

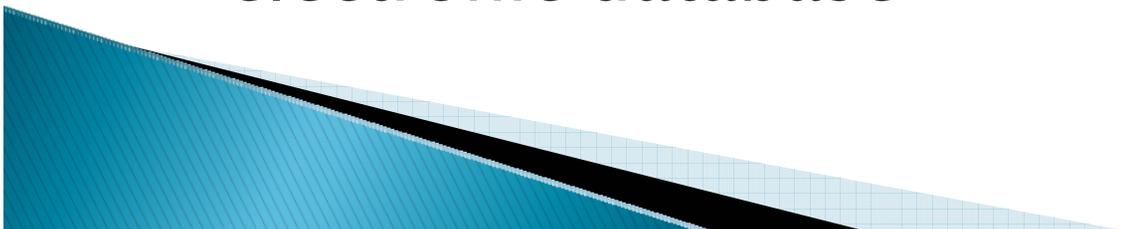
# **AFROFOODS CALL FOR ACTION FROM THE DOOR OF RETURN: FOOD COMPOSITION, BIODIVERSITY AND SUSTAINABLE DIETS**

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International Scientific Symposium on Biodiversity and Sustainable Diets  
United Against Hunger Nov 3-5 2010

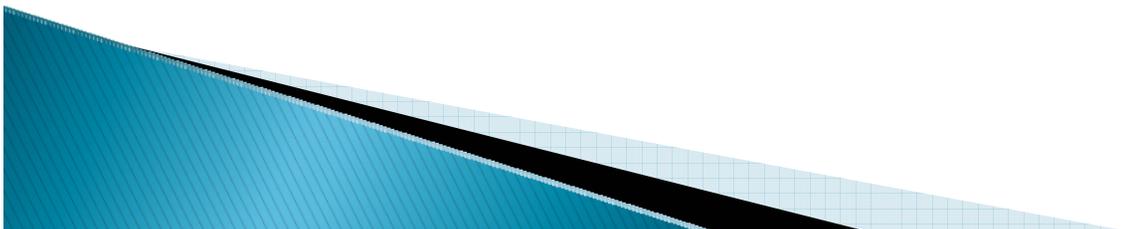
# INTRODUCTION

- ▶ AFROFOODS is the regional food data centre for Africa within the INFOODS network
- ▶ AFROFOODS was set up to generate ,and publish food composition data along the INFOODS guidelines in addition to building the capacity of members through training courses in Food Composition
- ▶ Many countries are generating and publishing food composition data but there is yet to be an Africa wide publication or electronic database

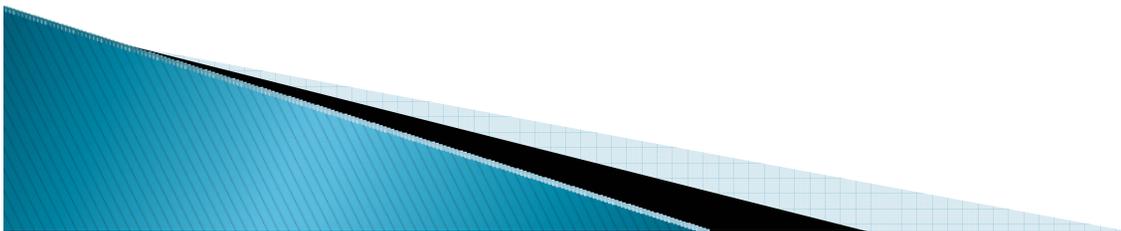


# Introduction

- ▶ The importance of food composition data in food safety, trade and nutrition activities made it imperative for food composition activities to be continued and sustained, especially in Africa.
- ▶ Over the years the importance of nutrition in Development has been neglected in sub saharan Africa in spite of several calls by various groups and agencies



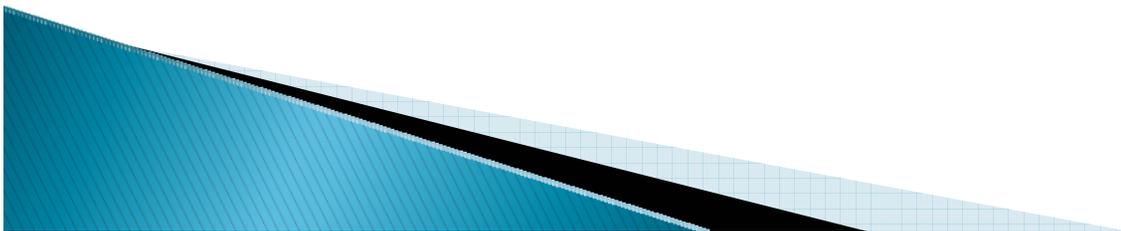
- ▶ This lack of attention has primarily resulted in dire consequences for the region resulting in various forms of food insecurity and malnutrition including the double burden of non communicable diseases
- ▶ As part of advocacy for change the AFROFOODS coordinators meeting in December 2009 put out a wake up call to African governments and development partners to stop treating nutrition as an emergency but take decisive action



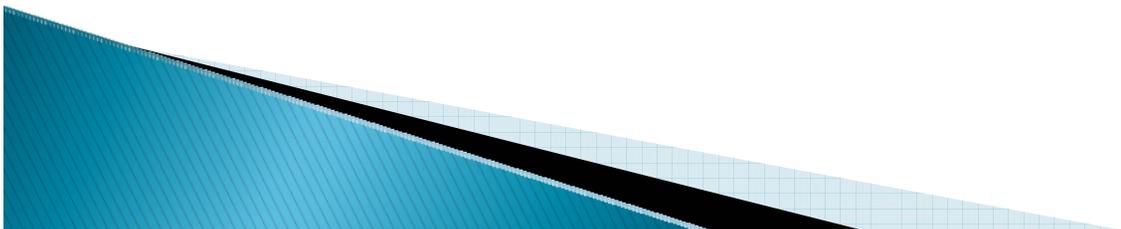
# AFROFOODS CALL from Door of return



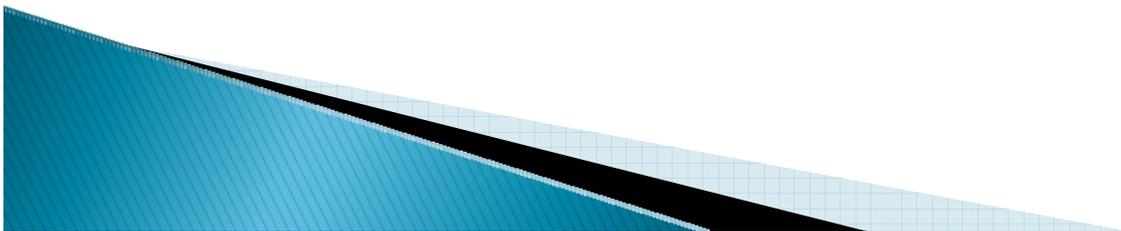
- ▶ **Note** that the degradation of ecosystems and the loss of food biodiversity is contributing greatly to the increases in poverty and malnutrition in Africa;
- ▶ **Recognize** that returning to local crops and traditional food systems is a prerequisite for conservation and sustainable use of biodiversity for food and nutrition;
- ▶ **Acknowledge** that local foods are the basis for African sustainable diets;



- ▶ Urge that food composition data be emphasized as the fundamental information underpinning almost all activities in the field of nutrition;
- ▶ ● Call upon the sectors of public health, agriculture, and environment and food trade to help reinforce and assist with the improvement of food composition data, particularly on local foods;



- ▶ **Request** that the contribution of food composition be credited as one of the most important components for action in nutrition and food quality, food safety, and food and nutrition security;
- ▶ We invite all sectors to place AFROFOODS on the national, regional and international agenda for all food and nutrition activities in Africa through interdisciplinary strategic plans for achieving the MDGs;



# How Maternal and child nutrition are linked

*Birth weight is closely associated with child survival, well-being, and growth, which influences nutrition in adolescence and determines how well nourished the mother is when she enters pregnancy.*



