# Food and Nutrition Security: For SA Households and children

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## Food and nutrition security & government priorities

- Government objective to halve unemployment and poverty by 2014
- Food and nutrition security for all is foundational goal.
  - Fundamental building block for human participation
  - Unlike many other poverty reduction interventions, food and water are essential to life
  - Nutrition is key foundation that influence effectiveness of other interventions



### Purpose of this session

- Although food insecurity has fallen dramatically, there
  is widespread and deep nutrition insecurity.
  - It is much more significant than many realise
  - Its character is not what many think
  - Its impact on children is huge and has long term implications
- Purpose of session is to create awareness of and to explore how ECD Stakeholders can respond to the challenge of addressing appropriately food and nutrition security for young children.



### definitions

#### Malnutrition

Malnutrition concerns not enough food, too much food, the wrong types of food, and the body's response to a wide range of infections that result in malabsorption of nutrients, or the inability to use nutrients properly to maintain health. Clinically, malnutrition is characterised by inadequate or excess intake of protein, energy, and micronutrients such as vitamins, and the frequent infections and disorders that result.

Source: World Health Organization www.who.int/water\_sanitation\_health/diseases/malnutrition/en



### Cont.

#### Undernutrition

Undernutrition includes a wide range of effects including intrauterine growth restriction resulting in low birth weight; being underweight (indicated by low weight-for-age); stunting (low height-forage); wasting (low weight-for-height); and less visible micronutrient deficiencies. Undernutrition is caused by a poor dietary intake that may not provide sufficient nutrients, and/or by common infectious diseases, such as diarrhoea.

**Source:** *The Lancet's* Series on Maternal and Child Undernutrition, Executive Summary, January 2008



## Characteristics of food and nutrition insecurity in SA

South Africa is one of the top 20 countries with the highest burden of under nutrition

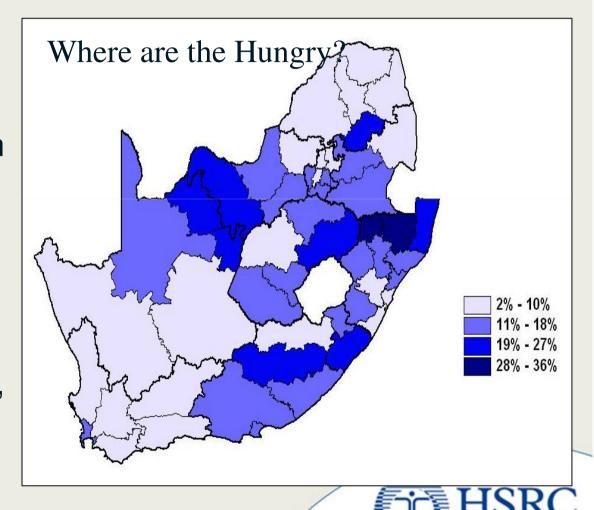


### HH food insecurity has fallen dramatically

- Household food insecurity, or hunger, has fallen dramatically since 2001. According to the GHS:
  - In 2002, 20% of children and 25% adults said that they were hungry 'sometimes', 'often' or 'always'.
  - By 2007, 12.2% of children and 10.6% of adults said they were hungry
- This seems to largely be explained by the expansion of social grants
- Some reversal in these gains is probable in the context of the economic downturn, with the loss of 770,000 jobs

### Household food security

- While the experience of hunger has decreased in recent years, 12% of South African children and 10% of adults still feel the desperation of hunger (GHS 2007)
- At the national level, one out of two households (52%) experienced hunger



(NFCS 2005) Social science that makes a difference

## Deeper analysis shows that improvements are not so dramatic

- The National Food Consumption Survey (NFCS, 2005) found that:
  - 52% of the population are hungry
  - 33% are at risk of being hungry
  - Only 20% of the SA population are food secure
- Our team has been grappling with why this picture is so different to that of the official GHS
- Challenge = NFCS is much smaller sample (2,980) and is not official data.
- The gap between the GHS and the NFCS may be explained by the difference in the experience of hunger, and of under-nutrition.
  - The GHS asks: are you hungry? (although this has changed)
  - The NFCS asks about food items consumed. Many poor households mainly consume low nutrient starches so they feel full. But there is a high prevalence of under-nutrition. People do not easily link their under-nutrition with their experience of being tired or ill.



