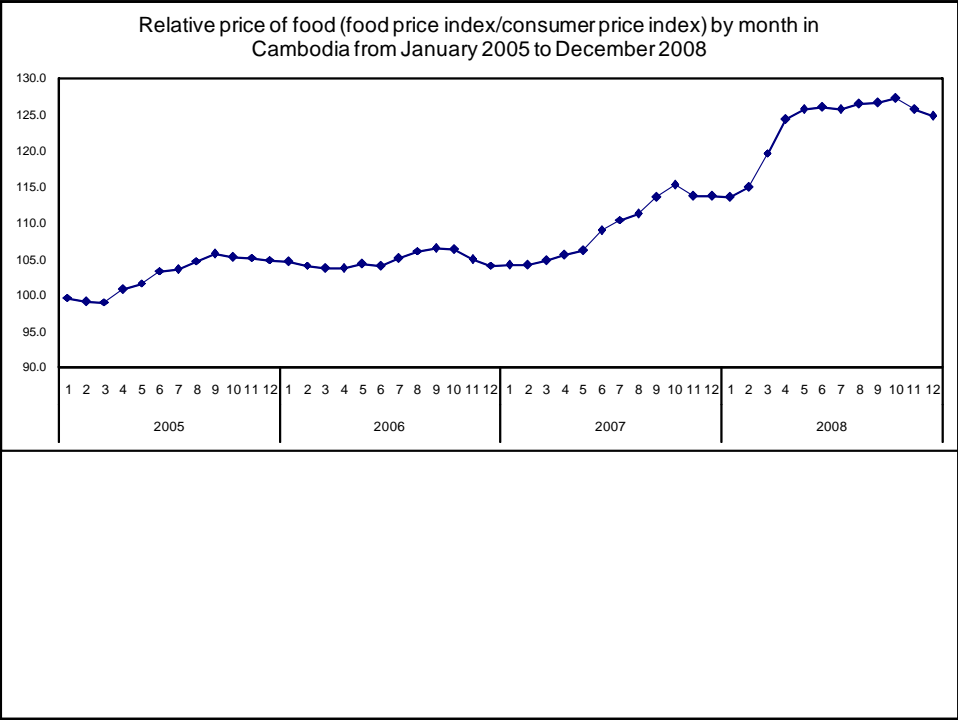


# CAMBODIA ANTHROPOMETRICS SURVEY 2008

Initial Findings of National Survey

## Survey Description

- Cluster sample survey designed to detect a two percentage point change in acute malnutrition and to provide provincial estimates of key nutrition indicators; separate domain of informal urban settlements also surveyed, but not analyzed yet
- Field work carried out in November, with mop-up activities completed in December
- 7,600 households selected; interviews completed in 7,495 households (response rate >98%)
- Primary objective of the survey is to determine the affect of increased food prices on nutrition



# Section I

Child anthropometry

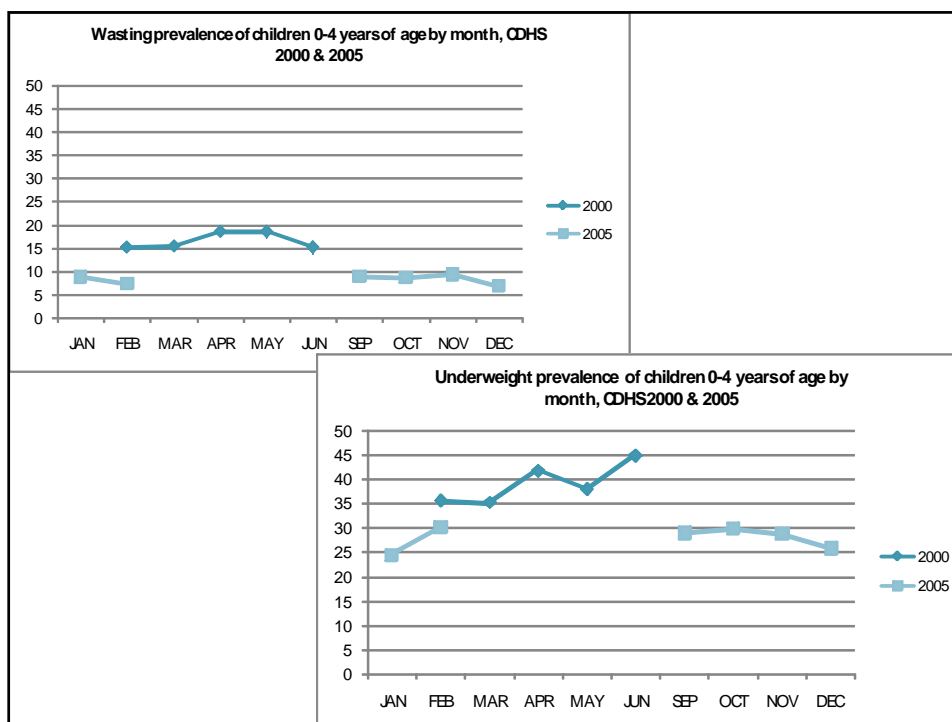


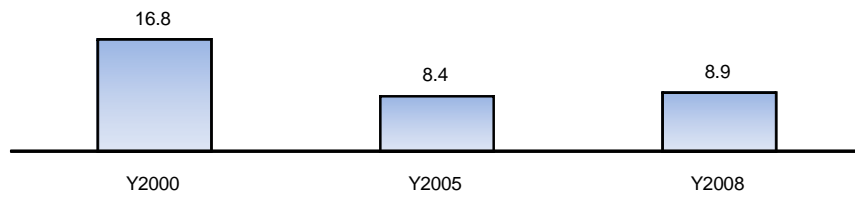
Table 3. Standard deviation ranges for data quality assessment and the 5th and 95th percentiles of standard deviations from the Demographic and Health Surveys (DHS) for four anthropometric Z-scores

