.2	8.0	3.3	13.7	15056	144
Religion of household Head								
Buddhist	51.0	7.4	10.7	6.8	4.4	19.7	17984	111
Hindu	44.4	3.0	8.6	4.8	2.2	37.0	21884	113
Islam	57.4	0.0	13.0	11.5	4.2	13.8	17449	23
Catholic and other Christian	60.8	0.0	12.2	5.8	5.8	15.4	15199	22
Education of household Head								
No schooling	77.9	5.7	11.8	0.2	3.7	0.7	11573	10
Primary	61.6	0.0	7.6	12.4	6.3	12.1	14080	50
Secondary	55.0	0.0	9.9	7.1	6.7	21.3	17443	103
Passed O' Level	50.1	6.9	13.4	8.7	9.1	11.8	19091	85
Higher	49.0	0.0	18.4	9.3	10.6	12.7	21671	2
Monthly household income								
< 9,000	68.2	0.3	9.0	7.2	4.9	10.4	13032	112
9,000 – 13,999	50.9	14.1	10.9	5.2	5.7	13.3	18490	70
14,000 – 19,999	50.5	3.3	12.3	10.	6.5	16.7	2000	39

Background characteristic	Average monthly expenditure in LKR							Number of households
	food	liquor/tobacco	Utility services	health	education	productive assets	Total	
				7			2	
20,000 – 31,999	45.6	0.0	14.3	6.7	6.9	26.6	22439	31
≥ 32,000	19.4	0.0	4.6	1.9	4.4	69.7	60865	11
Wealth quintile								
Poorest	68.1	2.8	8.1	7.3	4.0	9.7	12690	95
Second	63.1	0.0	10.8	7.9	3.7	14.5	15069	92
Middle	50.5	0.0	15.9	8.2	4.3	21.2	19775	46
Fourth	50.9	12.4	12.7	5.7	3.8	14.6	21045	24
Richest	18.4	0.0	6.8	2.4	2.1	70.4	60272	15
Overall	50.2	5.8	10.1	6.3	3.5	24.1	18890	272
% of the Total Expenditure								

Table A 28 : 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	65.9	(19.2)	3.2	4.0	92.9	126
4-6	69.2	(17.7)	0.8	2.2	97.0	368
≥ 7	69.6	(17.0)	0.0	1.3	98.7	76
Residence						
Urban	72.1	(16.4)	0.0	2.1	97.9	48
Rural	63.8	(19.3)	2.3	3.8	94.0	265
Estate	72.8	(15.5)	0.4	1.2	98.4	257

Background characteristic	Mean (SD) HFCAS Score*		HFCAS Score Category (%)			No. of households
			Poor	Borderline	Adequate	
Religion of household Head			0.0	0.0	0.0	
Buddhist	63.9	(17.8)	1.5	3.7	94.8	270
Hindu	73.6	(17.2)	0.9	0.9	98.2	226
Islam	74.8	(15.5)	0.0	3.6	96.4	28
Catholic and other Christian	67.0	(17.9)	3.1	3.1	93.8	32
Education of household Head						
No schooling	64.1	(12.1)	0.0	3.8	96.2	26
Primary	68.3	(18.6)	2.0	3.4	94.6	147
Secondary	66.6	(19.5)	1.5	2.5	96.0	198
Passed O' Level	72.2	(16.3)	0.0	1.9	98.1	160
Higher	70.8	(13.2)	0.0	0.0	100.0	4
Monthly household income						
< 9,000	65.9	(17.7)	1.6	3.3	95.1	243
9,000 – 13,999	70.7	(17.0)	0.0	2.3	97.7	129
14,000 – 19,999	69.2	(14.4)	0.0	2.4	97.6	85
20,000 – 31,999	72.0	(18.9)	0.0	1.4	98.6	73
≥ 32,000	76.7	(17.1)	0.0	0.0	100.0	20
Wealth quintile						
Poorest	62.9	(18.0)	3.1	3.1	93.7	159
Second	68.6	(18.4)	1.2	2.9	96.0	173
Middle	72.7	(18.5)	0.0	1.6	98.4	126
Fourth	69.9	(15.5)	0.0	2.7	97.3	73
Richest	74.9	(11.8)	0.0	0.0	100.0	39
Overall	68.5	(18.0)	1.2	2.5	96.3	570