*Prevention of stunting in girl children during the first two years can help break the cycle of malnutrition.*



*Nutrient stores built up in adolescence help the nutrition of women during and between pregnancies.*



*Mother's nutrition before and during pregnancy influences growth and development of the fetus and its birth weight; it affects her chances of surviving the delivery.*



*Adequate nutrition for the mother should be maintained during breastfeeding.*

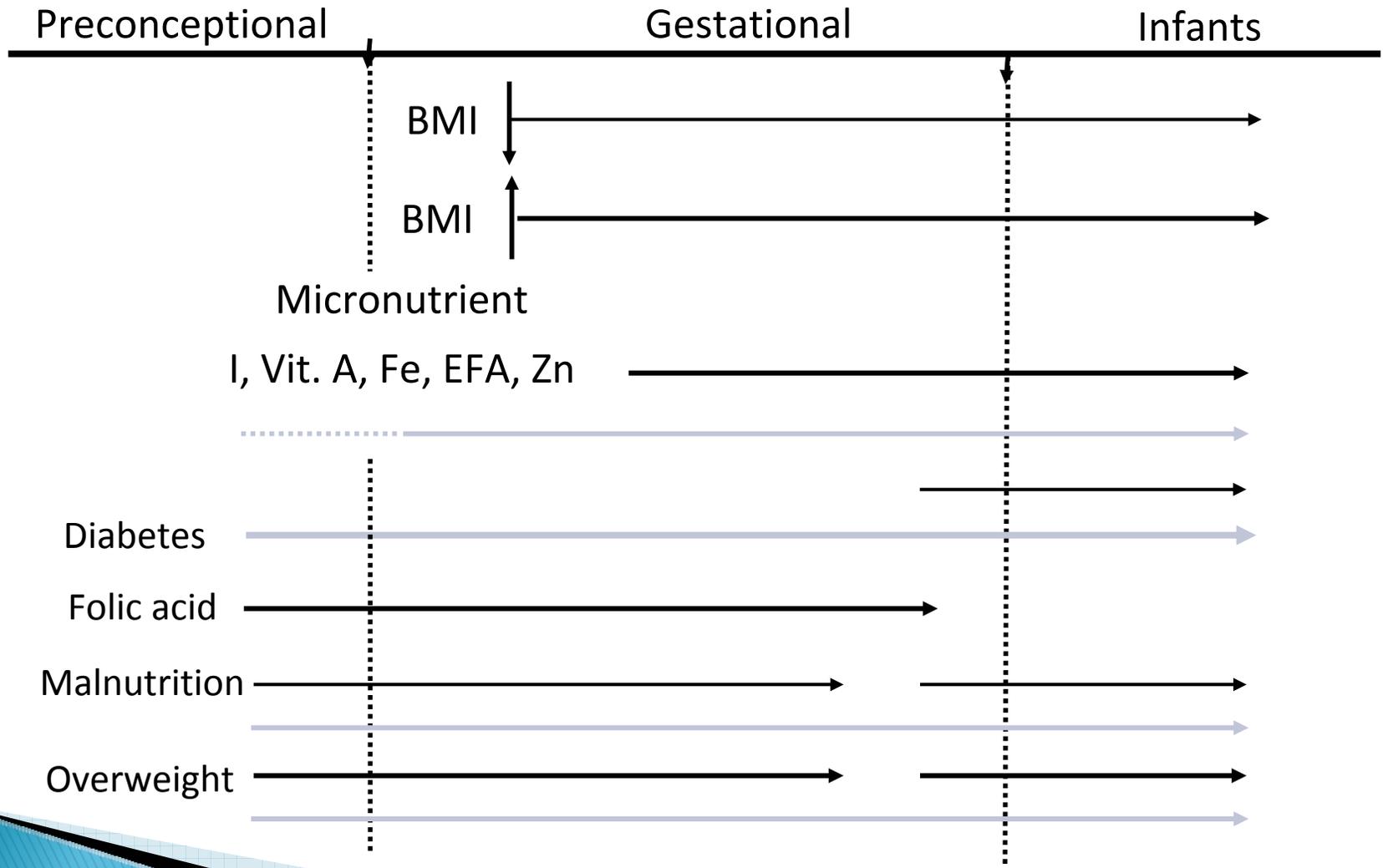


*Mother's nutrition is important for practicing child-rearing, care, and household/economic tasks, and for recovery...*