	HAZ	WAZ	WHZ	BMIZ <sup>a</sup>
<b>Standard deviation ranges for data quality assessment</b>				
Recommendation from WHO expert panel in 1995 <sup>1</sup>	1.10–1.30	1.00–1.20	0.85–1.10	–
<b>5th and 95th percentiles of standard deviations from DHS data</b>				
1978 WHO/NCHS reference with old cut-offs <sup>b</sup> for data exclusion	1.20–1.53	1.11–1.37	0.95–1.29	–
Old Z-score cut-offs <sup>b</sup> from 1978 WHO/NCHS reference for data exclusion first, then new Z-score were assigned using 2006 WHO growth standards	1.29–1.68	1.11–1.36	1.06–1.46	1.08–1.47
2006 WHO growth standards with new cut-offs for data exclusion <sup>c</sup>	1.35–1.95	1.17–1.46	1.08–1.50	1.08–1.55

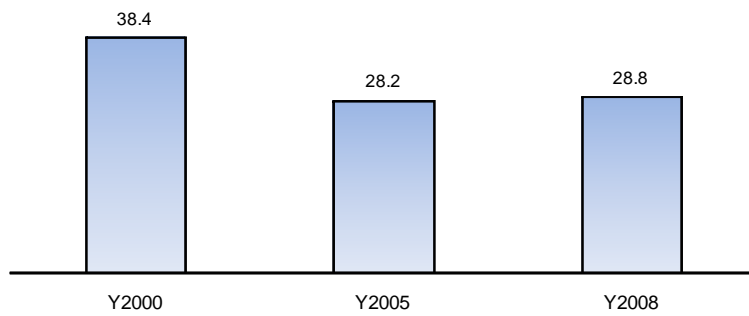
From Mei et al, 2007

Standard Deviation of Child Anthropometry Indicators from CAS 2008		
HAZ	WAZ	WHZ
1.8	1.26	1.13

**Percentage of children under five years classified as acutely malnourished according to Weight for Height, CDHS 2000/5 & CAS 2008**

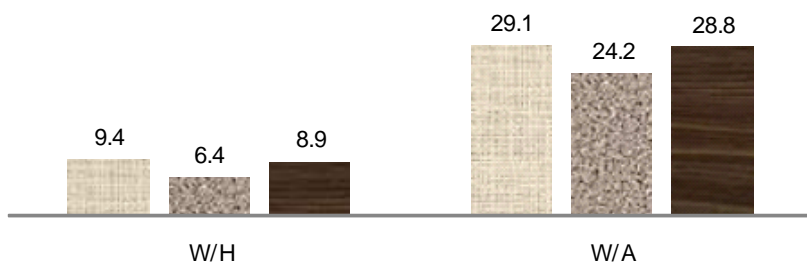


**Percentage of children under five years classified as malnourished according to Weight for age, CDHS 2000/5 & CAS 2008**



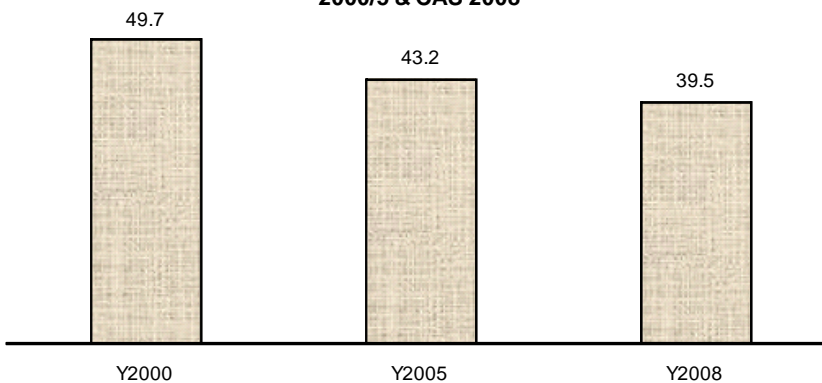
**Comparison of similar months and expected levels of selected child anthropometry indicators**

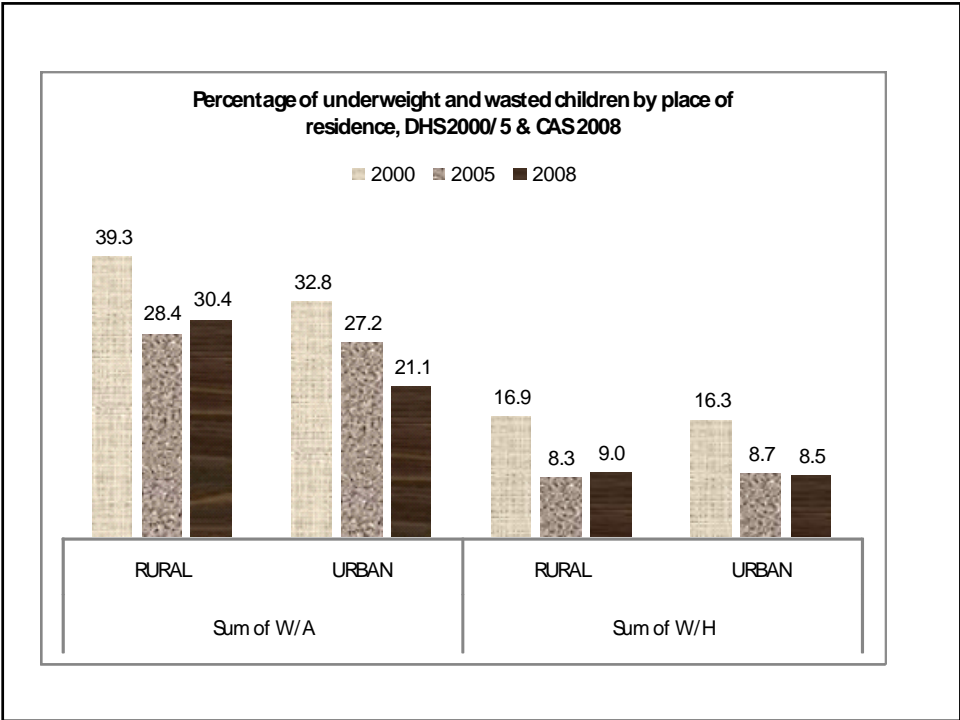
■ DHS Nov 2005 ■ Expected Nov 2008 ■ CAS2008