Table A29 : Food groups by the main and secondary sources

Background	Food Groups	

Characteristic	Rice	Wheat	Nuts/pulses	vegetables	fruits	meat/poultry	fish	eggs	milk/diary products	oils/fats	Coconut	Sugar
Main source												
Own production	4.2	1.0	0.9	19.8	16.6	0.9	0.0	3.3	4.6	1.3	4.8	0.7
Purchase	85.3	88.8	89.2	68.2	74.2	89.7	89.3	81.0	86.1	87.7	84.0	88.3
Purchase on credit	5.6	5.4	4.8	1.4	0.4	2.1	4.7	4.3	0.5	4.5	4.6	5.0
Traded goods or services	0.0	0.0	0.0	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Borrowed	0.0	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	0.4	0.2	0.2	1.1	0.9	0.0	0.2	0.3	0.2	0.4	0.4	0.2
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	0.5	0.4	0.6	0.4	0.2	0.0	0.6	0.3	0.2	0.4	0.4	0.4

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	25.6	30.6	38.8	5.0	4.88	121
4-6	23.5	29.9	35.5	11.2	4.86	358
≥ 7	20.0	30.7	42.7	6.7	4.09	75
Sector						
Urban	27.1	20.8	41.7	10.4	8.61	48
Rural	18.4	37.6	34.5	9.4	6.94	255
Estate	27.9	24.3	39.0	8.8	6.86	251
Education of household Head						
No schooling	4.0	8.0	64.0	24.0	5.36	25
Primary	27.0	31.2	31.9	9.9	5.45	141
Secondary	21.1	27.4	40.0	11.6	7.12	190
Passed O' Level	23.9	38.4	34.0	3.8	8.38	159
Higher	50.0	50.0	0.0	0.0	16.00	4
Monthly household income						
< 9,000	17.4	28.9	41.3	12.3	5.60	235
9,000 – 13,999	26.2	26.2	38.9	8.7	6.57	126
14,000 – 19,999	24.4	29.3	36.6	9.8	8.91	82
20,000 – 31,999	27.8	44.4	26.4	1.4	9.89	72
≥ 32,000	30.0	35.0	25.0	10.0	10.15	20
Wealth quintile						

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 (%)		
Poorest	20.0	22.6	45.2	12.3	5.13	155
Second	26.5	25.9	36.5	11.2	6.83	170
Middle	25.8	33.3	32.5	8.3	7.98	120
Fourth	18.3	42.3	36.6	2.8	8.48	71
Richest	26.3	47.4	23.7	2.6	9.92	38
Overall	23.5	30.1	37.2	9.2	7.04	554

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

Characteristic	Not received food aids	Type of food aid (mean no. of times per 6 month)								No. of households
		WFP /GA	Samurdhi	Food Basket	School feeding	CSB	Thriposha	Food for work	Other	
No. of members in family										
1-3	81.90	6.00	3.10	2.00	.	0.00	2.80	0.00	.	127
4-6	74.30	4.50	3.50	4.00	12.70	0.00	4.80	0.00	1.00	371
≥ 7	76.30	.	3.00	6.00	.	0.00	1.20	0.00	.	76
Sector										
Urban	64.60	.	3.70	.	.	0.00	1.80	0.00	1.00	48
Rural	67.80	5.00	5.30	4.00	12.70	0.00	5.70	0.00	.	268
Estate	87.20	.	.	.	.	0.00	1.90	0.00	.	258
Monthly household income										
< 9,000	71.30	6.00	5.00	3.70	18.00	0.00	2.20	0.00	1.00	244
9,000 – 13,999	78.50	3.00	3.80	4.30	4.00	0.00	8.70	0.00	1.00	130
14,000 – 19,999	79.80	.	6.00	2.00	13.50	0.00	1.20	0.00	.	85
20,000 – 31,999	79.70	.	3.80	6.00	9.00	0.00	2.80	0.00	.	74
≥ 32,000	80.00	.	.	.	.	0.00	2.00	0.00	.	20
Wealth index quintile										
Poorest	68.80	.	3.50	2.00	24.00	0.00	2.90	0.00	1.00	161
Second	77.00	4.50	3.40	3.70	.	0.00	6.90	0.00	1.00	174
Middle	81.90	6.00	2.80	6.00	.	0.00	1.10	0.00	.	127

Fourth	82.20	.	3.80	3.50	4.00	0.00	3.00	0.00	.	73
Richest	74.40	.	1.00	.	8.00	0.00	1.50	0.00	.	39
Overall	76.30	5.00	3.30	4.00	12.70	0.00	3.80	0.00	1.00	574