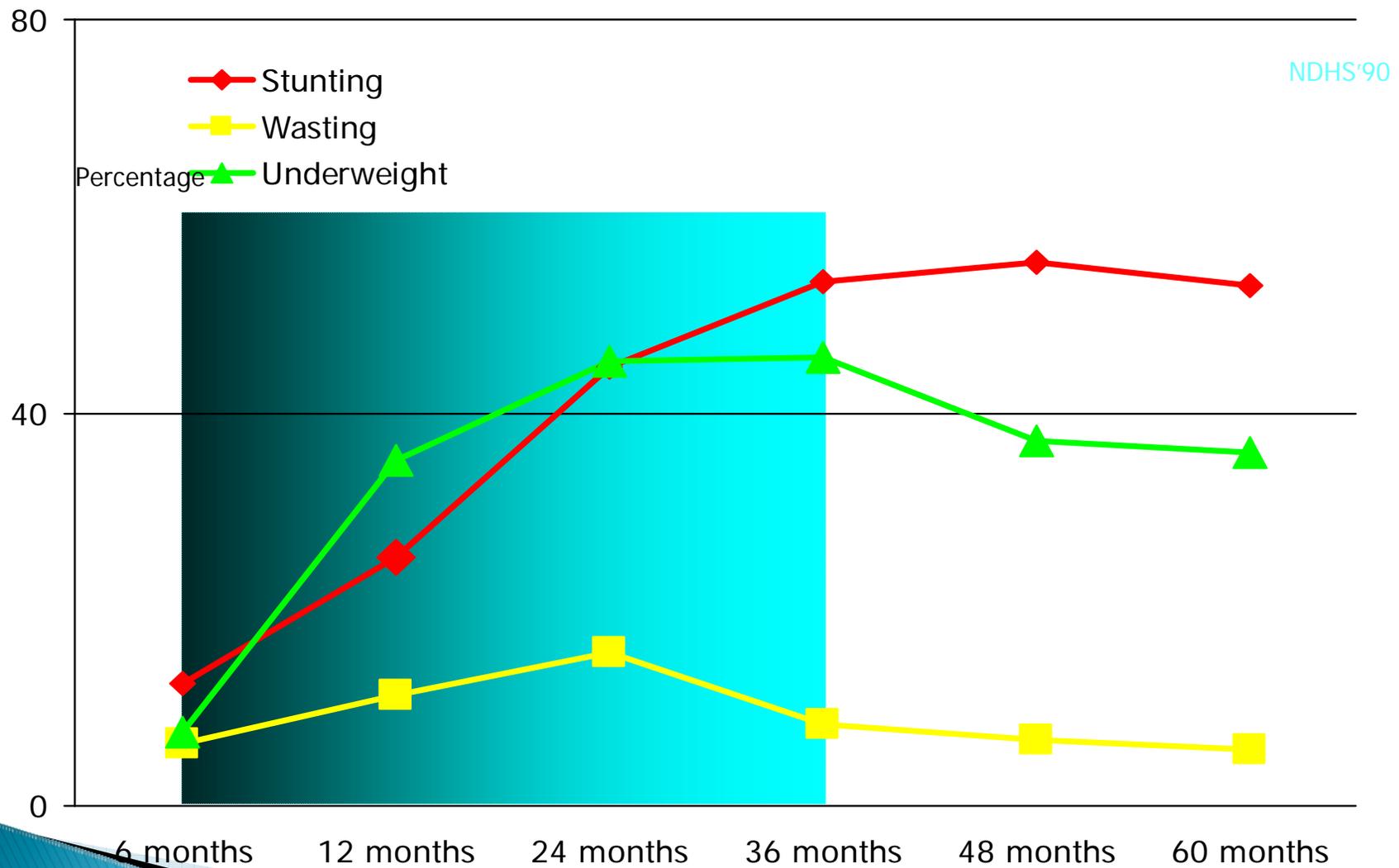


*...for future pregnancies.*

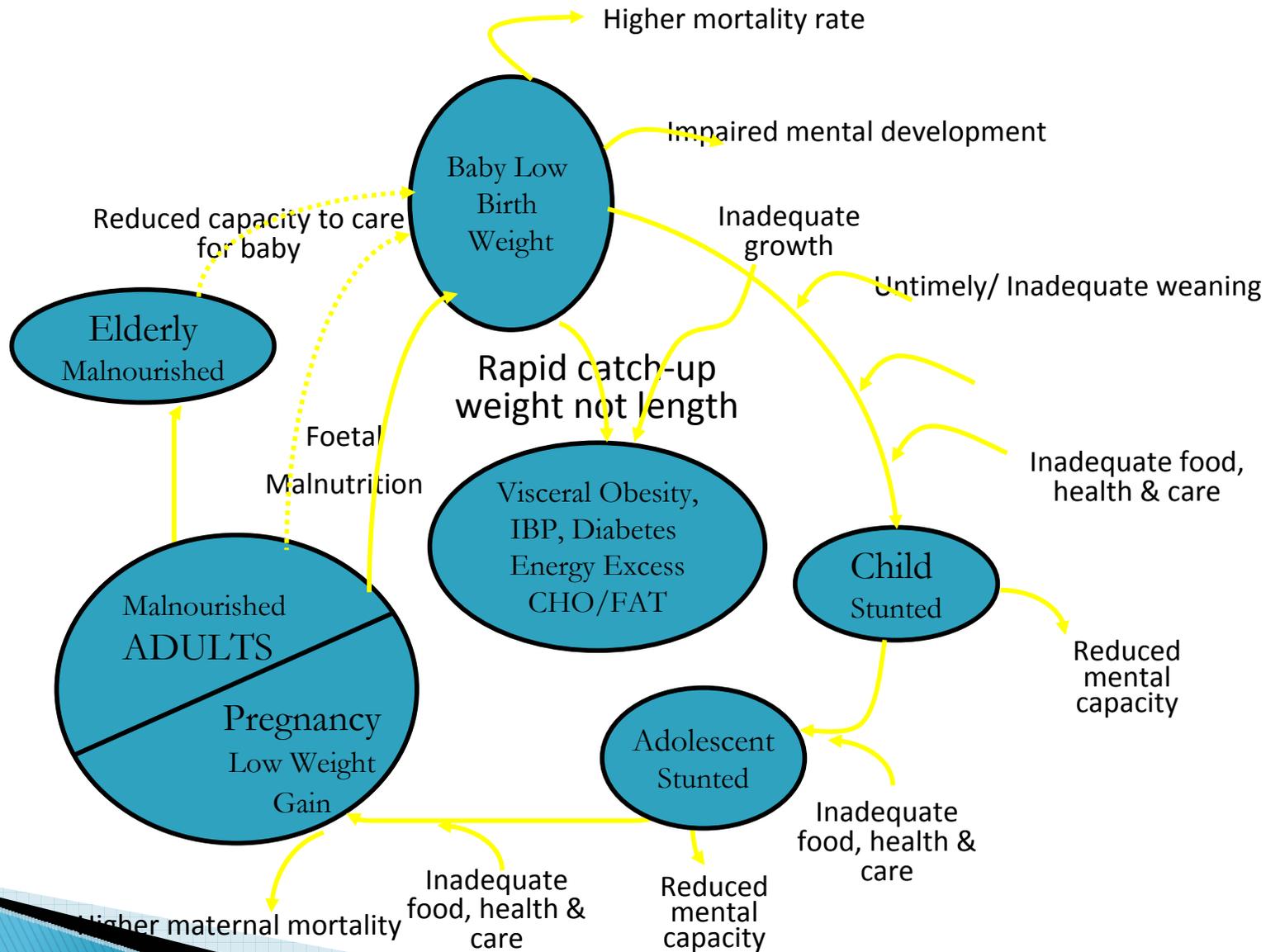
# Nutrition: Critical Timing



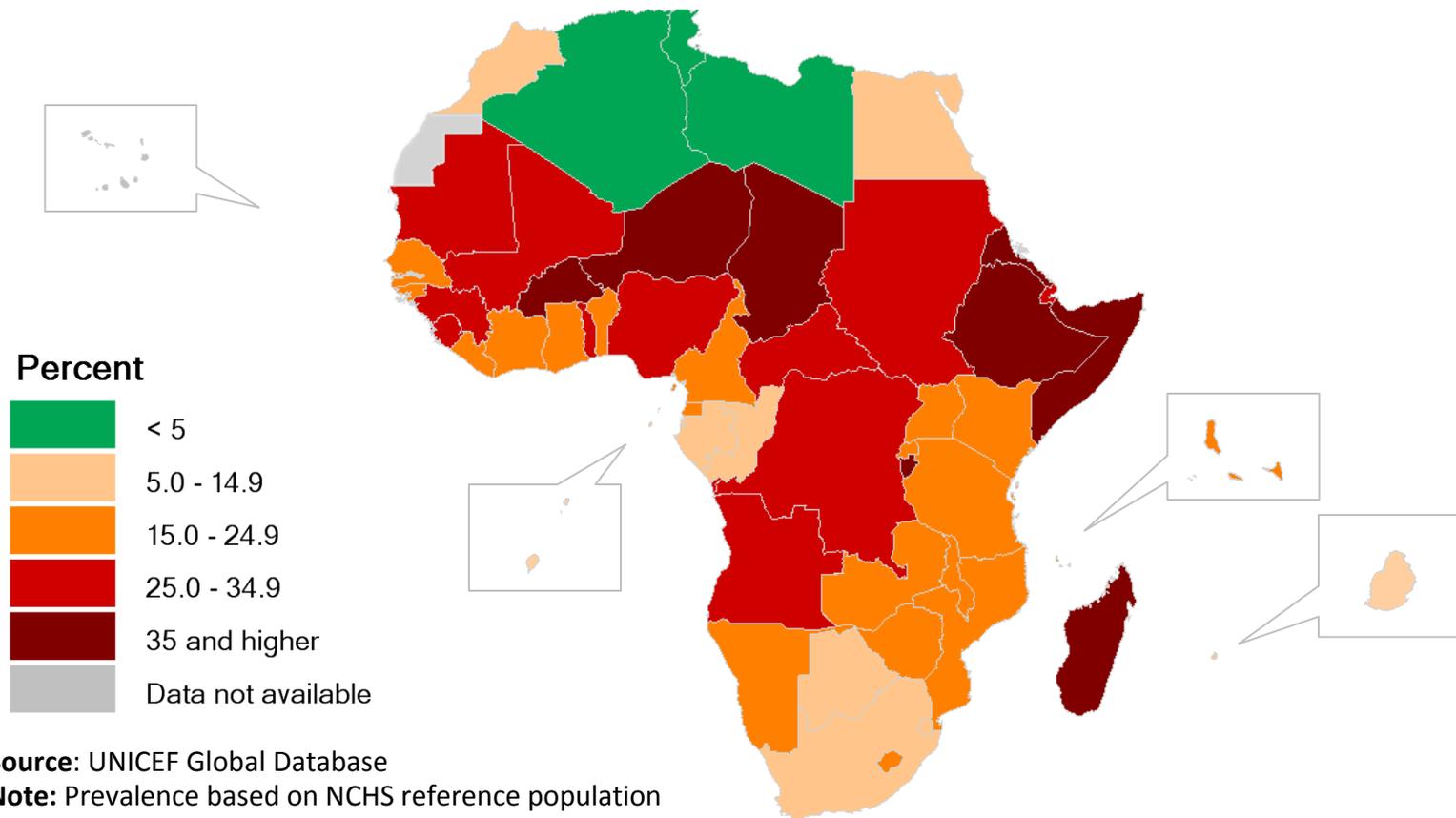
# Malnutrition Happens Early



# Intergenerational effects



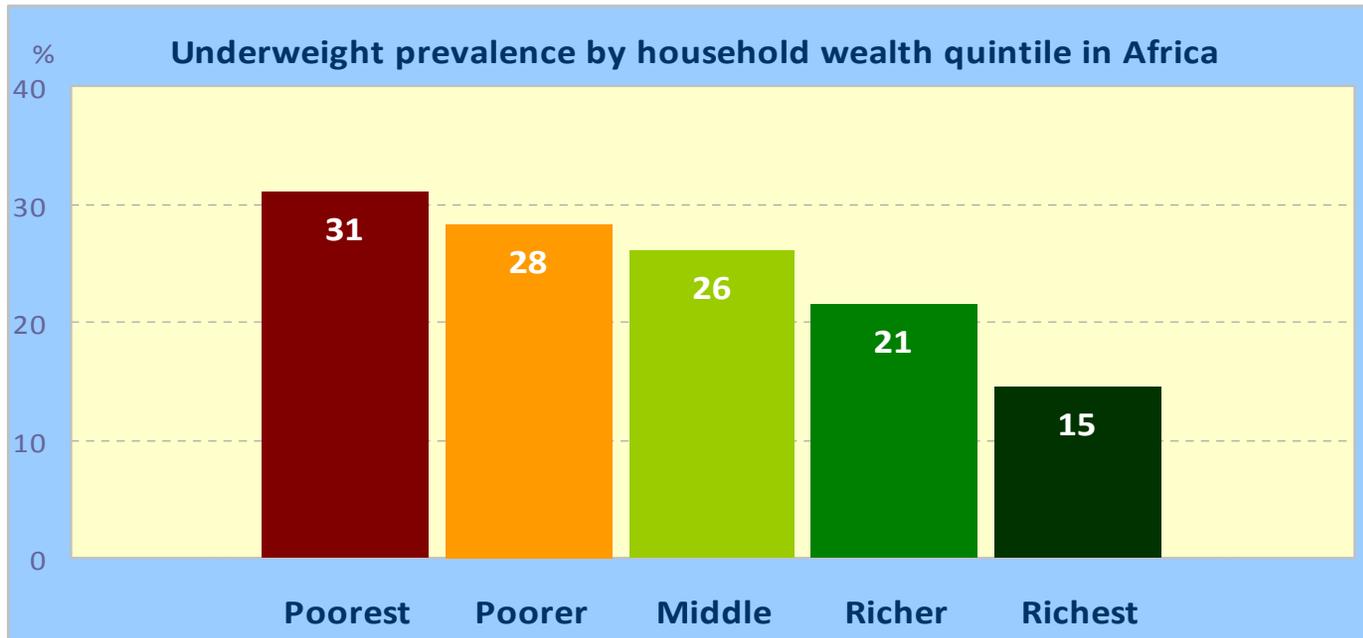
# Underweight prevalence among children under five in Africa



## Key messages

- More than a quarter of under five children in Africa are underweight (26%)
- There are striking disparities across countries in Africa. At least 35% of under five children are underweight in eight countries

