

# NUTRITION OF WOMEN AND CHILDREN IN TANZANIA

Theobald C.E. Moshia; Ph.D.

SOKOINE UNIVERSITY OF AGRICULTURE



**USAID**  
FROM THE AMERICAN PEOPLE



# BACKGROUND

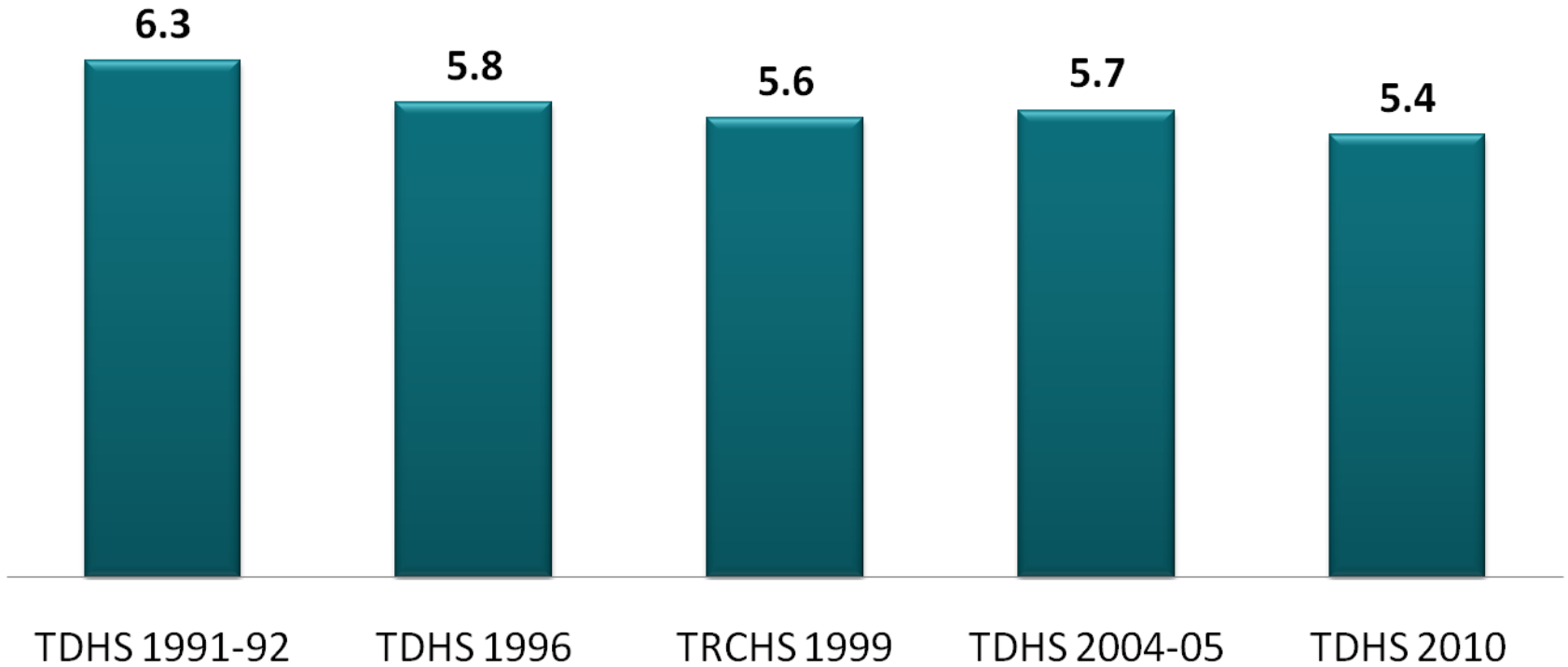
- Tanzania is one of the countries in East Africa.
- It has a land area of 945,087 sqkm of which 886,039 sqkm is dry land and 59,048 sqkm is water body
- It has a population of 44,929,002.
- 47% of the household members are children less than 15 years

# Background

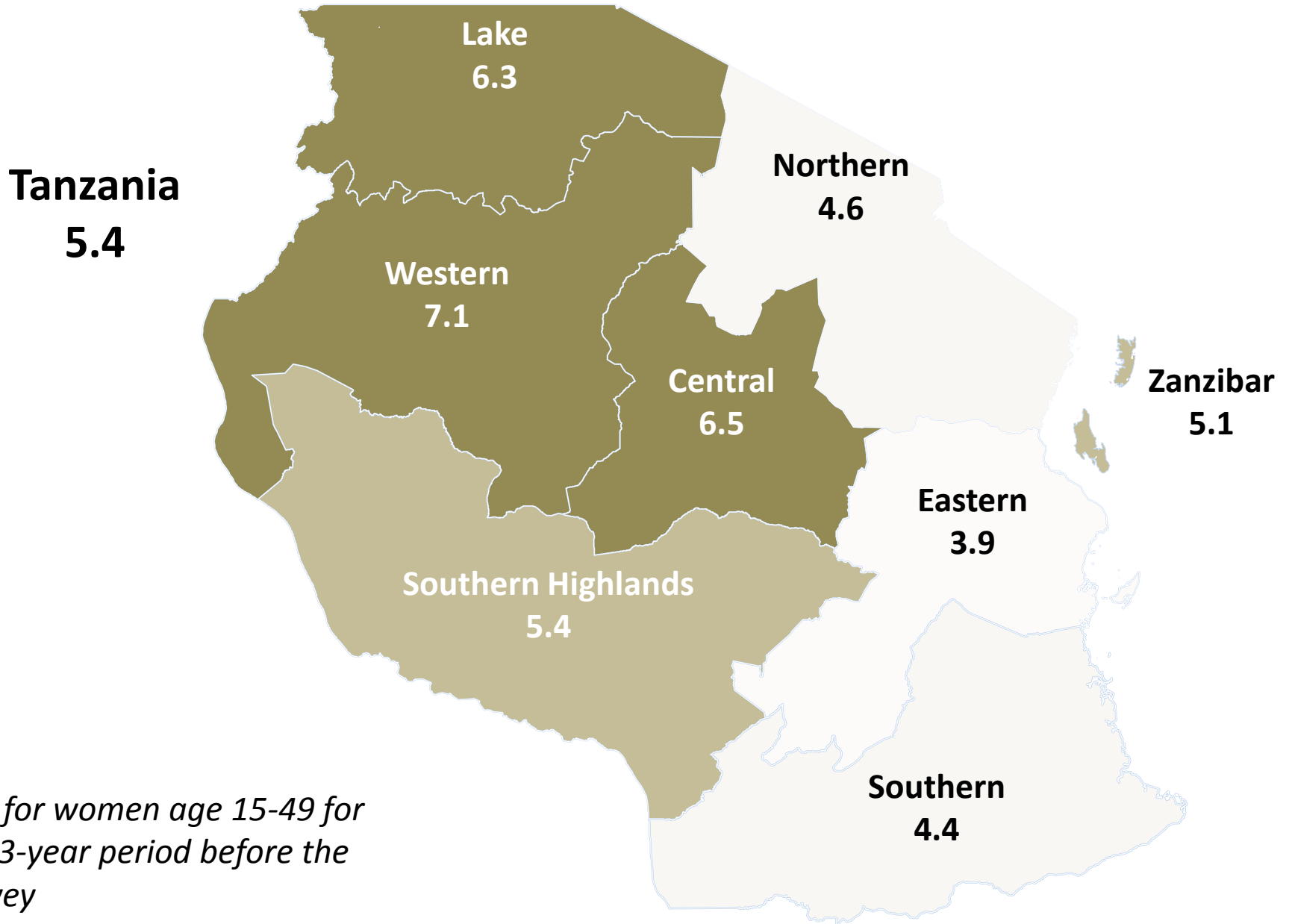
- Average household size is 5 people
- Literacy level:
  - Men – 82%, and Women: 72%
- Secondary education
  - Men – 23%, and Women: 16%
- Total fertility rate – 5.4 children per woman; TFR has declined slightly over the past 20 yrs
- Average age at first birth – 19.5 years