Table 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	67.1	19.3	7.9	5.6	569
b. Borrowed food	78.2	17.3	3.9	0.7	568
c. Purchased food on credit	67.4	24.7	6.5	1.4	570
d. Consumed seeds held for next season	96.7	1.2	1.6	0.5	570
e. Reduced meal size	79.1	13.3	6.0	1.6	570
f. Reduced number of meals per day	83.2	11.6	4.0	1.2	570
g. Restricted consumption for adults	80.9	11.4	5.4	2.3	570
h. Sent children to live with relatives	95.6	2.3	1.4	0.7	570
i. Reduced expenditure on health and education	91.6	5.3	2.1	1.1	570

Non-food coping strategies	% of Households		Total households
	No	Yes	
j. Sold livestock	98.1	1.9	570
k. Pawned jewellary	76.8	23.2	573
l. Sold agricultural tools, seeds	99.1	0.9	572
m. Sold other assets	99.7	0.3	573
n. Used savings	86.7	13.3	572
o. Borrowed money from relatives/neighbours	80.2	19.8	571
p. Took children out of school to earn income	97.5	2.5	571

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

Background	Percent of households adopted strategy at least once during the preceding 30 days

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
No. of members in Household										
1-3	44	78.9	50.0	84.1	52.3	81.8	13.6	59.1	61.4	31.8
4-6	154	84.5	32.7	79.2	51.3	80.5	6.5	44.2	29.2	48.7
≥ 7	35	100.0	33.3	80.0	62.9	74.3	8.6	71.4	68.6	57.1
Sector										
Urban	21	85.2	42.6	76.2	61.9	85.7	0.0	66.7	23.8	52.4
Rural	87	83.6	25.5	80.5	44.8	79.3	11.5	37.9	37.9	34.5
Estate	125	0.0	0.0	80.8	57.6	79.2	7.2	57.6	46.4	54.4
Monthly household income										
< 9,000	136	93.8	50.0	84.6	54.4	80.1	5.9	58.8	45.6	53.7
9,000 – 13,999	48	92.3	46.2	77.1	66.7	87.5	6.3	43.8	33.3	41.7
14,000 – 19,999	22	76.9	26.9	72.7	31.8	72.7	9.1	31.8	31.8	18.2
20,000 – 31,999	18	81.8	18.2	72.2	27.8	61.1	11.1	22.2	33.3	33.3
≥ 32,000	4	30.0	10.0	100.0	100.0	75.0	25.0	75.0	50.0	75.0
Wealth quintile										
Poorest	96	100.0	38.5	82.3	65.6	85.4	8.3	60.4	50.0	60.4
Second	69	100.0	62.5	79.7	44.9	73.9	4.3	44.9	34.8	42.0
Middle	43	92.5	35.0	79.1	46.5	74.4	18.6	48.8	46.5	30.2
Fourth	20	87.2	38.3	80.0	40.0	85.0	0.0	45.0	20.0	45.0
Richest	5	59.0	20.5	60.0	40.0	80.0	0.0	0.0	0.0	0.0
overall	233	84.7	36.8	80.3	53.2	79.8	8.2	51.1	41.2	46.8

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

Background	Received loan	Main reason for loan (% of the total received loan)

Characteristic	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	49	38.9	39.6	10.4	4.2	0.0	2.1	0.0	6.3	18.8	18.8
4-6	168	45.8	53.8	8.2	5.3	1.8	2.9	0.6	0.0	8.8	18.7
≥ 7	45	60.0	57.8	8.9	4.4	0.0	4.4	2.2	4.4	8.9	8.9
Sector											
Urban	26	54.2	50.0	3.8	7.7	0.0	3.8	0.0	0.0	7.7	26.9
Rural	83	31.3	26.5	9.6	6.0	0.0	4.8	1.2	1.2	26.5	24.1
Estate	153	60.0	65.8	9.0	3.9	1.9	1.9	0.6	2.6	2.6	11.6
Monthly household income											
< 9,000	239	56.5	56.9	8.8	5.1	1.5	2.2	1.5	2.9	4.4	16.8
9,000 – 13,999	129	48.1	55.6	11.1	3.2	0.0	3.2	0.0	0.0	9.5	17.5
14,000 – 19,999	85	32.9	35.7	3.6	10.7	3.6	0.0	0.0	3.6	25.0	17.9
20,000 – 31,999	74	35.1	32.0	4.0	4.0	0.0	8.0	0.0	0.0	32.0	20.0
≥ 32,000	20	20.0	25.0	25.0	0.0	0.0	25.0	0.0	0.0	25.0	0.0
Wealth quintile											
Poorest	92	59.0	64.2	8.4	3.2	1.1	2.1	1.1	1.1	5.3	13.7
Second	91	52.6	47.3	12.1	4.4	0.0	2.2	0.0	3.3	9.9	20.9
Middle	49	38.6	49.0	6.1	4.1	4.1	4.1	2.0	0.0	14.3	16.3
Fourth	21	28.8	35.0	0.0	15.0	0.0	10.0	0.0	5.0	20.0	15.0
Richest	9	23.1	22.2	11.1	11.1	0.0	0.0	0.0	0.0	33.3	22.2
overall	568	46.1	51.9	8.7	4.9	1.1	3.0	0.8	1.9	10.6	17.0