# Underweight prevalence among children under five and household wealth in Africa



**Note:**

Prevalence based on NCHS reference

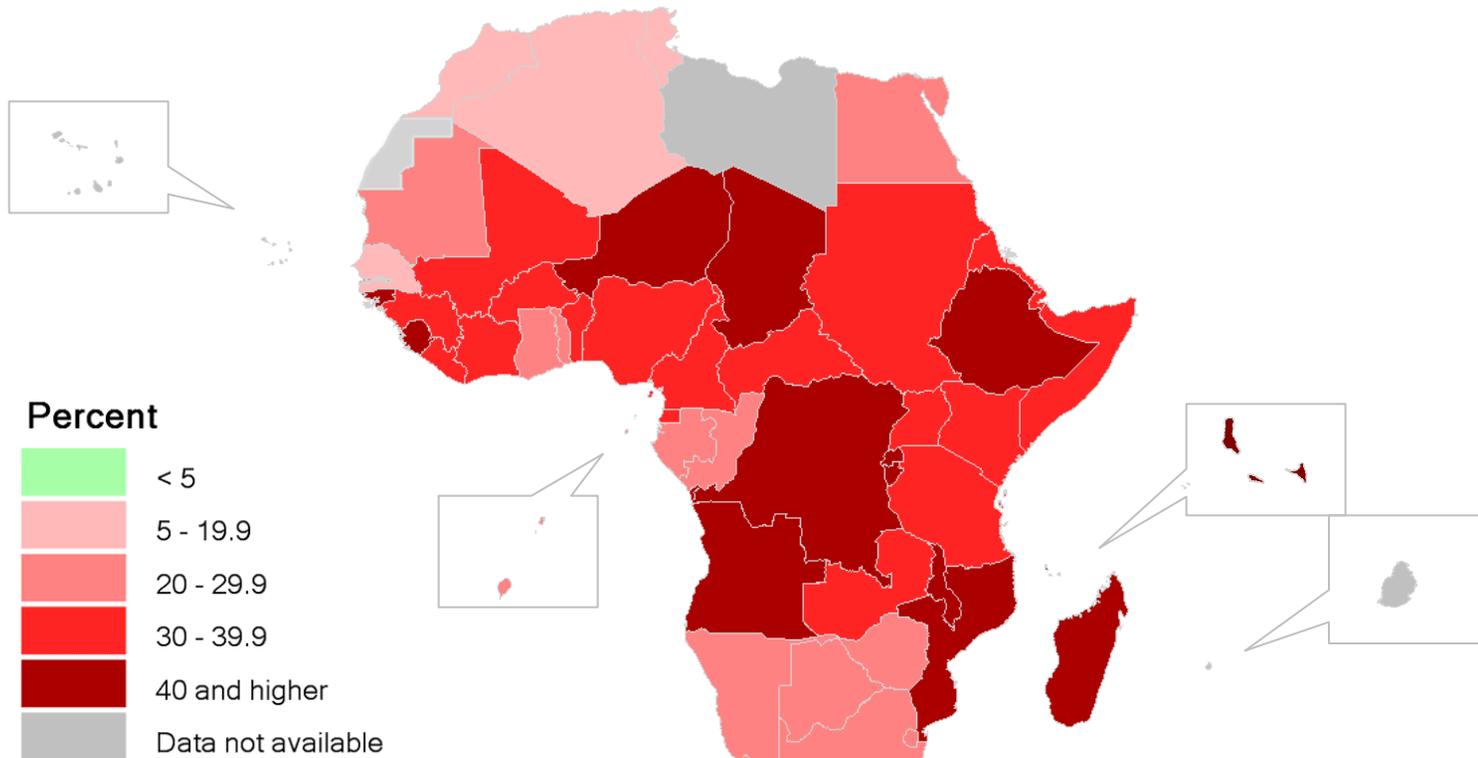
Estimates based on direct average from 34 countries where household wealth information is available

**Source:** UNICEF Global Database

## Key messages

- Underweight prevalence is closely associated with household wealth
- Overall, children in the poorest families are twice as likely to be underweight as children in the richest families, although disparities are even more pronounced in certain countries