Expected levels are calculated using the percent decrease from DHS2000 & 2005 and applying this to November 2005 levels

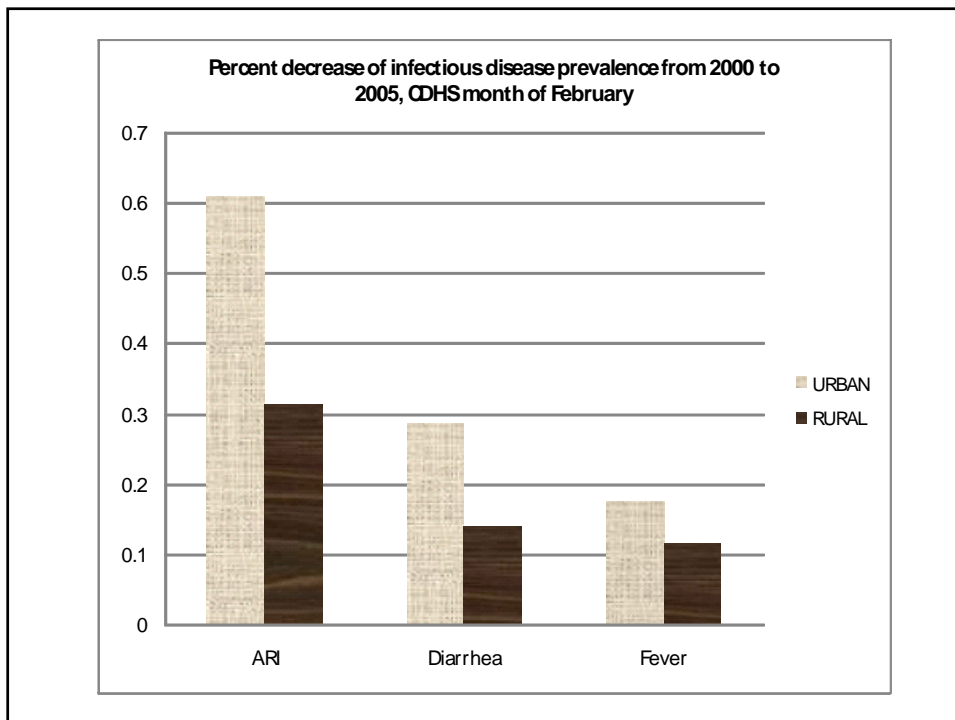
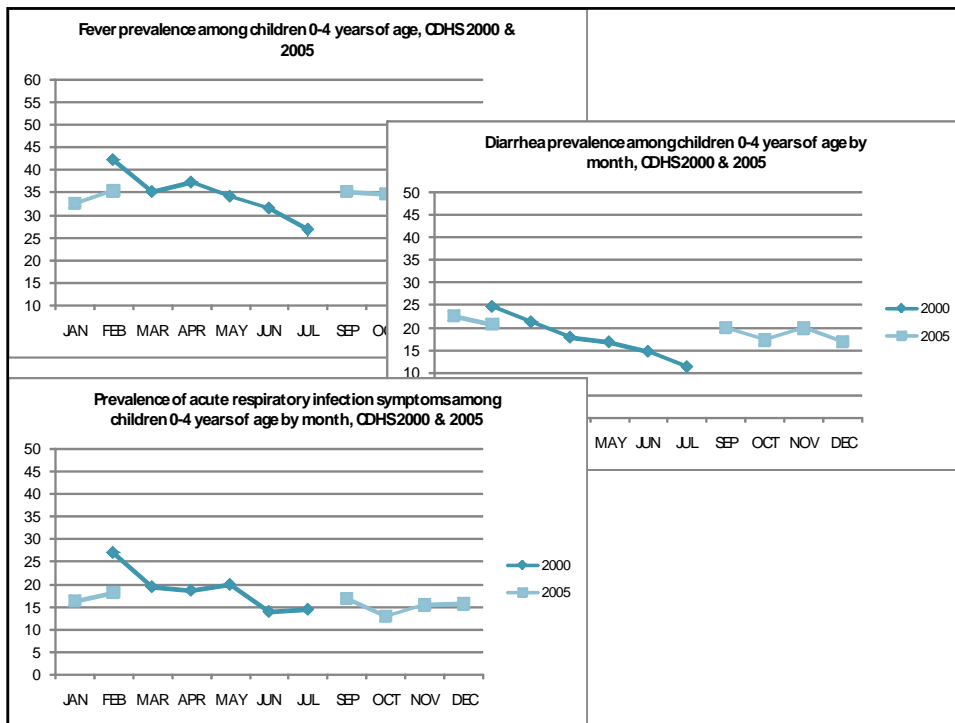
**Percentage of children under five years classified as chronically malnourished according to Height for Age, CDHS 2000/5 & CAS 2008**