# Trends in Fertility

*TFR for women age 15-49 for the  
3-year period before the survey*



# Fertility by Zone



*TFR for women age 15-49 for the 3-year period before the survey*

# Background

- Infant Mortality rate = 51 per 1000 live births
- Under-five mortality rate = 81 per 1000 live births
- Neonatal mortality rate = 26 per 1000 live births
- Life expectancy = 53.14 years

# CHILDREN AND WOMEN NUTRITION

- Good nutrition – prerequisite for national development and well-being
- Poor nutrition affects mostly women and children due to their unique physiology
- SE factors in society are also unfavorable to these social groups
- Adequate nutrition - critical to child growth and development

# CHILDREN AND WOMEN NUTRITION

- Age 0 – 2 y important for optimal growth. Children under the age of 5 years - used as a marker for changes in nutrition situation
- This period, however, is characterized by micronutrient deficiencies that impair growth
- Prevalence of illnesses including malaria, diarrhea and RTI are high
- Malnutrition in women reduces productivity, increases susceptibility to infections and adverse pregnancy outcomes



# Nutrition situation of children in TZ

- Stunting – low height relative to age
- Prevalence of stunting = 42%
  - Highest prevalence (55%) = 18 – 23 mo children
  - Lowest prevalence (18%) = < 6 mo children
- Stunting by sex:
  - Boys = 46%
  - Girls = 39%
- Stunting by Residence
  - Rural areas = 45%
  - Urban areas = 32%