# Child stunting prevalence among children under five in Africa



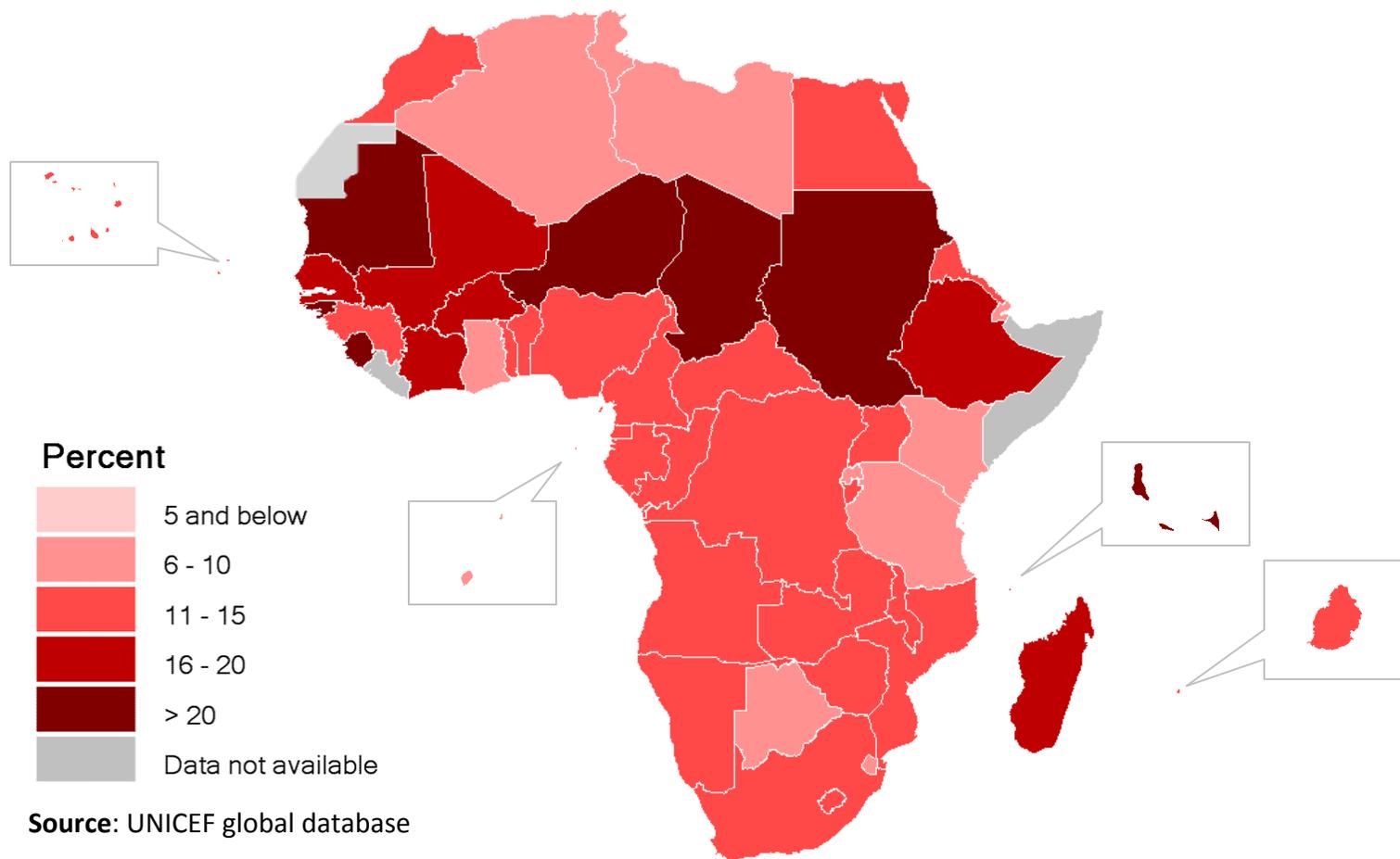
**Note:** Prevalence based on NCHS reference population

**Source:** UNICEF global database

## Key messages

- More than one third of under five children across Africa are stunted
- Burundi, Niger and Zambia have the highest prevalence in Africa – at least 50% or higher

# Incidence of low birthweight in Africa

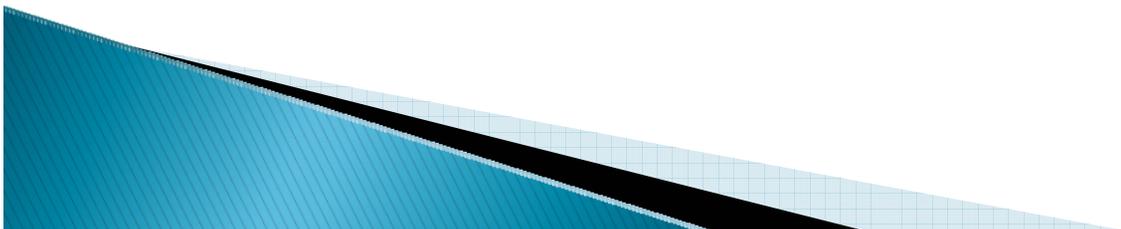


## Key messages

- Around 1 in 7 infants weigh less than 2,500 grams at birth in Africa (14%)
- Around two-thirds of infants are not weighed at birth in Africa (65%)

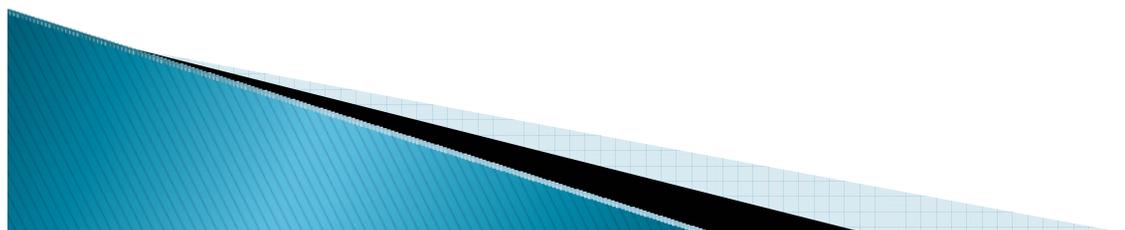
# Malnutrition across the life span, by disorder and consequence.

<b>Life Stage:</b>	<b>Common Nutritional Disorders</b>	<b>Main Consequences.</b>
Embryo/ fetus	<ul style="list-style-type: none"><li>■ Intrauterine growth retardation</li><li>■ Iodine deficiency disorders (IDD)</li><li>■ Folate deficiency</li></ul>	<ul style="list-style-type: none"><li>■ Low birth weight</li><li>■ Brain damage</li><li>■ Neural tube defects</li><li>■ Stillbirths</li></ul>



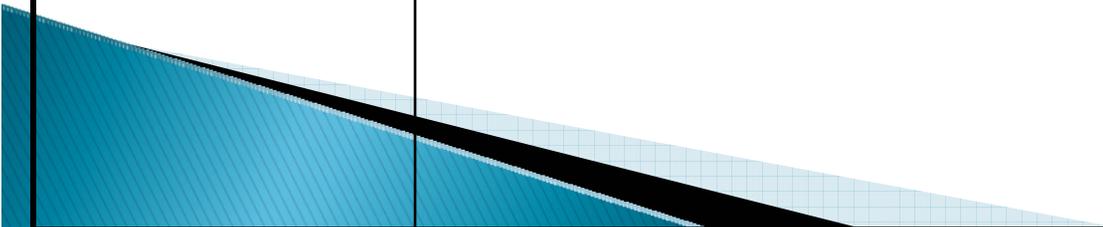
# Malnutrition across the life span, by disorder and consequence.

<b>Life Stage:</b>	<b>Common Nutritional Disorders</b>	<b>Main Consequences.</b>
Neonata	<ul style="list-style-type: none"><li>■ Low birth weight</li><li>■ Iodine deficiency disorders (IDD)</li></ul>	<ul style="list-style-type: none"><li>■ Growth retardation</li><li>■ Development retardation</li><li>■ Brain damage</li><li>■ Early anaemia</li></ul>



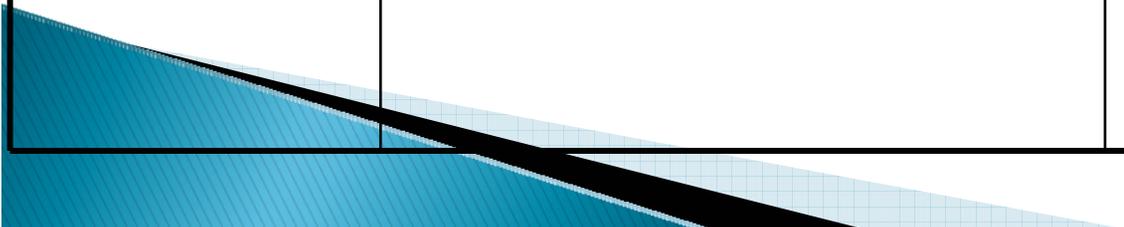
# Malnutrition across the life span, by disorder and consequence.