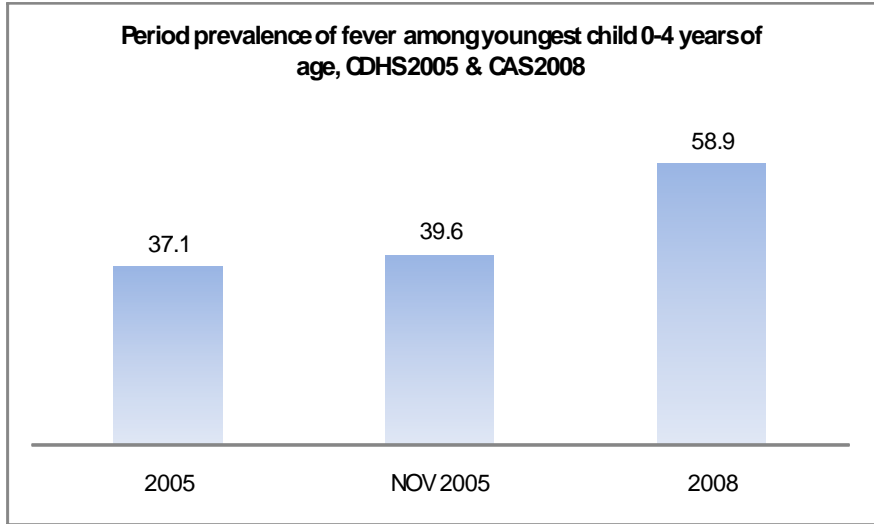
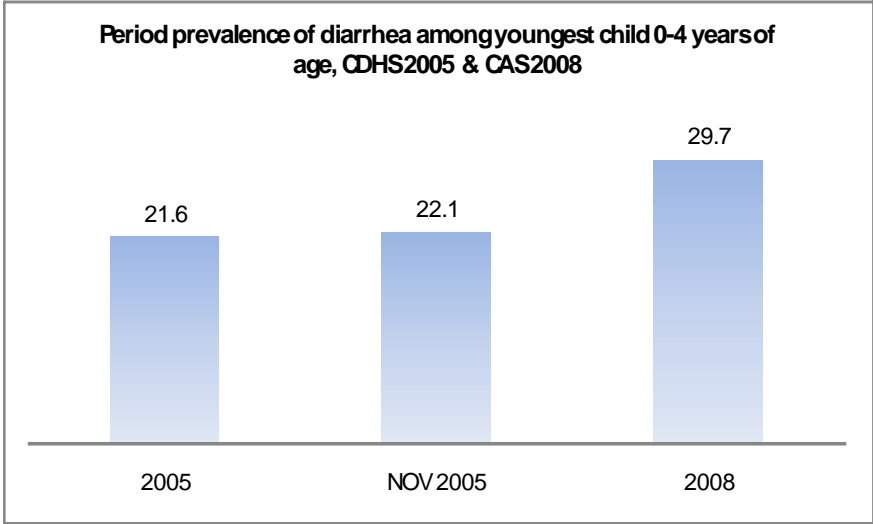




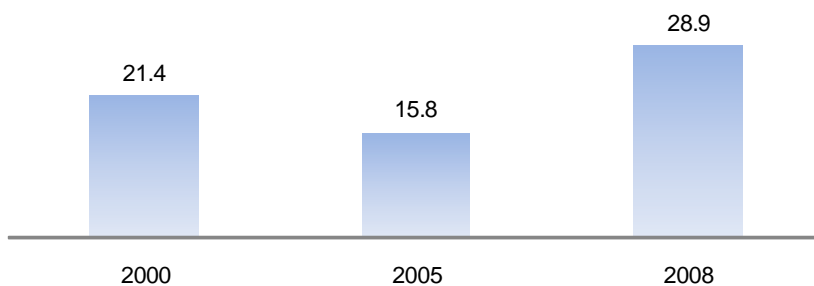
## Section II

### Child disease



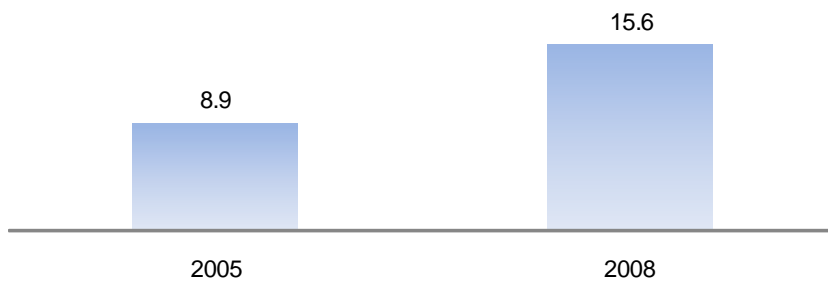


**Period prevalence of symptoms of acute respiratory infection among the youngest child 0-4 years of age, DHS2000/5 & CAS 2008**



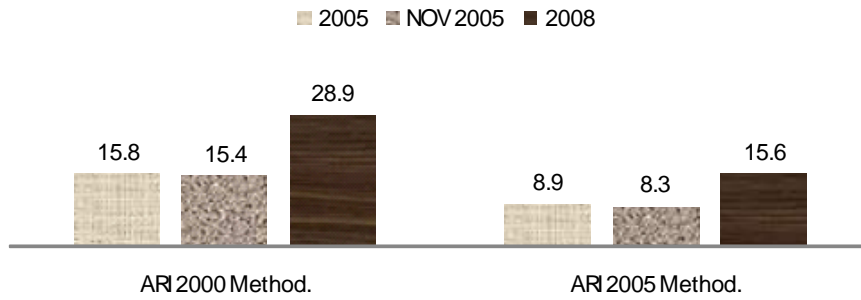
Prevalence is calculated using methodology from the DHS2000. Symptoms include cough and difficulty breathing

**Period prevalence of symptoms of acute respiratory infection among the youngest child 0-4 years of age, DHS2005 & CAS 2008**