# Nutrition situation of children in TZ

- Stunting by region

--- 4 regions had levels exceeding 50%

1. Dodoma = 56%

2. Lindi = 54

3. Iringa = 52%

4. Rukwa = 50%

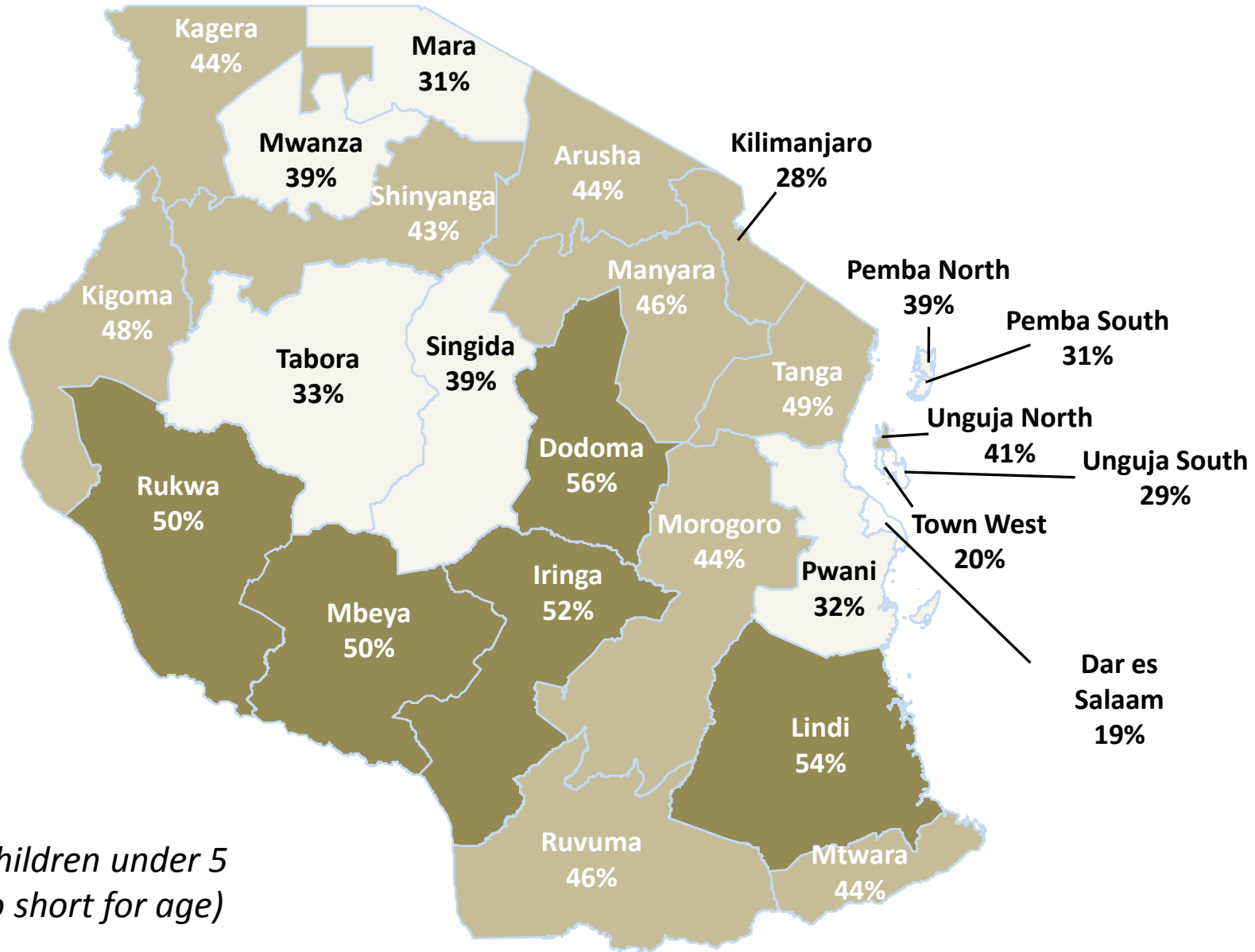
---- 2 regions had levels below 20%

1. Zanzibar urban = 20%

2. Dar es Salaam = 19%

# Children's Stunting by Region

**Tanzania**  
**42%**



*Percent of children under 5  
stunted (too short for age)*

# Nutrition situation of children in TZ

- Wasting – indicates severe loss of body mass or excessive body mass (O/wt and Obesity)
- Prevalence of Wasting: 5%
  - Highest prevalence (11%) = 6 – 8 mo children
  - Lowest prevalence (2%) = 36 – 47 mo children
- Wasting by Sex
  - Boys = 6%
  - Girls = 4%

# Nutrition situation of children in TZ

- Wasting by Residence

- Urban = 6%

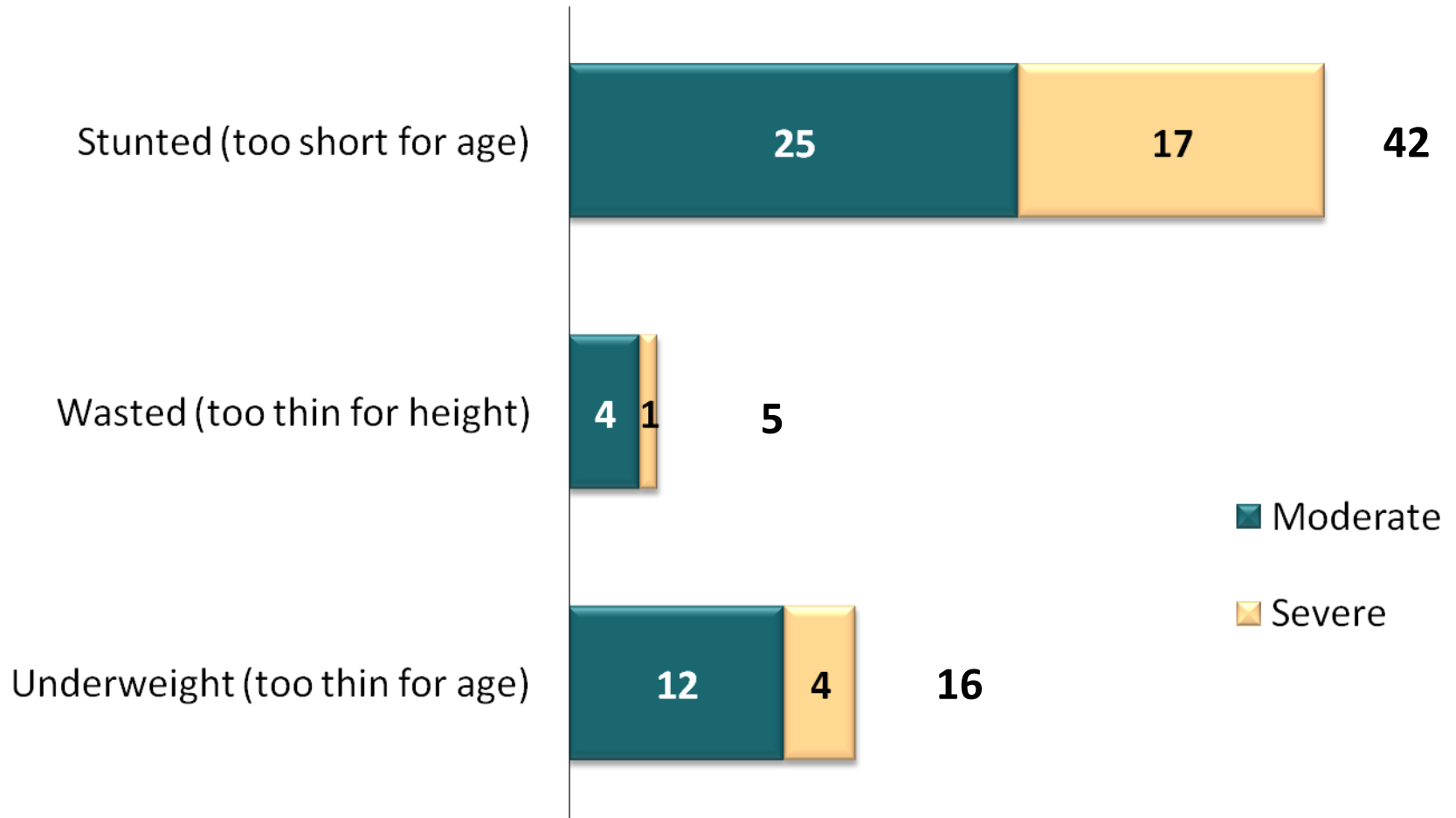
- Rural = 2%

- Wasting by Region

- Arusha had the highest prevalence = 10%

- Mbeya had the lowest prevalence = 1%

# Nutritional Status of Children



*Percent of children under 5*

# Nutrition situation of children in TZ

- Prevalence of O/Weight and Obesity defined by  $WHZ \geq +2 SD = 5\%$
- O/Weight and Obesity by sex
  - Boys = 5.5%
  - Girls = 4.6%
- Prevalence by residence
  - Rural = 4.9%
  - Urban = 5.8%

(NBS, 2011)

# Nutrition situation of children in TZ

- Underweight – low weight relative to age
- Prevalence of underweight = 16%
  - Highest prevalence (21%) = 18 – 23 mo children
  - Lowest prevalence (9%) = < 6 mo children
- Underweight by sex:
  - Boys = 17%
  - Girls = 14%
- Underweight by Residence
  - Rural areas = 17%
  - Urban areas = 11%



# Nutrition situation of children in TZ

- Underweight by region
  1. Arusha has the highest prevalence = 28.2%
  2. Mbeya has the lowest prevalence = 9.7%

