

# **AAUN** AUSTRALIA AFRICA UNIVERSITIES NETWORK

## **THEME: PUBLIC HEALTH**

**Building an AAUN coalition to support improved nutrition and health of children under 5 years, pregnant and lactating mothers**

# Introduction

The State of Food Insecurity in the World (SOFI) 2015 reported that:

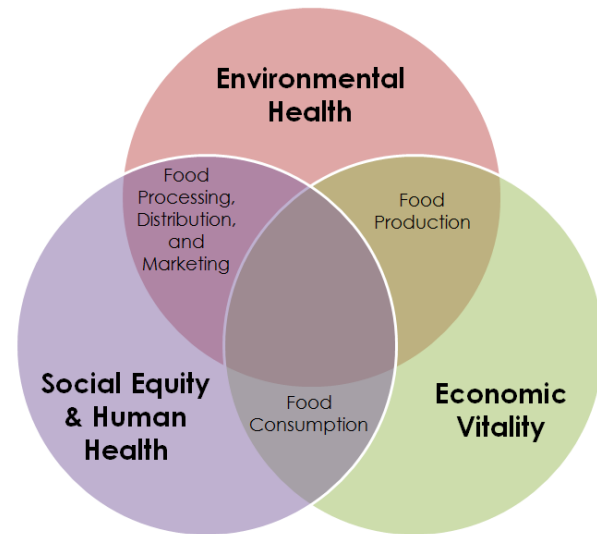
- seven countries in the region (Angola, Djibouti, Cameroon, Gabon, Ghana, Mali and Sao Tome) **have achieved both the Millennium Development Goal 1 and world food target (MDG)**
- in general, Africa, has made insufficient progress towards international hunger targets such as:
- **protein energy malnutrition (PEM) responsible for more than 45 % (> 3 million) death among the under-five** putting the future of Africa at a stake (FAO, 2014)



# Multiple level intervention

- The pillars of food security are: availability, accessibility, utilization and stability
- The relationship between food security, nutrition and health are complex
- They are sustainable issue linked to the environment, social, political and economic

- Food system



# Project 1 Literature review

The literature review was conducted to gather information on the AAUN identified parameters (framework was provided) that would help to understand the nutrition situation of children aged less than 5 years and women of child bearing age in south africa, Nigeria, kenya, Mauritius, Zambia and Malawi.

The literature study included childhood nutrition status (stunting, underweight and wasting, micronutrient status) and maternal nutritional status, food quality and production (crops and animals), people living with HIV and poverty levels

# Summary of the findings

- Double burden of **undernutrition** and **over-nutrition**
- 27% of **0- 60 months** are stunted
  - ✓ 12% are underweight, and 5% are wasted (UNICEF, 2009)
- 55%  $\geq$  **15 years** in are either overweight or obese (WHO, 2009)
- 15% of infants are born with a low birth weight (UNICEF, 2009)
- Inadequate utilization of IK systems of food production storage marketing and processing

# Key causes of undernutrition

- Inadequate breastfeeding (only 8% of infants < 6 months are exclusively breastfed) (UNICEF, 2009)
- Lack of nutrition knowledge
- Infections such as HIV, respiratory tract, diarrhea (16% of child deaths are due to either diarrhea or pneumonia) (UNICEF, 2009)
- Limited access to food
  - ✓ Dietary diversity is essential for food security (FAO, 2009)
  - ✓ Adequate awareness must be given to cheap but high source of protein such as edible insects (FAO, 2013)

# Key causes of over-nutrition

- Urbanization (Kruger, 2005)
- Adoption of Western diets (high in refined carbohydrates, saturated fats and sugars)
- Sedentary lifestyle
- Cultural factors
- Lack of nutrition knowledge
- Poor nutrition early in life

# Project 2: Mopani worms

- An analysis of the value chain for indigenous edible insects and their potential role in mother and child nutrition in Eastern and Southern Africa: Focus on Mopani
- The aim is to assess and compare the value chain of the mopani across selected countries in eastern and southern Africa with a view of enhancing maternal and child nutrition and health
- Mopane worms, *Gonimbrasia belina* (also known as *Imbrasia belina*), feeding on the leaves of the mopane tree, *Colophospermum mopane*. The adult stage of the worm is the Emperor moth (Family Saturnidae).





# Situational analysis of insect consumption, initially, in four countries, South Africa, Zambia, Uganda and Malawi

## **Phase 1**

- South Africa and Zambia received ethical approval
- Workshops with harvesters held
- Data collection will start in December
- Climate change a challenge
- 1 Phd student

## **Phase 2**

- To conduct nutrient analyses on mopani worms (protein content and quality – amino acid composition)
- The Proposal to be submitted end of the month

## **Phase 3**

- To evaluate potential key roles the insects may play in mother and child nutrition

# Recommendations

- Needs for access and diversified agricultural production in rural areas, and
- National food policies that align with public health nutrition.
- Government policies that promote diverse diets and physical activities
- Improve dietary diversity through increased food production
- Needs to improve young child feeding through effective education and counseling services
- **Indigenous knowledge of food production, processing and storage**
- **Measures to ensure ownership and sustainability**

**Thank you**