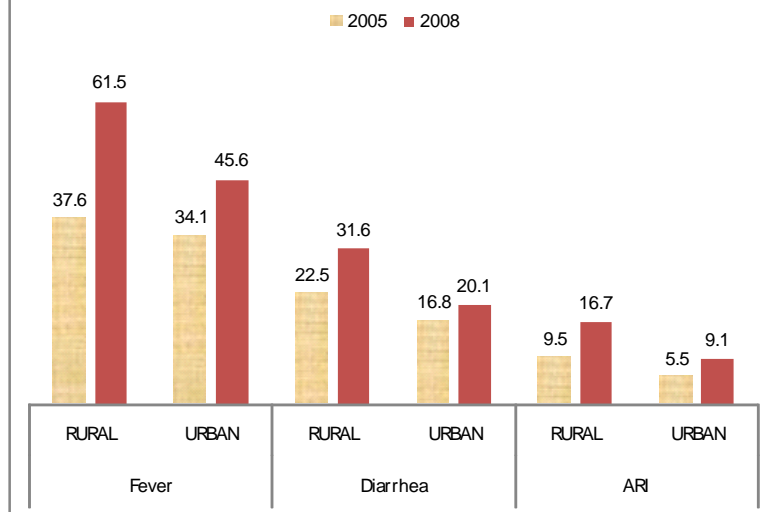
Prevalence calculated using DHS2005 methodology. Symptoms include cough, difficulty breathing, and that these are chest related

**Period prevalence of symptoms of acute respiratory infection among youngest child 0-4 years of age, DHS2005 & CAS2008**



The methodology for calculating prevalence differed from 2000 to 2005. 2 symptoms were included in 2000 (cough & difficulty breathing) and a third symptom (chest-related) was added in 2005

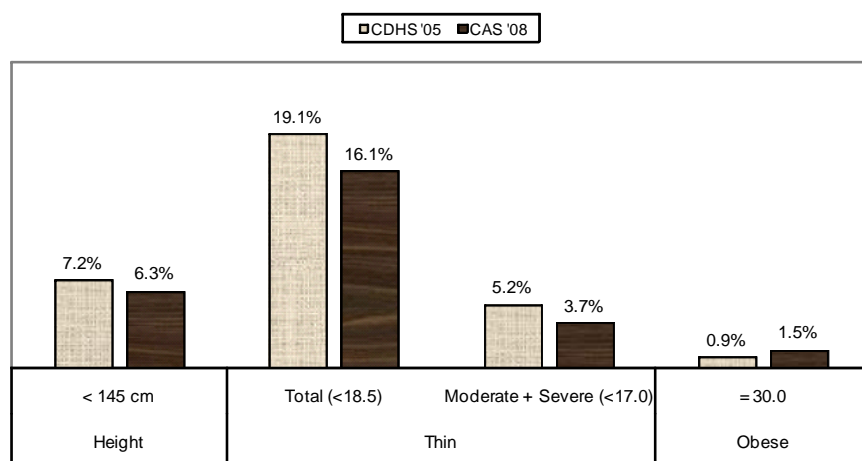
**Percentage of children under 5 with disease in the two weeks preceding the survey by place of residence, DHS2005 & CAS2008**

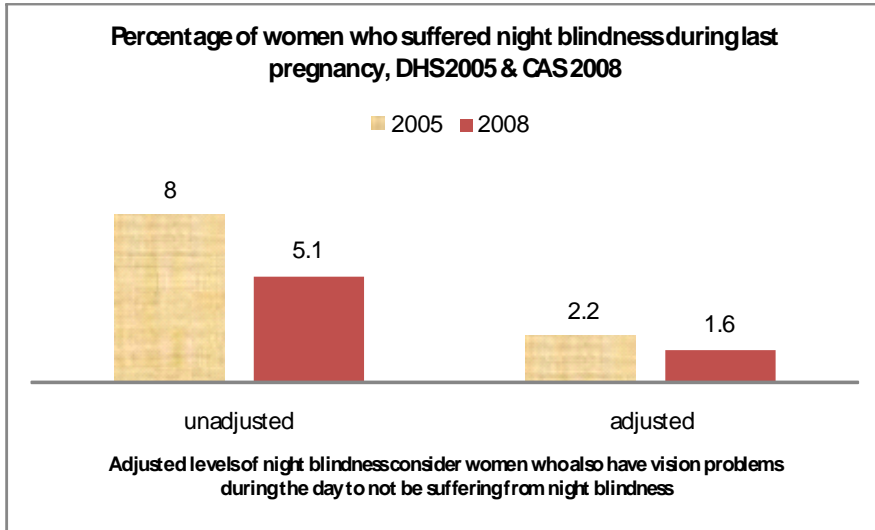


## Section III

### Woman anthropometry and micronutrient deficiency

Among Women 15-49 Years of Age with a Child Under-5, Height and Levels of Body Mass Index, CDHS 2005 & CAS 2008