# Nutrition situation of children in TZ

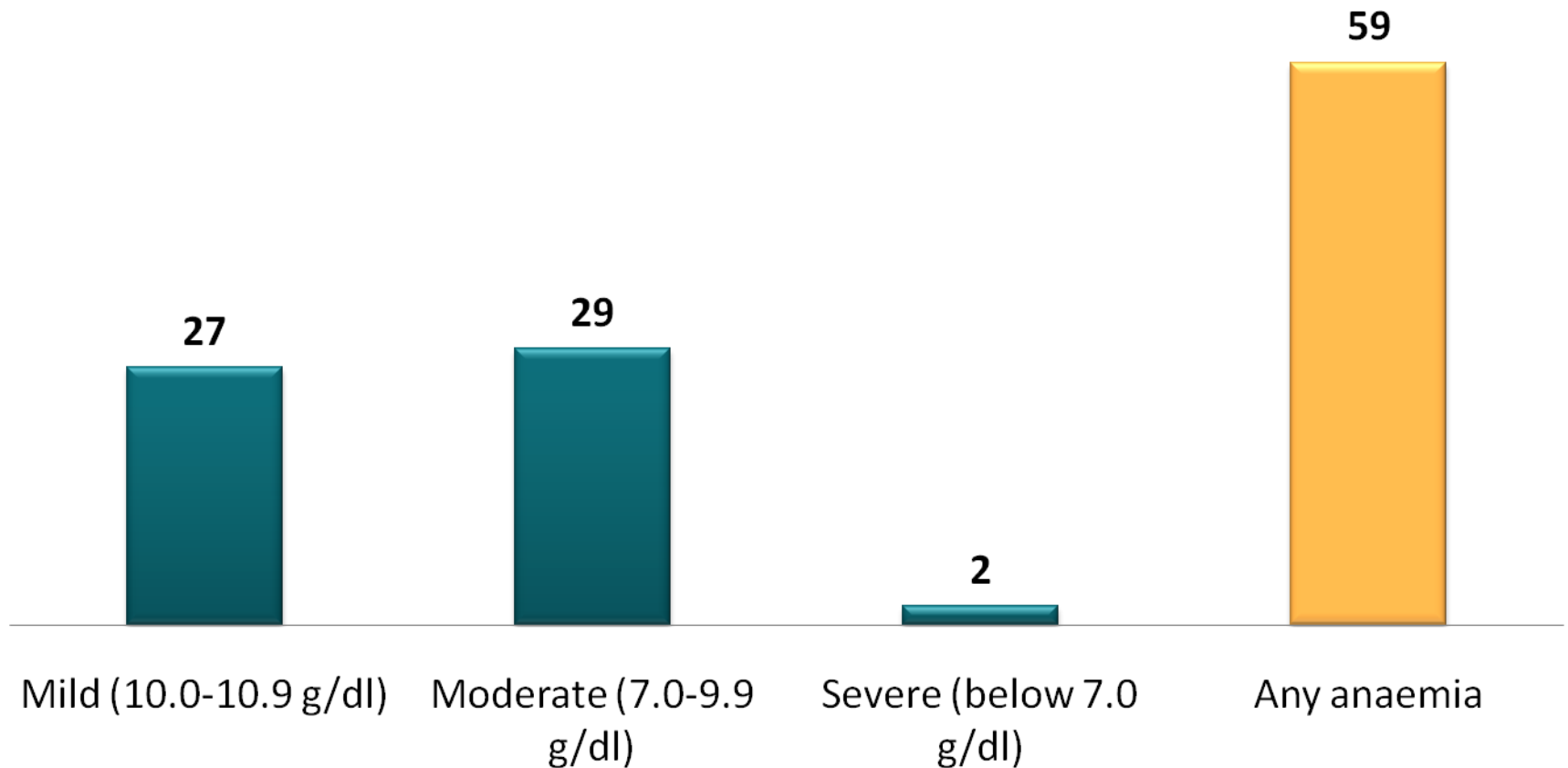
- Anemia – characterized by low levels of Hb in blood
- Major public health problem in TZ among children and pregnant women
- Cause – inadequate intake of iron, folate, Vit B12
- Enhanced by malaria, parasitic infection and sickle cell diseases

# Nutrition situation of children in TZ

- Prevalence of anemia = 57%
  - Highest prevalence (81%) = 9 – 11 mo children
  - Lowest prevalence (47%) = 48 - 59 mo children
- Anemia by sex:
  - Boys = 60.9%
  - Girls = 56.4%
- Anemia by Residence
  - Rural areas = 60.9%
  - Urban areas = 58.1%