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	65.9	(19.2)	3.2	4.0	92.9	126
4-6	69.2	(17.7)	0.8	2.2	97.0	368
≥ 7	69.6	(17.0)	0.0	1.3	98.7	76
Residence						
Urban	72.1	(16.4)	0.0	2.1	97.9	48
Rural	63.8	(19.3)	2.3	3.8	94.0	265
Estate	72.8	(15.5)	0.4	1.2	98.4	257
Religion of household Head			0.0	0.0	0.0	
Buddhist	63.9	(17.8)	1.5	3.7	94.8	270
Hindu	73.6	(17.2)	0.9	0.9	98.2	226
Islam	74.8	(15.5)	0.0	3.6	96.4	28
Catholic and other Christian	67.0	(17.9)	3.1	3.1	93.8	32
Education of household Head						
No schooling	64.1	(12.1)	0.0	3.8	96.2	26
Primary	68.3	(18.6)	2.0	3.4	94.6	147
Secondary	66.6	(19.5)	1.5	2.5	96.0	198
Passed O' Level	72.2	(16.3)	0.0	1.9	98.1	160
Higher	70.8	(13.2)	0.0	0.0	100.0	4
Monthly household income						
< 9,000	65.9	(17.7)	1.6	3.3	95.1	243
9,000 – 13,999	70.7	(17.0)	0.0	2.3	97.7	129
14,000 – 19,999	69.2	(14.4)	0.0	2.4	97.6	85
20,000 – 31,999	72.0	(18.9)	0.0	1.4	98.6	73
≥ 32,000	76.7	(17.1)	0.0	0.0	100.0	20
Wealth quintile						
Poorest	62.9	(18.0)	3.1	3.1	93.7	159

Background characteristic	Mean (SD) HFCAS Score*		HFCAS Score Category (%)			No. of households
			Poor	Borderline	Adequate	
Second	68.6	(18.4)	1.2	2.9	96.0	173
Middle	72.7	(18.5)	0.0	1.6	98.4	126
Fourth	69.9	(15.5)	0.0	2.7	97.3	73
Richest	74.9	(11.8)	0.0	0.0	100.0	39
Overall	68.5	(18.0)	1.2	2.5	96.3	570

Table A 36 : Distribution (No and Percent) of households by food security Levels

Food Access (Percent expenditure on food) \ *Food Consumption*	Poor (0-21)	Borderline (21.01 – 35)	Adequate (> 35.01)
Poor (> 90 %)	0 (0.0)	2 (0.7)	31 (11.4)
Average (75-90 %)	0 (0.0)	2 (0.7)	135 (49.8)
Good (<75 %)	0 (0.0)	3 (1.1)	98 (36.2)

Table A 37 : Food Security Levels

Background characteristic	Food Security Level			*No. of households*
	Food Secure (%)	Moderately Food Secure (%)	Food Insecure (%)	
No. of members in family				
1-3	82.2	17.8	0.0	45
4-6	89.9	9.0	1.1	178
≥ 7	81.3	18.8	0.0	48
Sector				
Urban	93.5	6.5	0.0	31
Rural	93.8	5.2	1.0	96
Estate	81.3	18.1	0.7	144
Education of household Head				

No schooling	80.0	20.0	0.0	10
Primary	80.0	18.0	2.0	50
Secondary	87.3	11.8	1.0	102
Passed O' Level	94.1	5.9	0.0	85
Higher	100.0	0.0	0.0	2
Monthly household income				
< 9,000	80.4	17.9	1.8	112
9,000 – 13,999	91.4	8.6	0.0	70
14,000 – 19,999	87.2	12.8	0.0	39
20,000 – 31,999	96.8	3.2	0.0	31
≥ 32,000	90.9	9.1	0.0	11
Wealth quintile				
Poorest	78.7	19.1	2.1	94
Second	84.8	15.2	0.0	92
Middle	97.8	2.2	0.0	46
Fourth	100.0	0.0	0.0	24
Richest	100.0	0.0	0.0	15
Overall	87.1	12.2	0.7	271

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[5]. 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; 75t o 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 Food access	Poor	Borderline	Adequate
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

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[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