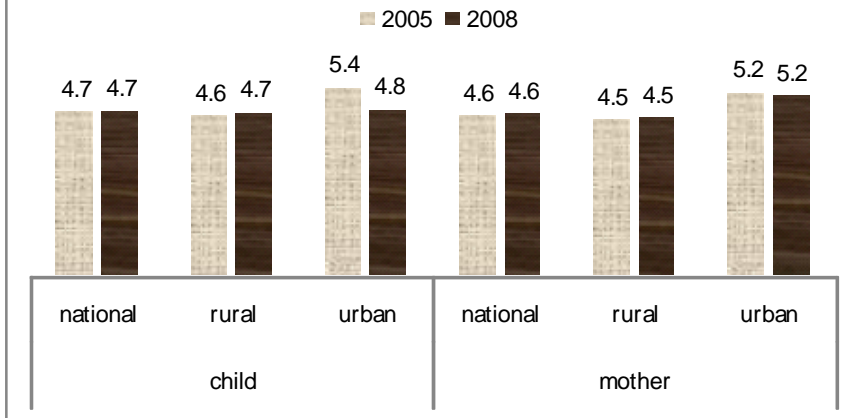




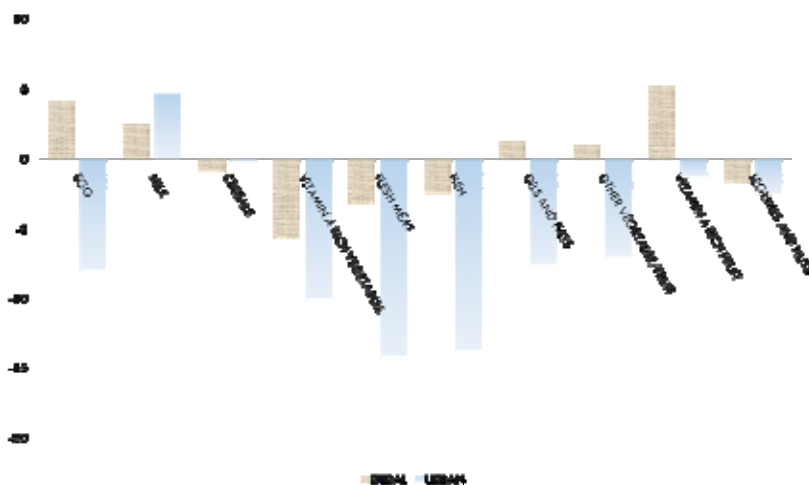
## Section IV

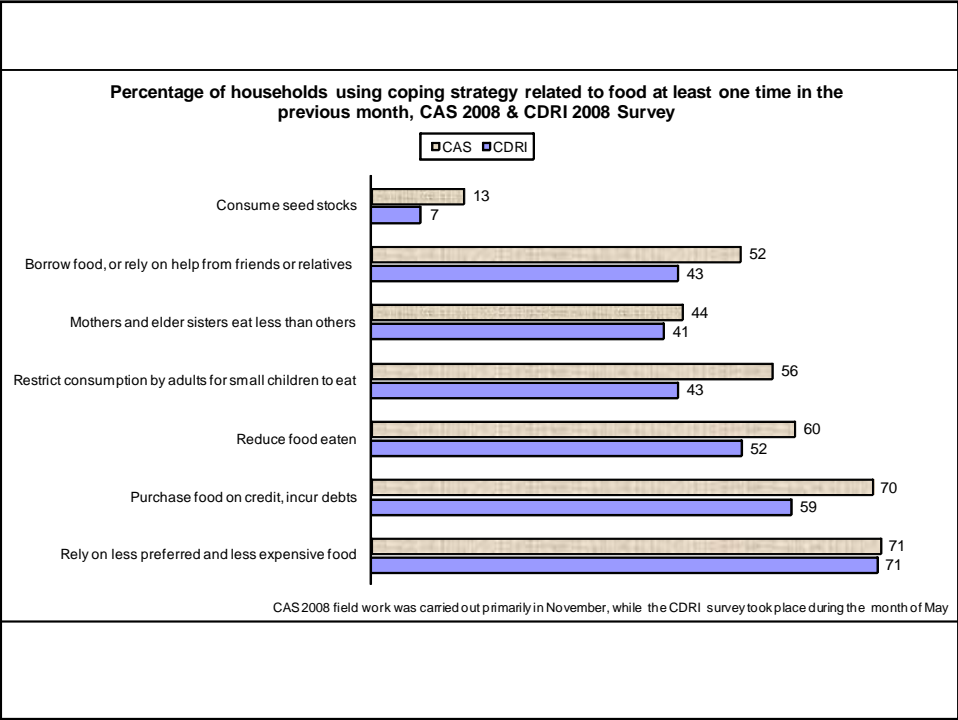
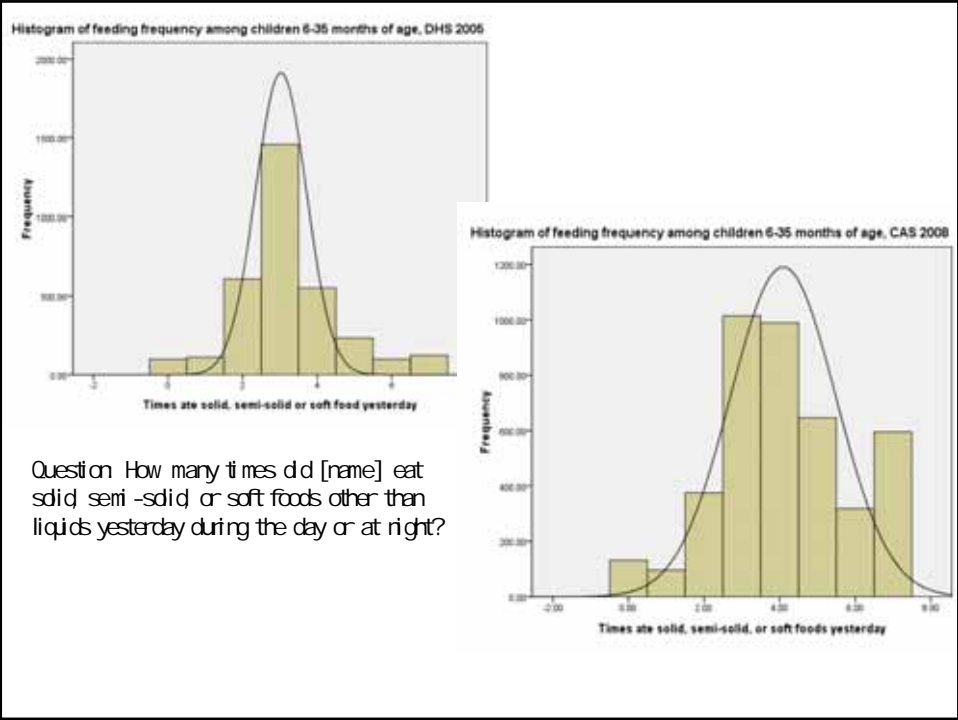
Food consumption and coping strategies