# Anaemia in Children

*Percentage of children age 6-59 classified as having anaemia*

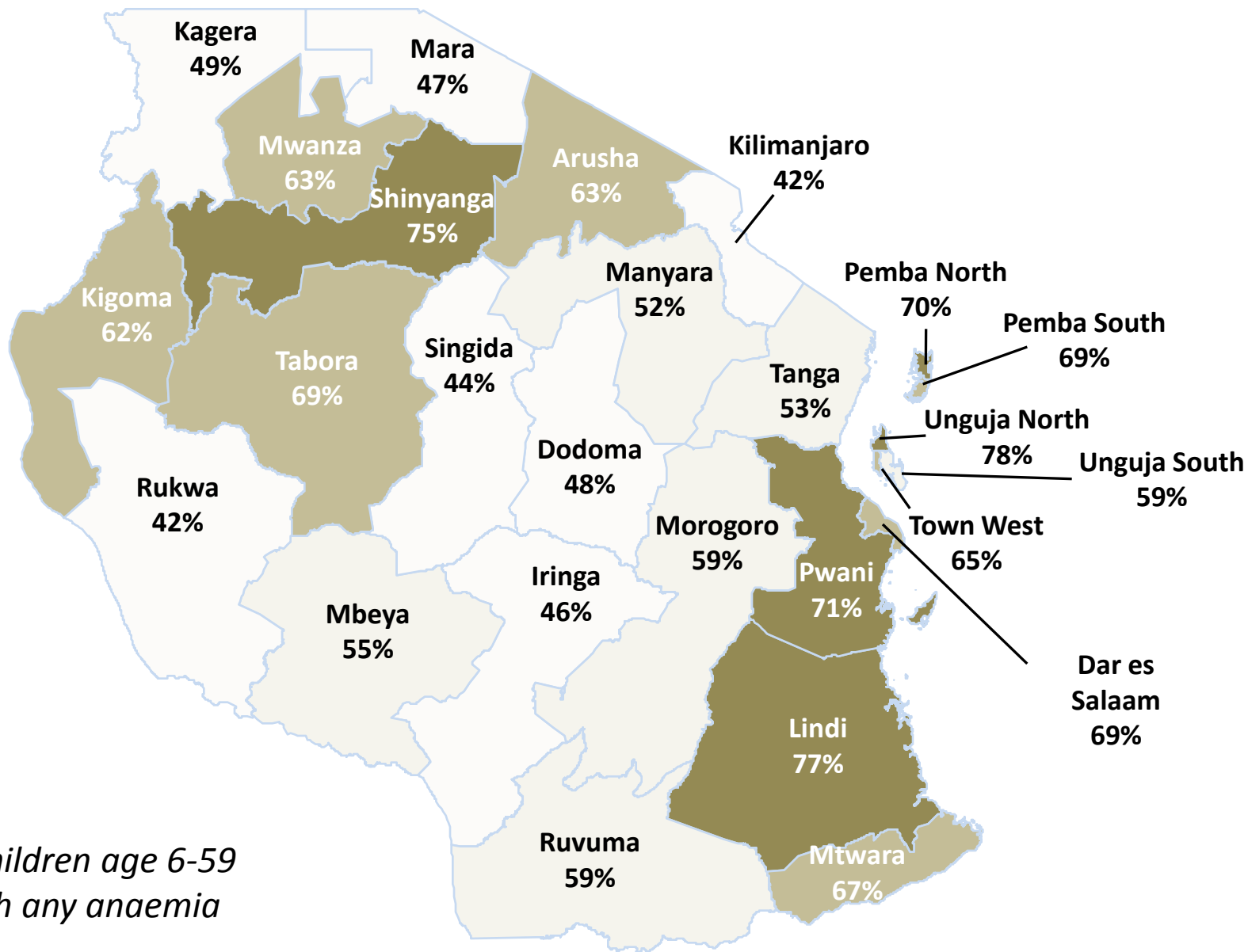


# Nutrition situation of children in TZ

- Anemia by region
  1. Lindi has the highest prevalence = 76.8%
  2. Kilimanjaro has the lowest prevalence = 41.8%

# Anemia in Children by Region

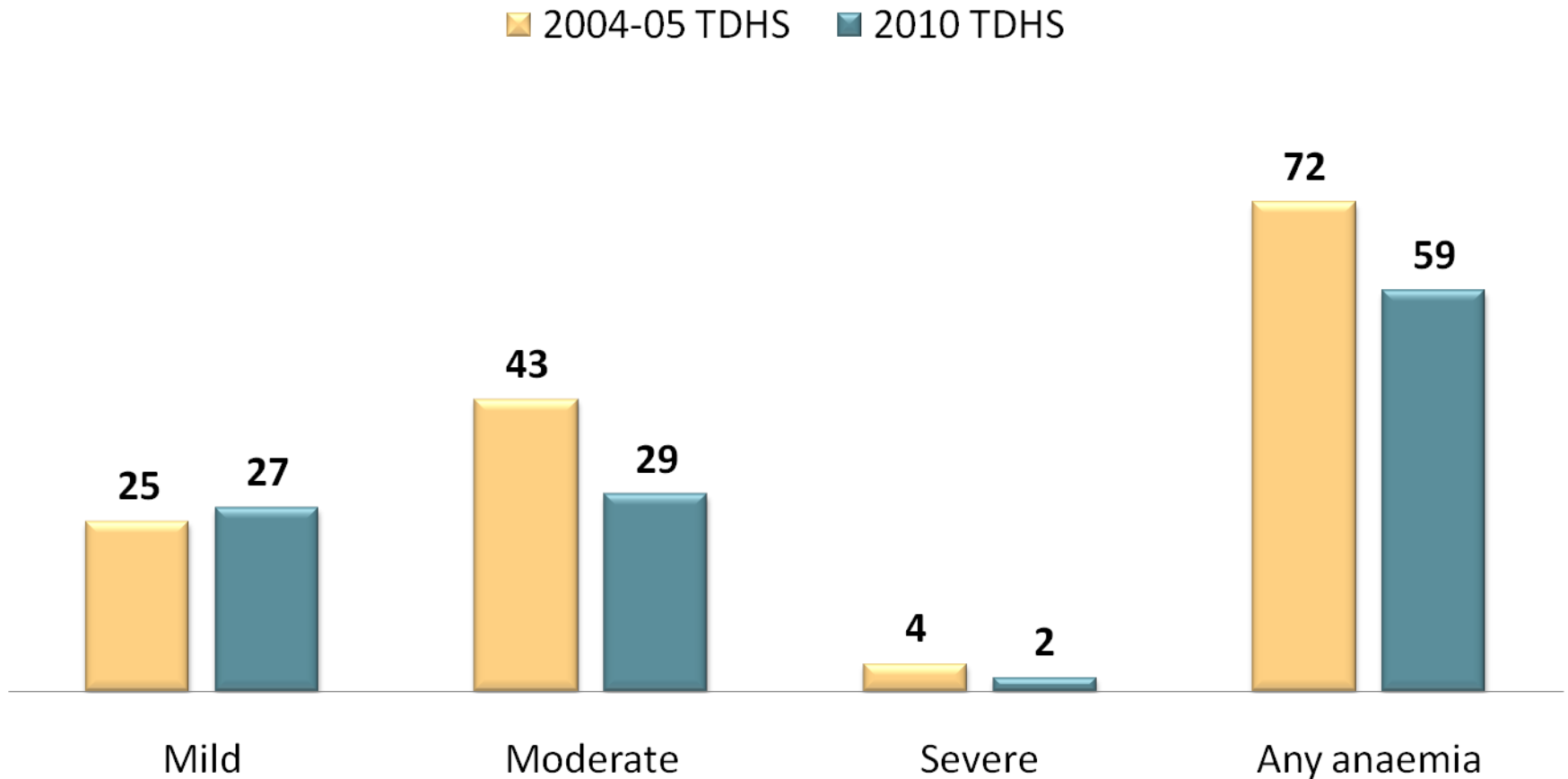
**Tanzania**  
**59%**



*Percent of children age 6-59 months with any anaemia*

# Trends in Anemia in Children

*Percentage of children age 6-59 classified as having anaemia*



# Nutrition Situation of Women in TZ

- Short stature - reflects previous SE conditions, inadequate nutrition during childhood and adolescence
- Height < 145 cm – increased risk
- Proportion of women with < 145 cm
  - National average = 3.5%
  - Highest proportion (5.4%) among 15 – 19 y group
  - Lowest proportion (2.8%) among 20 – 29 y group