#### Household food and nutrition security

- We brought together economists and nutritionists to work out a common ground
- Our question = what % of the population could access a balanced nutritious diet if they so desired?
  - Step 1 = identify *minimum* nutritious food basket and what it would cost (R262 pp pm at 2005 prices)
  - Step 2 = review IES and other sources to identify household income and total expenditures, the % spent on food vs other items (35% to 70%)
  - Step 3 = peer review
  - We assume people are perfectly rational. That is, they don't waste any money, and have perfect knowledge of what a low cost balanced diet would contain.
- Under these conditions, we found that:
  - 50% to 80% of households could not afford an acceptable nutritional balance, based on current prices and levels of fortification
  - Only 20% of households can afford a minimum nutritionally adequate diet.
- This more closely relates to the NFCS findings



#### Nutrition levels have not improved that much....

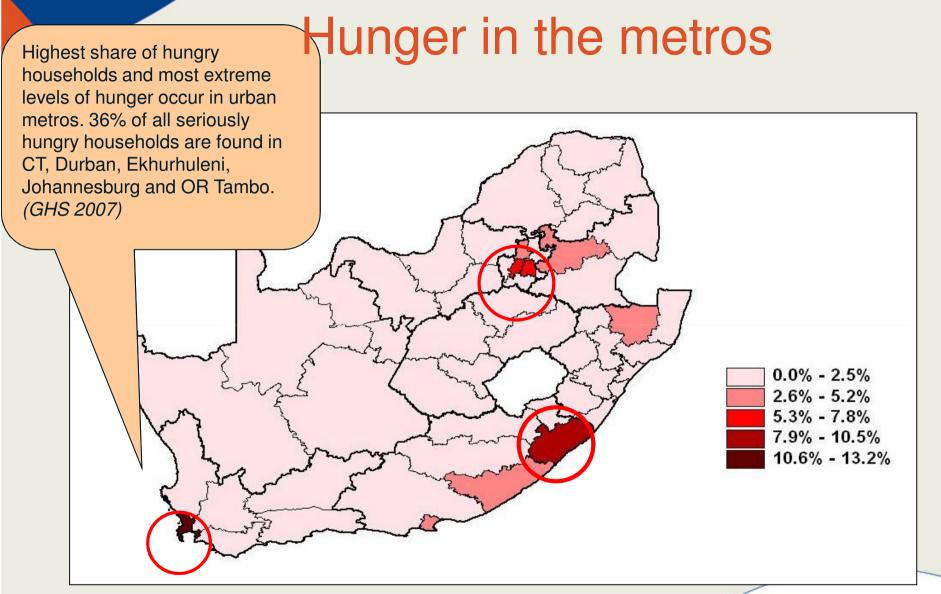
- Average South African consumes less than 4 of 9 food groups min should be
- Although there are fortification programmes, micro-nutrient count not as effective as it needs to be:
  - Nationally 45% of children had an inadequate zinc status (NFCS, 2005)
  - One quarter of women, and 2/3 children nationally had poor vitamin A status
  - About a third of women and children iron deficient
  - Under-nutrition is critical issue viz SA women, where approximately 1/3 of young women are HIV+



## Food and nutritional insecurity is a national challenge, not only rural

- Food security is currently located in the M&E outcome #7 focusing on rural livelihoods
- Although there are health and education sector programmes aimed at improving nutrition, there is no mention in their M&E targets
  - Exception =
    - Rural dev target = food & nutrition surveillance unit in Nutrition Directorate
    - "1 meal per day in primary schools"
- Strong evidence of deep hunger in urban areas, not only rural ones. The reasons and dynamics might differ







### Special rural dimensions

- Among the poorest half of households (i.e. those for whom monthly household income is less than R2000), rural households spend about 15% less on food per capita than urban households (esp less on meat).
- This might be explained by own food production but there is no reliable evidence available to show this.
- Rural households pay 10%-20% more for a basket of basic foodstuffs than urban ones (NAMC).



## Impact of Food Insecurity for young children

Although child hunger has fallen dramatically, indicators of under-nutrition have not noticeably improved

- Stunting (inadequate growth in height) affects 1 out of 5 children, and improved marginally between 1999 and 2005. This is sign of chronic malnutrition.
- 1 in 10 children was underweight for height in 2005.
   There are signs of rising "wasting", which is indicator of transitory food insecurity.
- Shortage of iodine in our diets can cause mental retardation and premature birth.

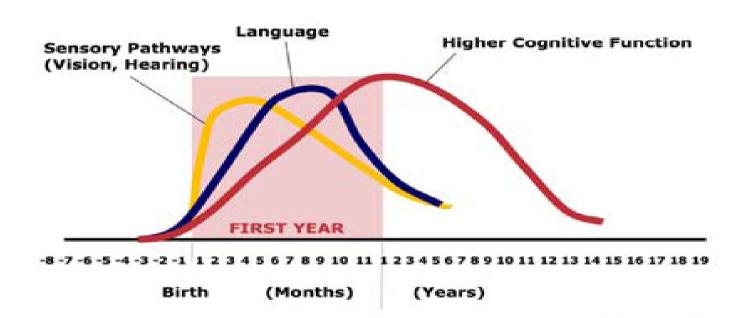


### **Child Development:**



#### **Human Brain Development**

**Neural Connections for Different Functions Develop Sequentially** 





### Consequences

- Without greater attention to nutrition, increased mortality, morbidity and impaired intellectual development are inevitable.
- Infant and under 5 mortality rates linked to undernutrition – we are reversing MDG gains in SA.