Life Stage	Common Nutritional Disorders	Main Consequences
Infant and young child	<ul style="list-style-type: none"><li>■ Protein-Energy Malnutrition (PEM)</li><li>■ IDD</li><li>■ Vitamin A deficiency (VAD)</li><li>■ Iron deficiency anaemia (IDA)</li></ul>	<ul style="list-style-type: none"><li>■ Continuing malnutrition</li><li>■ Developmental retardation</li><li>■ Increased risk of infection</li><li>■ High risk of death</li><li>■ Goitre</li><li>■ Blindness</li><li>■ Anaemia</li></ul>



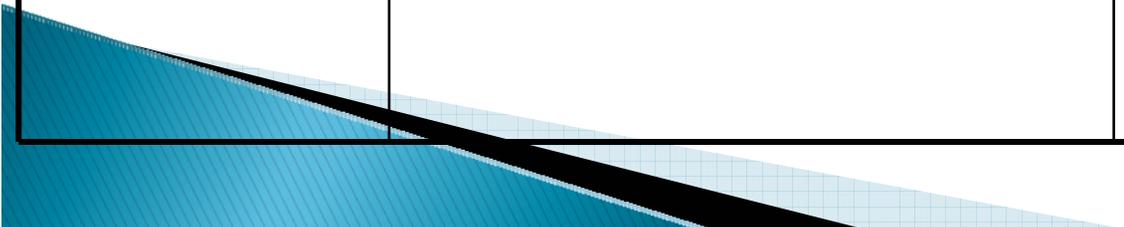
## Malnutrition across the life span, by disorder and consequence.

<b>Life Stage:</b>	<b>Common Nutritional Disorders</b>	<b>Main Consequences.</b>
Adolescent	<ul style="list-style-type: none"><li>■ PEM, IDD, IDA</li><li>■ Folate deficiency</li><li>■ Calcium deficiency</li></ul>	<ul style="list-style-type: none"><li>■ Delayed growth spurt</li><li>■ Stunted height</li><li>■ Delayed/retarded intellectual development</li><li>■ Goitre</li><li>■ Increased risk of infection</li><li>■ Blindness</li><li>■ Anaemia</li><li>■ Inadequate bone mineralization</li></ul>



## Malnutrition across the life span, by disorder and consequence.

<b>Life Stage:</b>	<b>Common Nutritional Disorders</b>	<b>Main Consequences.</b>
Pregnant and lactating women	<ul style="list-style-type: none"><li>■ PEM, IDD, VAD, IDA</li><li>■ Folate deficiency</li><li>■ Calcium deficiency</li></ul>	<ul style="list-style-type: none"><li>■ Insufficient weight gain in pregnancy</li><li>■ Maternal anaemia</li><li>■ Maternal mortality</li><li>■ Increased risk of infection</li><li>■ Night blindness</li><li>■ Low birth weight/high-risk death rate for fetus</li></ul>



# Contribution of improved micronutrient status to Millennium Development Goals (MDGs)

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## Goal 1: Eradicate extreme poverty and hunger.

✓ Iron and Iodine deficiencies are related to mental and physical incapacity and this has implications for learning and productivity; zinc deficiency is associated with stunting that is related to low earnings; vitamin and mineral deficiencies (VMDs) are interrelated with poverty and hunger.

## Goal 2: Achieve universal primary education

✓ Iron and iodine nutrition are closely related to cognitive function; anaemia is related to low school attendance independent of cognition.

# Contribution of improved micronutrient status to Millennium Development Goals (MDGs)

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## Goal 3: Promote gender equity and empower women.

✓ The demands of childbearing, menstruation, pregnancy, and lactation create high demands on micronutrient stores in women, which results in a higher level of deficiencies for them; reducing VMDs improves maternal health and productivity and reduces disabilities such as night blindness.

## Goal 4: Reduce Child mortality

✓ Iodine supplements, Vitamin A, and zinc are proven to reduce childhood deaths and/or severe illness; improving folate status around the time of conception reduces the risk of mortality related to neural tube defects (NTDs).

# Contribution of improved micronutrient status to Millennium Development Goals (MDGs)

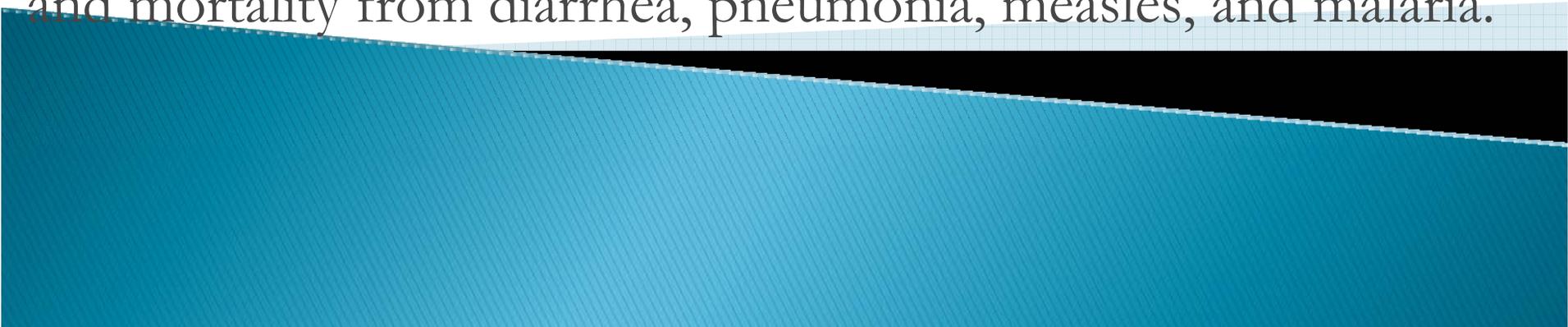
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## Goal 5: Improve maternal health.

✓ Anaemia is an important cause of maternal deaths; several VMDs (Vitamin A, Iron, Iodine, Folate, and Calcium) are associated with complications of pregnancy.

## Goal 6: Combat HIV/AIDS, malaria and other diseases.

✓ Adequate micronutrient status has been shown to reduce progression of HIV/AIDS and improve the quality of life of survivors; VMDs (e.g. zinc and Vitamin A) increase morbidity and mortality from diarrhea, pneumonia, measles, and malaria.