**Mean number of food groups consumed by children and mothers in the day or night preceding the interview, CAS2008**

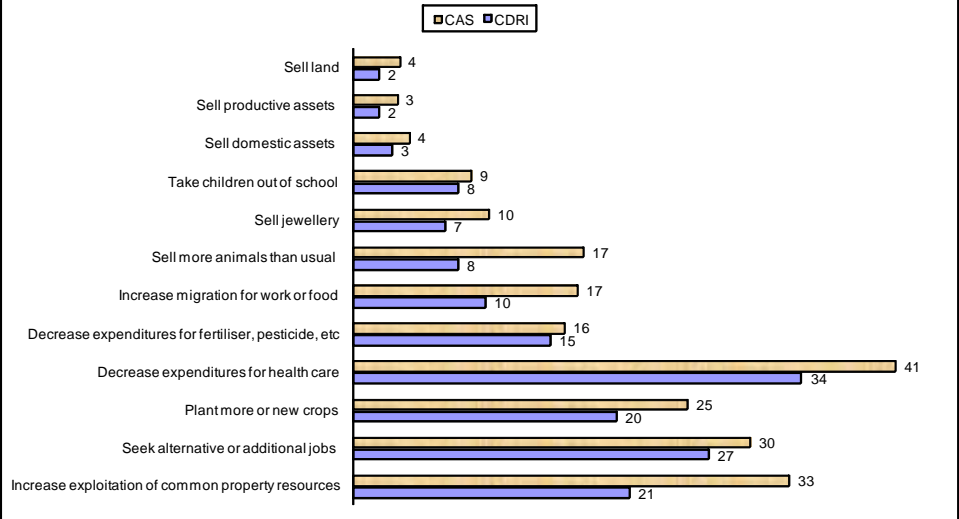


**Percentage point change of children's mean number of consuming specific food groups in the day or night preceding the interview, 2005-2008 to CAS 2008**





**Percentage of households using coping strategy not related to food at least one time in the previous month, CAS 2008 & CDRI 2008 Survey**



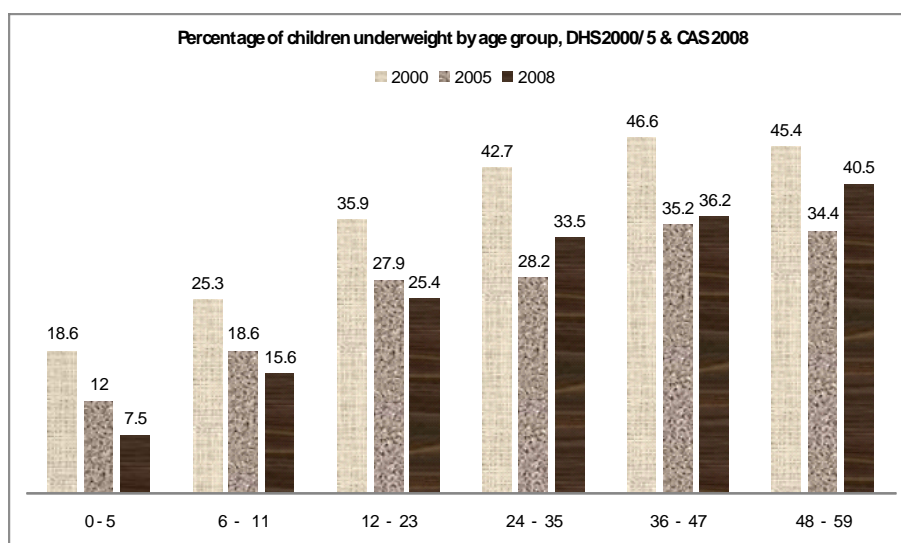
CAS 2008 field work was carried out primarily in November, while the CDRI survey took place during the month of May

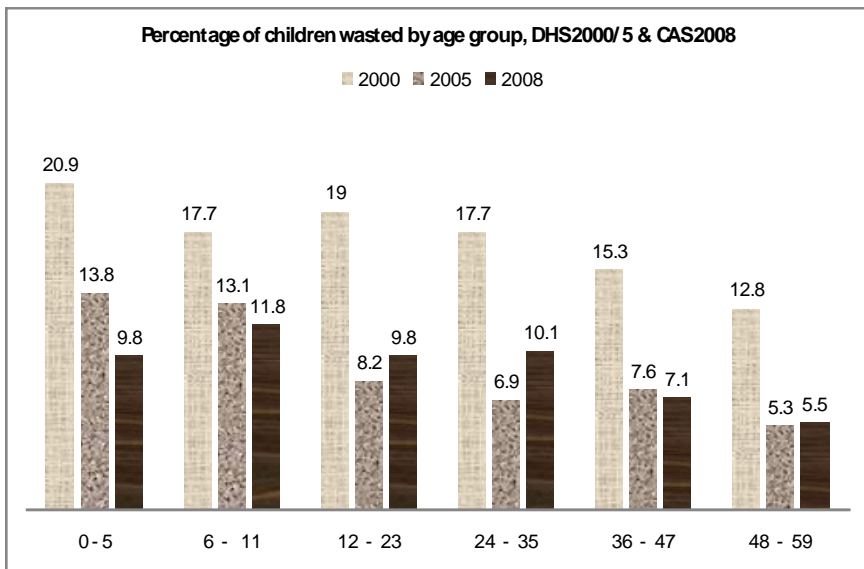
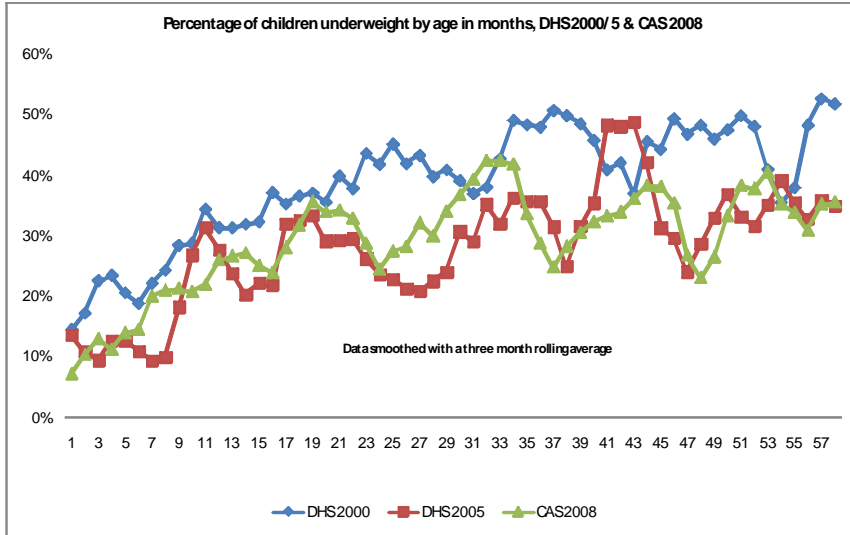
## Section V