## Height distribution by Residence

- Urban = 3.4%
- Rural = 3.4%



# Nutrition Situation of Women in TZ

- Distribution of heights by region
  - Highest proportion (11%) of women with height < 145 cm = Mtwara region
  - Lowest proportion (1%) of women with height < 145 cm = Arusha, Mara and Shinyanga regions

# Nutrition Situation of Women in TZ

- **Thinness**
- Women with BMI < 18.5 kg/sqm
  - National average = 11.8%
  - Highest proportion (17.6%) among 15 – 19 y group
  - Lowest proportion (2.5%) among 20 – 39 y group
- Low BMI distribution by Residence
  - Urban = 8.1%
  - Rural = 12.8%

# Nutrition Situation of Women in TZ

- Distribution of low BMI by region
  - Highest proportion (24.5%) of women with low BMI = Dodoma region
  - Lowest proportion (4.5%) of women with low BMI = Mbeya region

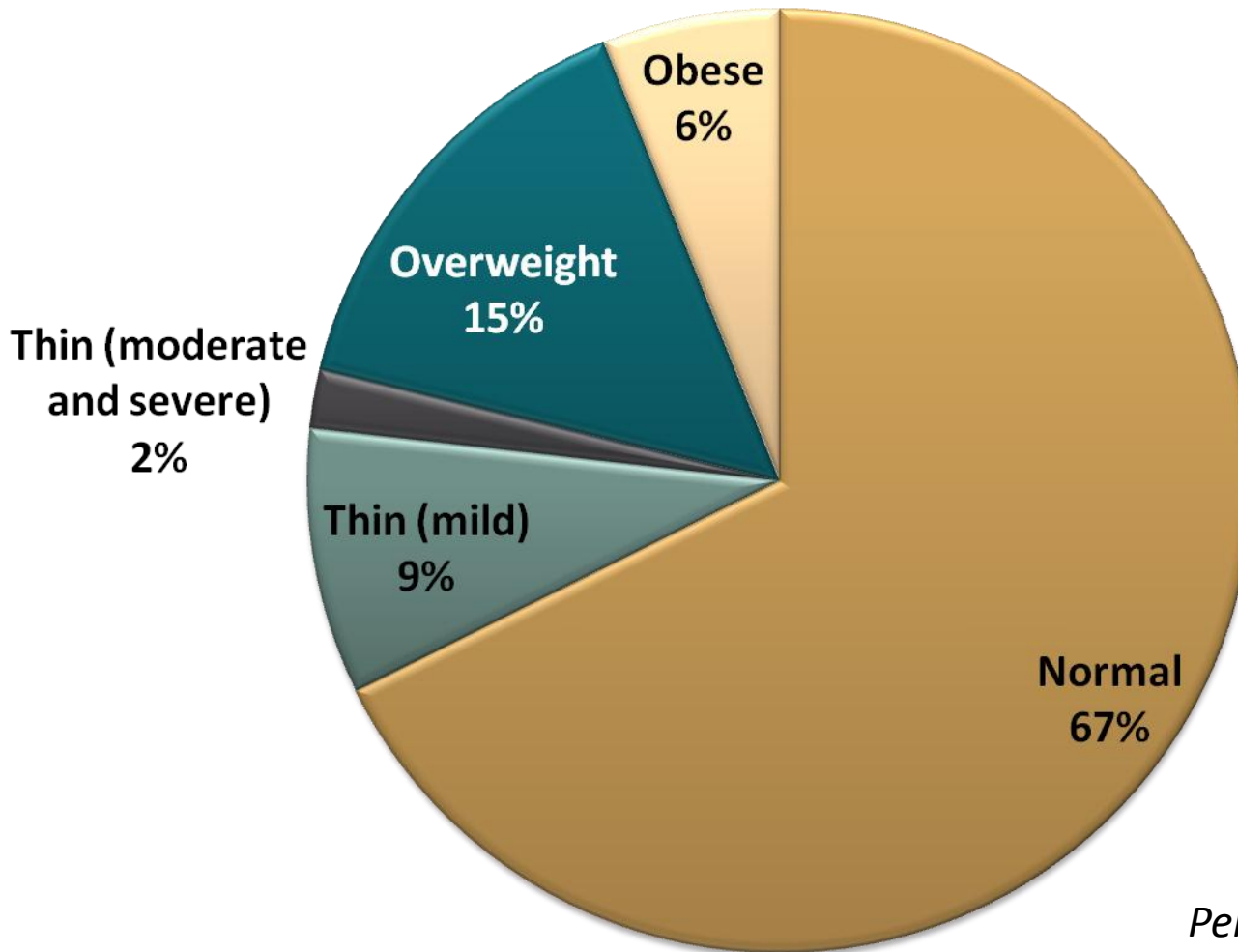
# Nutrition Situation of Women in TZ

- **Overweight and Obesity**
- Women with BMI  $\geq$  25 kg/sqm
  - National prevalence = 21.6%
  - Highest prevalence (29.3%) among 30 – 39 y group
  - Lowest prevalence (9.1%) among 15 – 19 y group
- Overweight/Obese by Residence
  - Urban = 36.3%
  - Rural = 15.2%

# Nutrition Situation of Women in TZ

- Prevalence of Overweight/Obesity by region
  - Highest prevalence (44.6%) = Dar es Salaam region
  - Lowest prevalence (9.5%) = Dodoma region

# Nutritional Status of Women



*Percent of women 15-49 by nutritional status*

# Nutrition Situation of Women in TZ

- **Anemia Prevalence**
- Women with Hb < 12 g/dL (non pregnant) and Hb < 11 g/dL (pregnant women)
- National prevalence = 40%
- Highest prevalence (42.2%) among 15 – 19 y group
- Lowest prevalence (38.8%) among 30 – 39 y group
- Anemia distribution by Residence
- Urban = 43.5%
- Rural = 38.8%