# Contribution of improved micronutrient status to Millennium Development Goals (MDGs)

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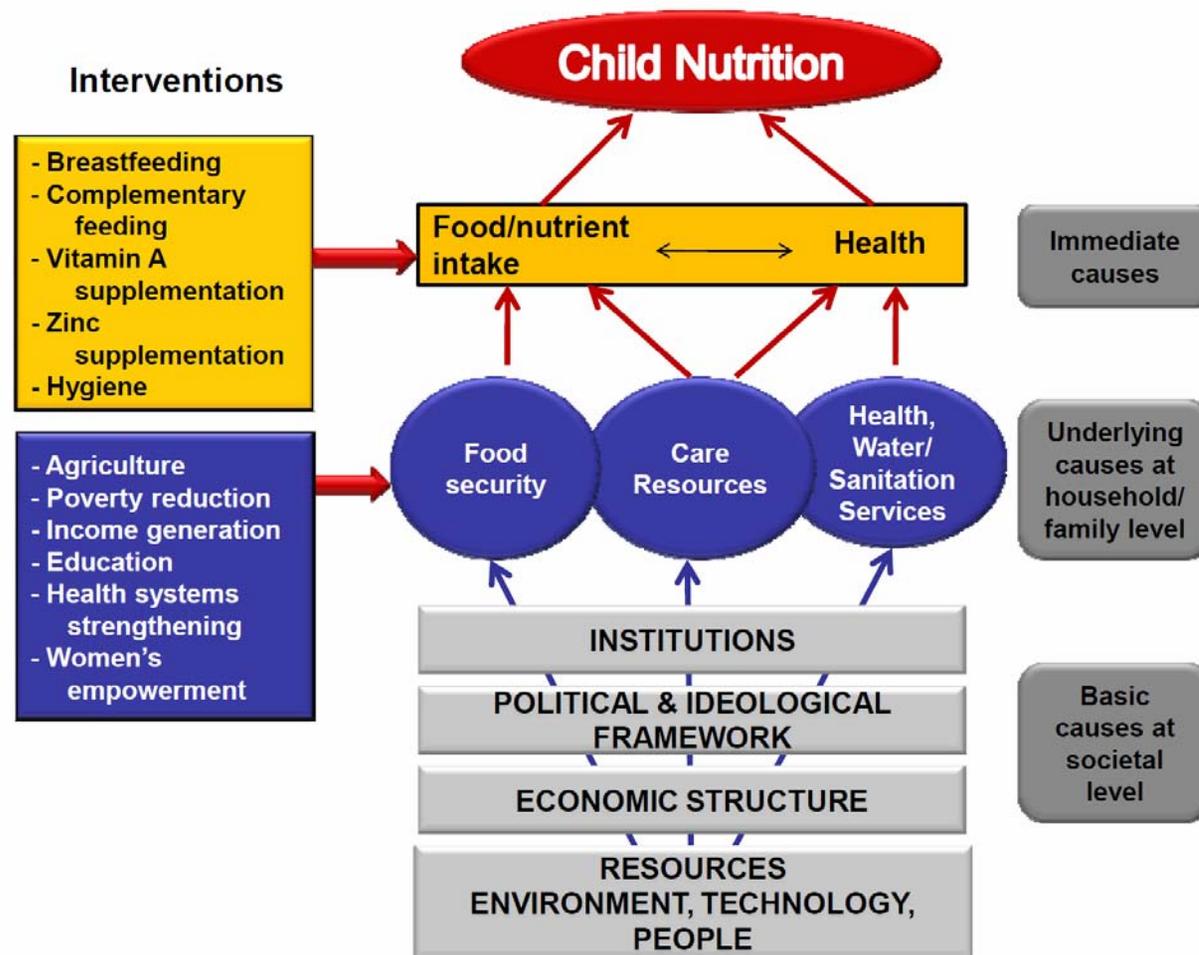
## Goal 7: Ensure environmental sustainability.

✓Fortification and supplementation support environmental sustainability; micronutrient status in turn is dependent upon a safe environment e.g. soils and iodine-deficiency disorders (IDDs) .

## Goal 8: Develop a global partnership for development.

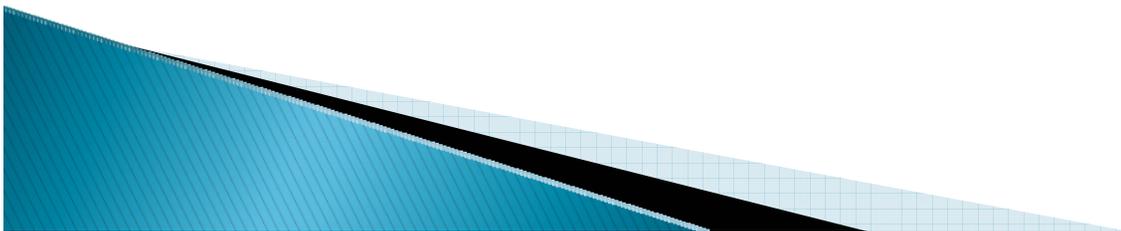
✓The micronutrient sector has facilitated a broad range of partnerships that raise the awareness and functioning of public and private sector development initiatives. .

## Determinants of Nutrition and Interventions to Address them

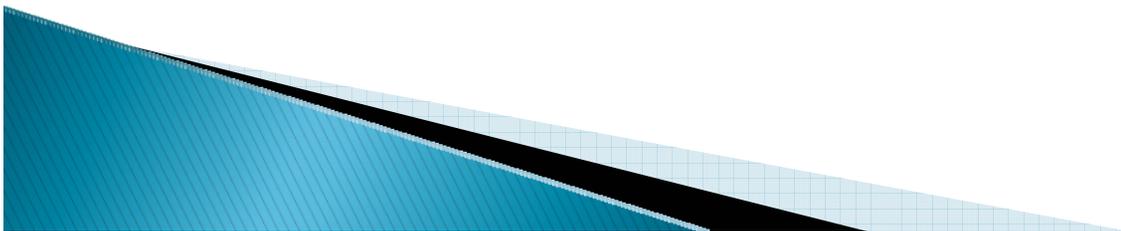


Source: Adapted from UNICEF model.

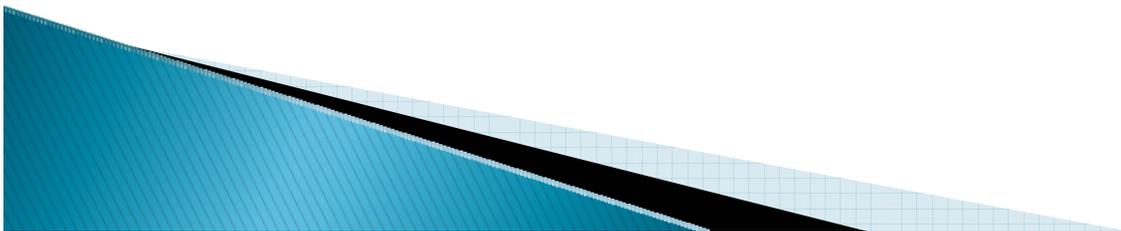
- ▶ Food composition and consumption studies are important dimensions for promoting the use of underutilized traditional foods for dietary diversity.
- ▶ Boosting dietary diversity through the consumption of underutilized traditional foods benefits, in particular, young children and women of reproductive age in the rural areas, holistically and sustainably.



- ▶ The benefits are more quantifiable when the nutrient and health promoting functional composition of the traditional foods are known which is where AFROFOODS would contribute immensely by providing reliable data for choosing the varieties consumed
- ▶ Harnessing the diversity in traditional foods is the key to sustainable diets in Africa

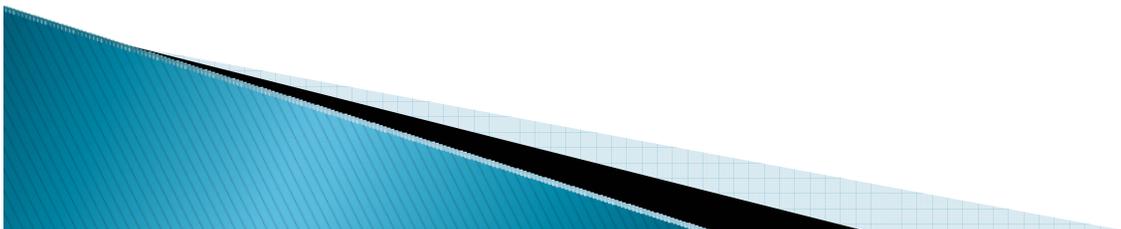


- ▶ Successful food systems in transition effectively draw on locally-available foods, food variety and traditional food cultures.
- ▶ In practice this process involves empirical research, public policy, promotion and applied action in support of multi-sectoral, community-based strategies linking rural producers and urban consumers with traditional and modern food systems.