### Potential contribution of home production

- Approximately 2.5 million households (4 million people) produce extra food for own consumption – primarily in the former homelands
- Although 1/5 of all black households are involved in some home production, a large % are located in former homelands.
   1/4 of all black subsistence farmers located in Vhembe, OR Tambo and Amathole municipalities
- About 1.9m subsistence producers are aged 15 29.
- Contribution of home production to HH food security varies considerably. Not all households that home produce are food secure.

### Ensuring affordable food at stable prices

- The poorest 40% of households allocate at least 35% of their spending to food, and some estimate this might be as high as 70%. These households need protection from rapid food inflation
- Since 2007, food prices started increasing very steeply, explained by various factors:
  - Competition along the agro-food value chains (Competition Commission investigations: Tiger Brands (bread), diary prices, supermarkets, etc)
  - Exchange rate depreciation: Small economies reliant on food imports are vulnerable to exchange rate depreciation (this makes imported foods more expensive)
  - Input costs: fertilizer costs, packaging, wage costs



## Why is it difficult for the poor to access a nutritious basket?

- Healthier foods could cost 9%-12% more than similar less healthy foods
- Poor buy in smaller quantities, and therefore higher unit prices
- Retail is often local monopoly
- Food prices not falling as they should

#### Why are prices higher in rural areas?

This is not known for certain, but we can guess that partly explained by:

- Structure of distribution and retail
- Food grown in rural areas, processed in urban areas, and transported back
- Transportation costs generally and poor rural infrastruct

## Intervention options to reach children

- Social grants increase access and amount
- Encourage breast feeding for 1<sup>st</sup> 6 months exclusively
- Address Food access for pregnant and lactating mothers
- Food Banks
- Food supplementation school feeding extend to ECD/Secondary etc
- Reduce cost of food that people buy (market interventions, retail, competition policy)
- Improve the quality of food that people buy, often through industry regulation or product development that enhances current foods
- Alter household demand toward more nutritious combinations; develop new nutritious products; offer supplements
- Promote home production
- Monitoring and evaluation of programmes (e.g. do companies fortify when regulated?) and outcomes (e.g. did nutrition levels rise?)

Given scale of the challenge, identify interventions that are low cost, high impact ideally with short to medium term horizon



### Social grants support food security & stability

- Approx 13 million people benefit from various social welfare grantsincluding 8.7 million children (2009)
- Social grant incomes protect the recipients against hunger: it helps households to afford a basic and stable level of nutrition
- 51% of all hungry households in 2007 were eligible for grants but did not receive it
  - Of this, 2/3 receive some grants but qualify for additional money
  - 1/3 receive zero grant although they qualify for it
- Grants will/can have more impact:
  - Improve reach (eg through birth registrations)
  - eligibility age of child grant recipients rises to age 18



### Food fortification & supplements

- Food fortification can enhance the nutrient content and reduce the overall cost to the consumer of procuring a nutritious diet.
- Adding iodine to salt is a simple solution 70% of world pop protected through this means.
- Potentially, an immediate, high-impact and fairly low-cost intervention
- The following foods are fortified by law:
  - Bread White bread; Wheat flour; Maize fortified with vitamin A
- All children under 6 and mothers are meant to receive vit A tablets at cost of 3c each, but reaching only 20%
- Uneven impact to date: Success with folic acid
  - No improvement in vitamin A or zinc reasons need to be established

     Social science that makes a difference

     High connection of the provided science in the prov

### Monitoring and evaluation

- Regularised monitoring and evaluation systems are essential
- These need to monitor:
  - Programme implementation
  - Nutrition outcomes
- High cost implies that creative approaches are needed



#### Recommendations

- Food and nutrition security needs to be a higher priority
- National approach and institutional home needed to meeting food security targets as laid out in M&E framework
- Clear link in budget and programmes made in relation to meeting targets
- Review of division of competencies across spheres of govt to ensure minimum delivery
- Need more forceful immediate interventions (egs)
  - Grants to those who qualify
  - Modification to fortification & supplements programme
  - Market interventions where appropriate to fortify and ensure stable affordable prices
  - Monitoring and evaluation of implementation and outcomes
- More forceful approach to longer term interventions
- Follow on processes needed to elevate and generate profile = ?



### What can be done?

- Create awareness and understanding of the need to address food insecurity
- Responses must take into account the whole family
- Nutrition education is critical
- Exploring low cost nutrition options is critical
- Ensure better targeting and access to food and vitamin supplementation programmes
- Enable food garden initiatives as 1 way to address food insecurity