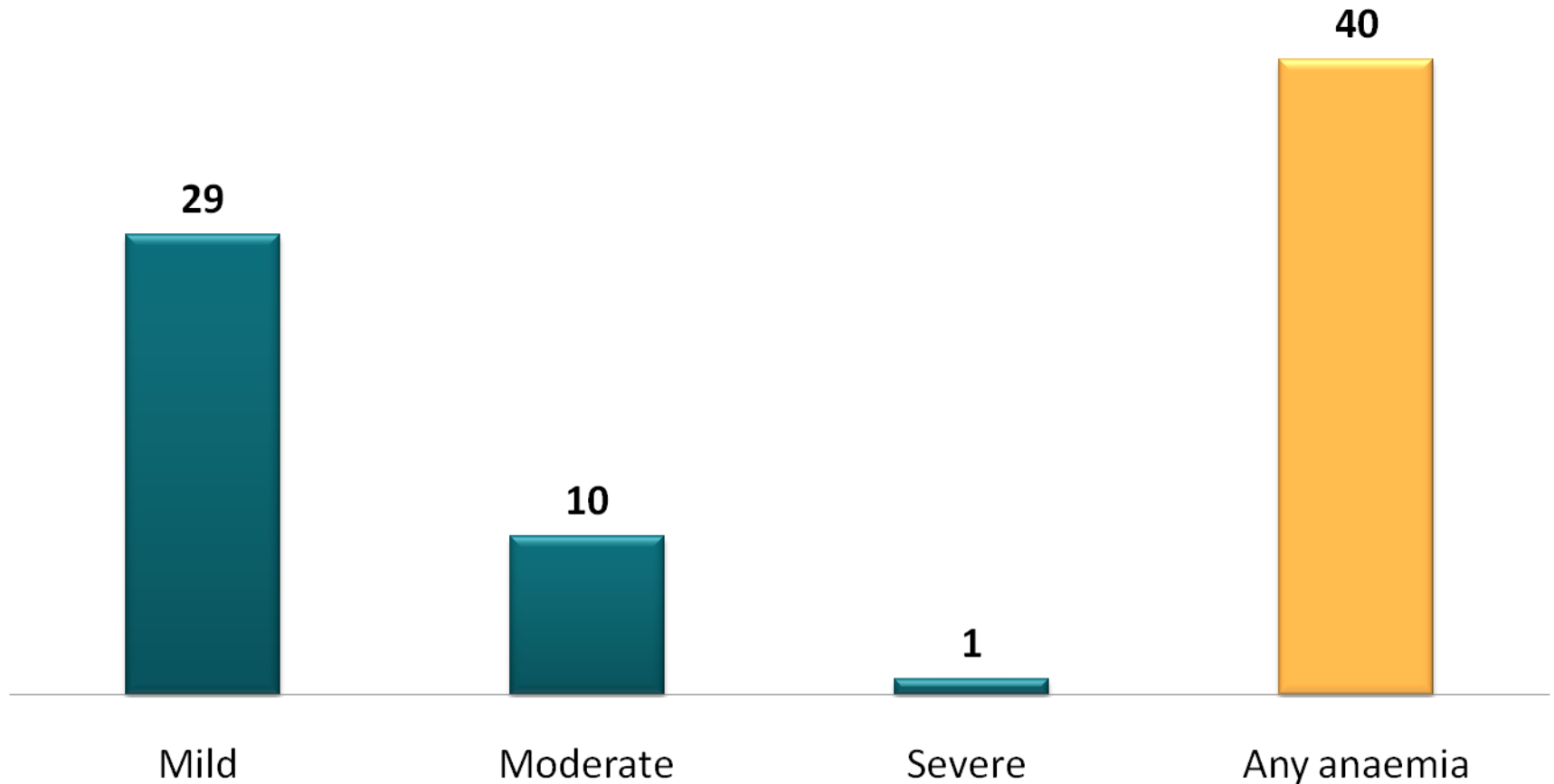
# Nutrition Situation of Women in TZ

- Prevalence of anemia by region
  - Highest prevalence (64.2%) = North Pemba region
  - Lowest prevalence (17.9%) = Kilimanjaro region