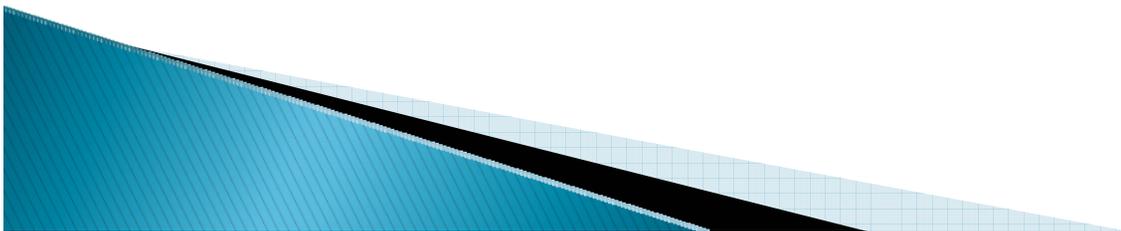


# ACTIONS NEEDED

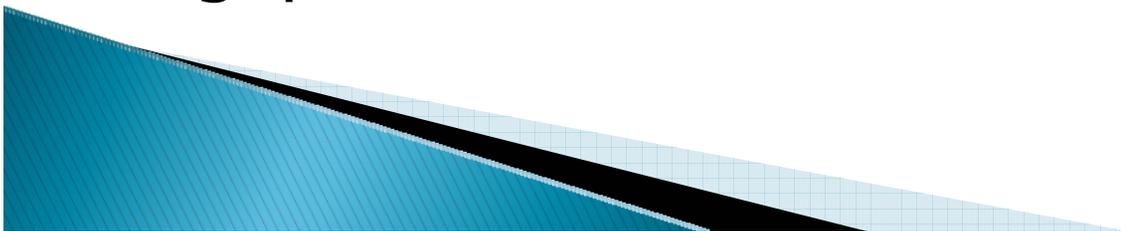
- ▶ Advocacy and mobilisation of resources is the first action area to ensure that African governments understand and support through adequate resource allocation, food composition activities in the region
- ▶ Advocacy with development partners to include funding for research in Food composition activities in all development projects addressing the MDGs



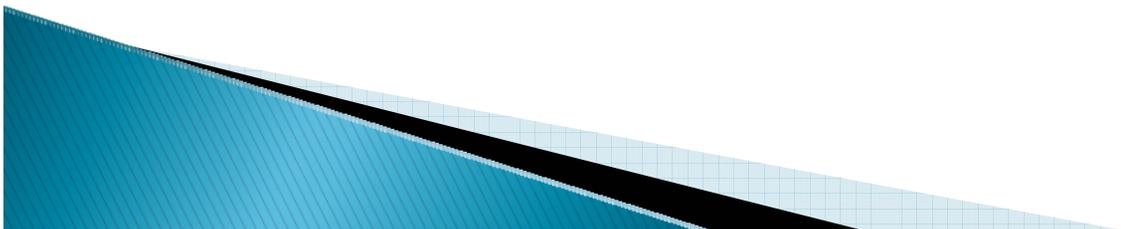
- ▶ Research on the properties of neglected and underutilized species and local varieties must be of priority for African scientists and AFROFOODS need to develop plans for moving that agenda forward
- ▶ Design of multi disciplinary research to provide evidence of links of biodiversity and sustainable diets in improving nutrition security



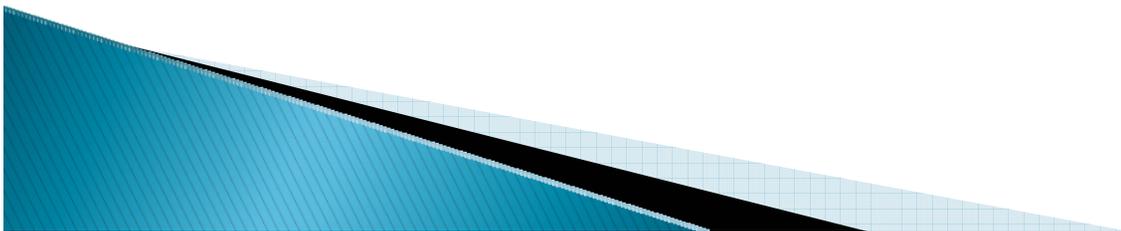
- ▶ To develop a sound research agenda each Country of AFROFOODS must document institutions and individuals generating food composition data in the various countries
- ▶ Similarly a documentation of the capacities in terms of the equipment and personnel to generate the required data is needed
- ▶ Mobilisation of resources to fill the capacity gap



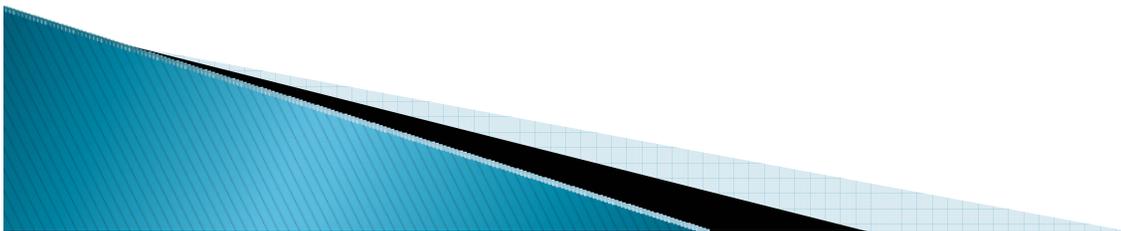
- ▶ Institutionalization of training in food composition activities in Departments of Food science and Human Nutrition in all countries
- ▶ Similarly coalition building of stakeholders particularly amongst professional associations, private sector and universities in each country to facilitate knowledge generation and sharing



- ▶ Effective coordination of all these activities at sub regional and regional levels will make AFROFOODS to be a virile network that will ensure that standardized food composition databases of indigenous traditional foods are produced for use in health and disease



- ▶ Traditional systems once lost are hard to recreate, underlining the imperative for timely documentation, compilation and dissemination of eroding knowledge of biodiversity and the use of food culture for promoting sustainable diets.



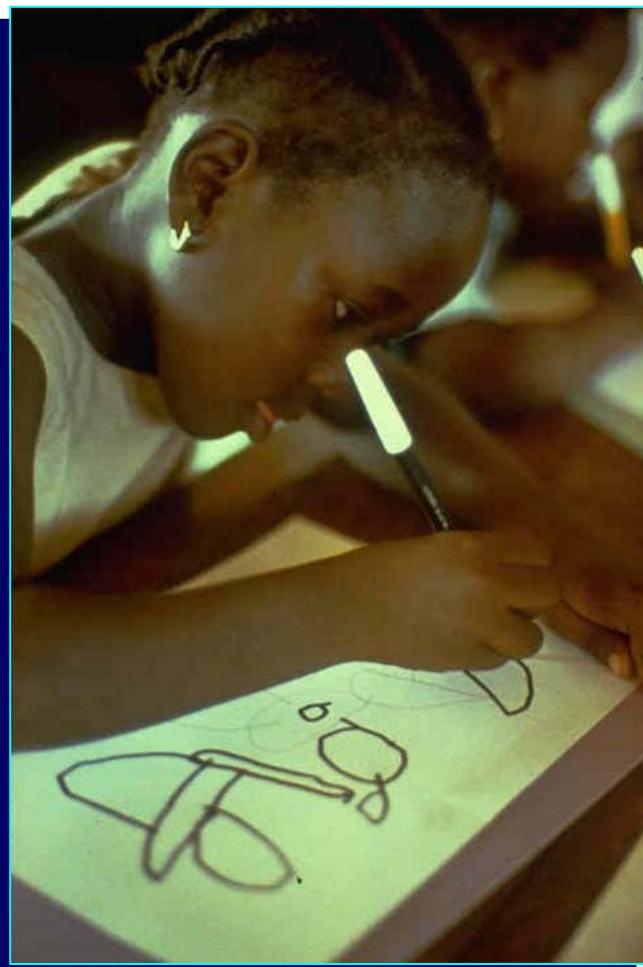
# Investment in Food Composition activities



*I see HOPE for a brighter future*



# Investing in Food Composition Activities



UNICEF/Pirozzi

The time to act is

**Now!**



THANK YOU