### Conclusions

## Conclusions 1

- Improvements in maternal nutrition are giving kids a better start, but this improvement is not carrying on through the first 5 years. The malnutrition-infection cycle for children under 5 is worsening and this is likely to have been caused by the increases in food prices

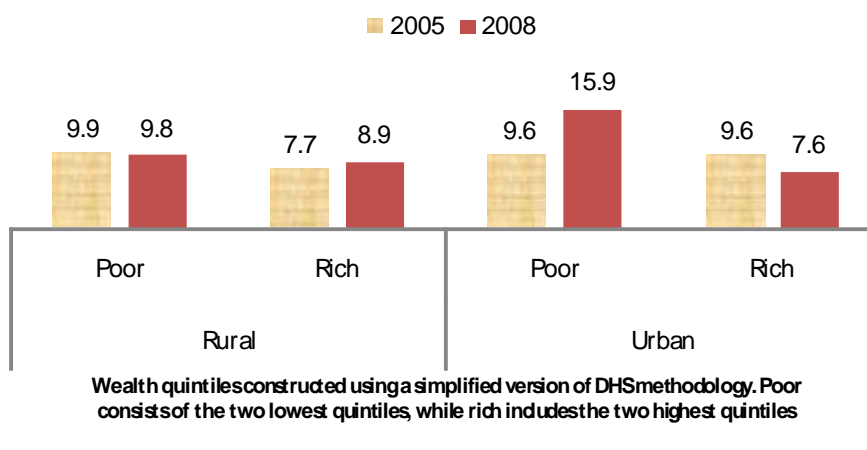


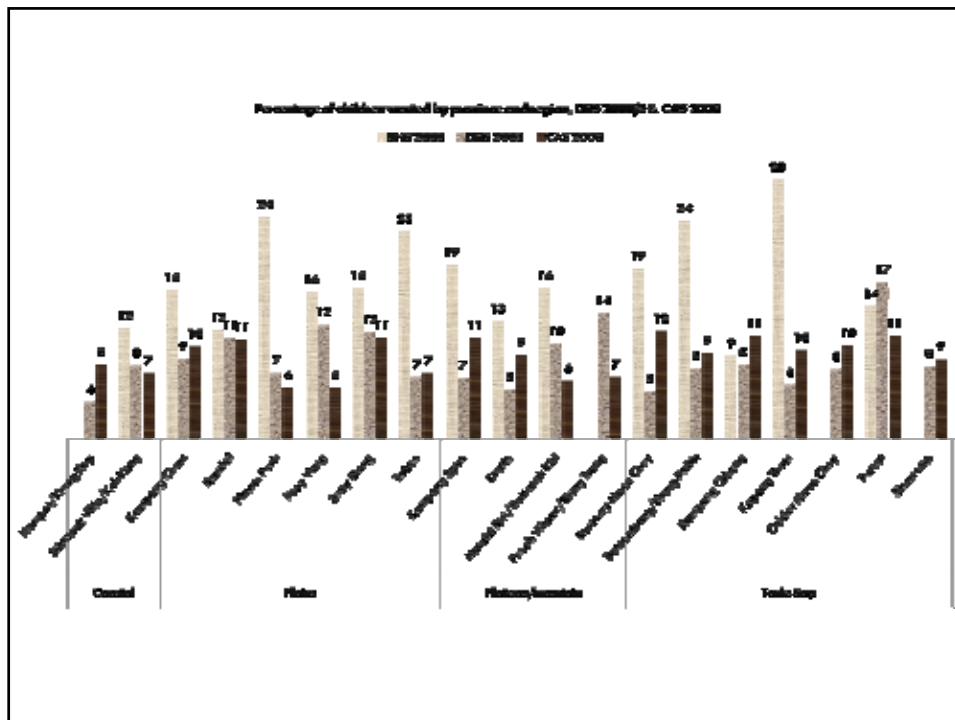


## Conclusions 2

- Infection has increased in both urban and rural areas, but levels are much higher in rural areas. Consumption of quality food is decreasing in both urban and rural areas, but the decrease is larger in urban areas. Poor urban areas have been affected the most by increased food prices and it can be considered an emergency situation in those areas. Many rural areas and entire provinces are facing crisis levels of acute malnutrition.

Percentage of wasted children under-5 by place of residence and wealth, DHS 2005 & CAS 2008





## Program Implications 1

- The malnutrition-infection cycle is not going to be broken with short-term staple food interventions. Breaking this cycle needs to be the focus.
- Community screening for severe malnutrition with supported referral is needed; the immediate need is greatest in poor, urban areas.
- The situation should be closely monitored with incidence data that can be disaggregated to the local level.

## Program Implications 2

- It does not make sense to focus only on maternal nutrition and nutrition of children under 2. The improvements for both of these groups are keeping national levels of U-5 malnutrition below emergency levels, but these improvements will be erased if we do not react to the worsening nutrition status of older children.

## Planned Further Analysis

- Child anthropometry by additional background characteristics such as profession
- Infant and young child feeding indicators
- Child and maternal supplementation
- Informal urban settlements

## Future considerations

- There is not yet evidence that food prices are going to drop to pre-crisis levels. If prices stay high, the nutrition situation will likely worsen.
- The global recession is likely to make it more difficult for many families in Cambodia. As the recession deepens the impact on nutrition will be felt more and more, especially in combination with high food prices.