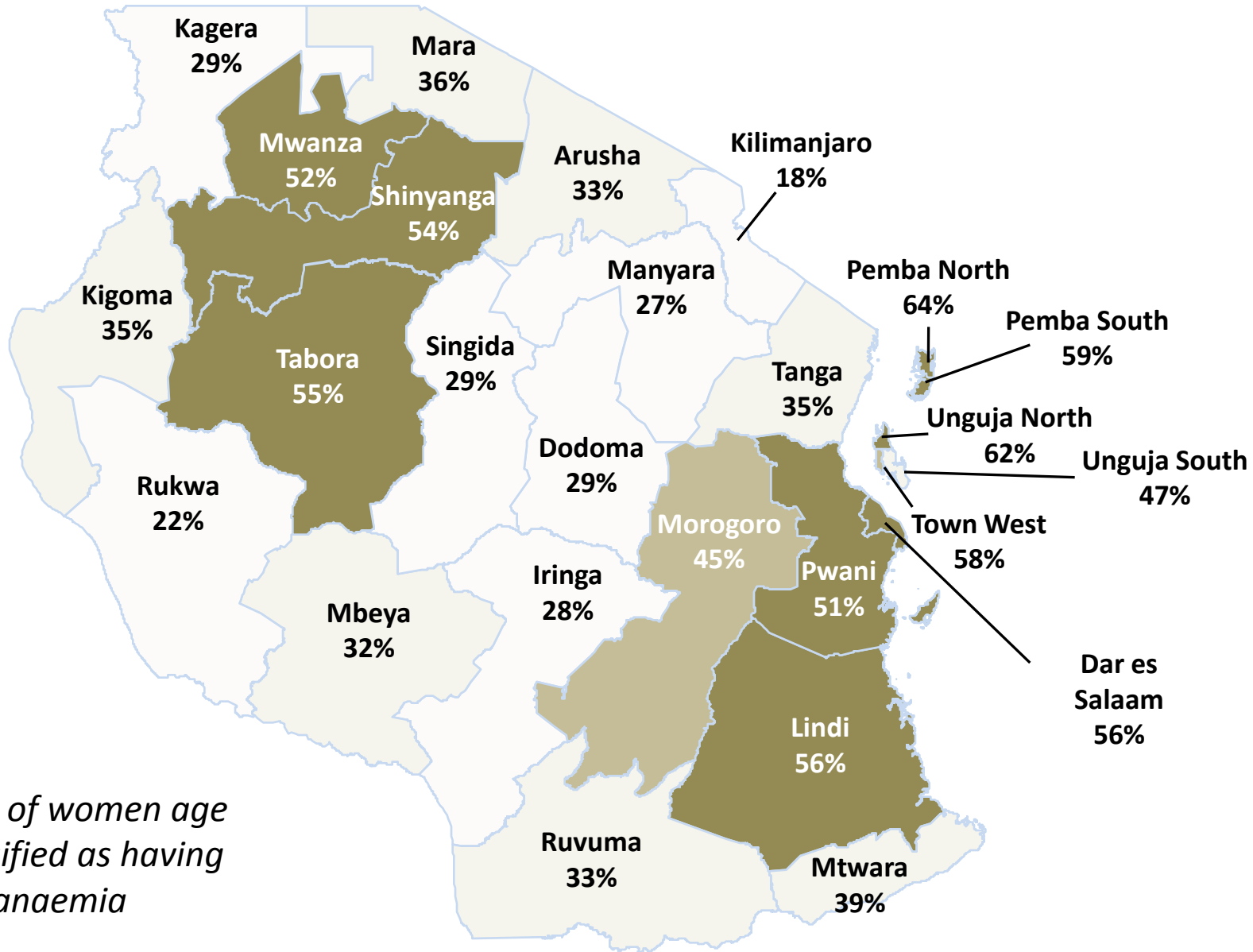
# Anemia in Women

*Percentage of women age 15-49 classified as having anaemia*



# Anemia in Women by Region

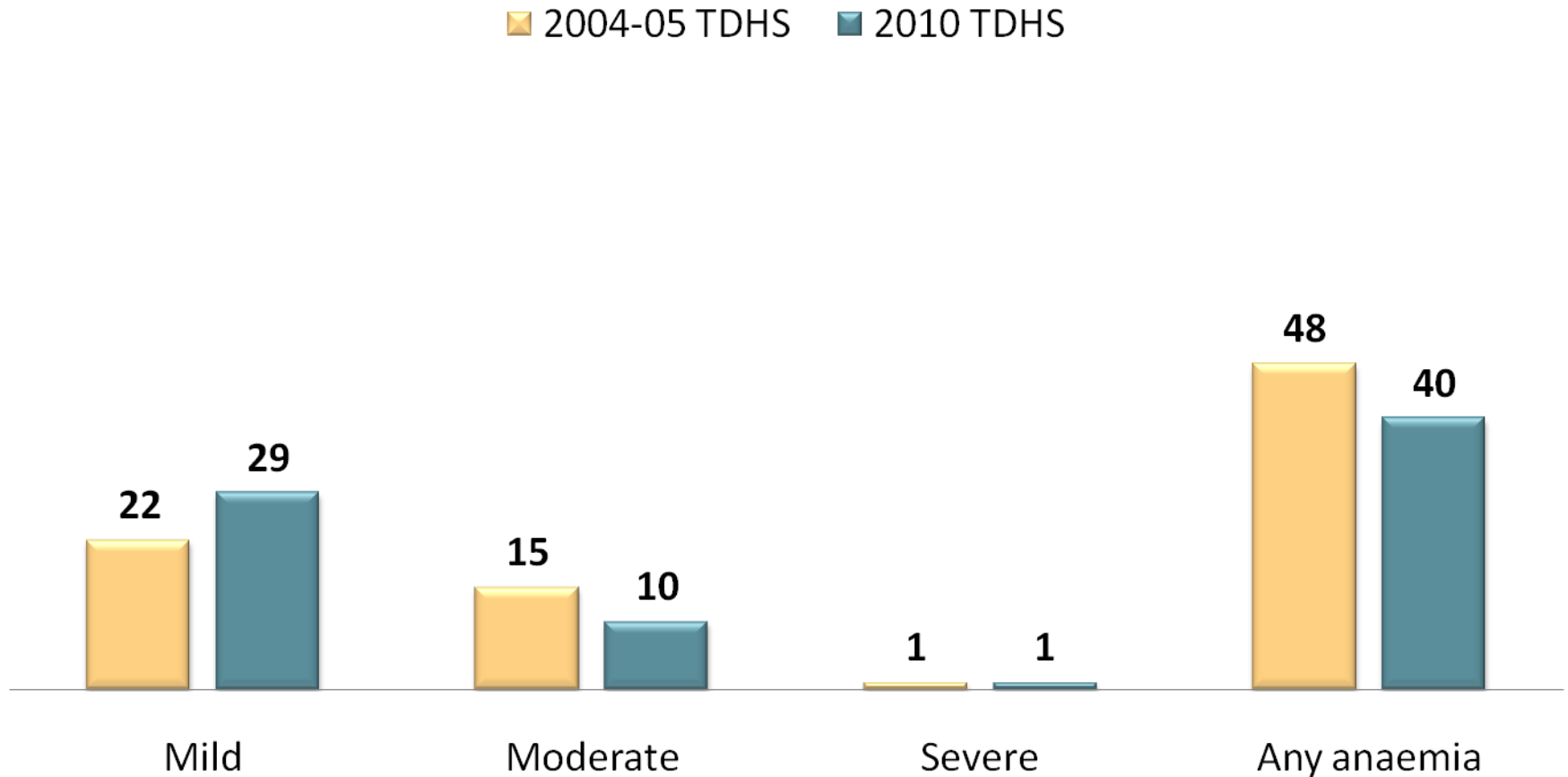
**Tanzania**  
**40%**



*Percentage of women age  
15-49 classified as having  
any anaemia*

# Trends in Anemia in Women

*Percentage of women age 15-49 classified as having anaemia*



# Summary of key aspects

- **42%** of children are **stunted** (short for their age)
- **11%** of women are **thin**, while
- **22%** are **overweight or obese**
- **59%** of children age 6-59 mo are **anemia** while
- **40%** of women age 15-49 are classified as **anemia**.

# Important Targets

- National Strategy for Growth and Poverty Reduction (*MKUKUTA*) targets to reduce **IMR**, **U5MR** and **MMR** by half by end of 2015
- According to UNICEF, tackling the global nutrition problem is essential to attaining any of the other MDGs.
- MDG No. 4 states that in order to reduce the current infant and U5 mortality levels, under-nutrition in children must be reduced by two thirds (60%) by the year 2020.

# Important Targets

- According to FtF - comprehensive package of proven nutrition interventions can achieve a —one-fifth to one-third decrease in stunting among children under five years over a two to three year period.
- FtF program is thus determined to improve the nutritional status of women and children in Tanzania
- They set following targets that must be attained by the end of the 5 year project
  1. Reduce the prevalence of stunting among children from 42% to 32%
  2. Reduce the prevalence of wasting among children from 5.9% to <5%
  3. Reduce the prevalence of underweight among women (BMI < 18.5 kg/sqm) from 11% to <1%

# Important Targets

- In order to achieve their goal, FtF needs support from development partners, interested parties and stakeholders
  - CRSP
    - National Governments
    - NGO
    - CBO
    - FBO
    - Other stake holders

Thank you for listening

