



República de Moçambique

**Developing a policy framework for Biofortification
in Mozambique and lessons learned from Food
Fortification”**

Eduarda Zandamela Mungói, Ph.D
Ministry of Industry and Trade
National Food Fortification Program
Maputo, Mozambique
March 01, 2017

OUTLINE

- ❖ Overview of Nutrition Situation in Mozambique
- ❖ Biofortification
- ❖ Food Fortification in Mozambique
- ❖ Challenges
- ❖ Next Steps

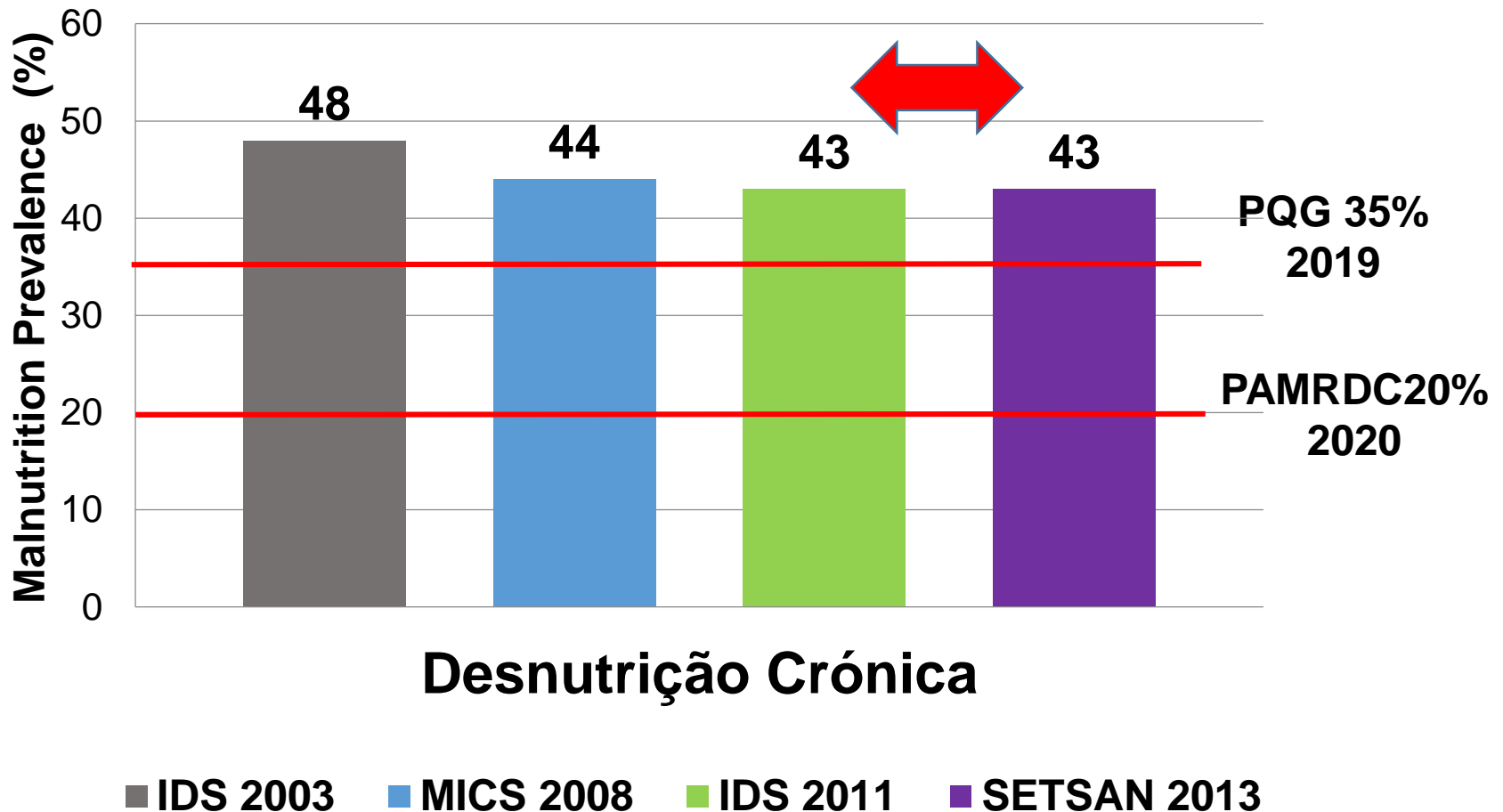
Mozambique Population

Mozambique Population:

- Total Population: **26.423.623**
- Men: **12.760.324**
- Woman : **13.663.299**
- Urban Population: **8.468.799**
- Rural Population : **17.954.824**
- Chronic malnutrition/ Stunting : 43%

Malnutrition in Mozambique

From 2008 to 2013 stunting only reduced 1% (from 44% to 43%)



Comparative Data on Chronic malnutrition in Mozambique

Província	IDS 2011	SETSAN 2013	OBS
Cabo Delgado	53 %	51,4%	
Nampula	55%	50,1%	
Zambézia	45%	40,5%	
Niassa	47%	43,6%	
Tete	44%	50,7%	↑
Manica	42%	45,4%	↑
Sofala	36%	44,1%	↑
Inhambane	36%	31,7%	
Gaza	27%	38,1%	↑
Maputo Província	23%	25,3%	↑
Maputo Cidade	23%	30,2%	↑

Micronutrient Deficiencies

Vitamin A

69% children <5 anos
(IDS, 2011)



Huge Public Health Problem

Iodine

68% of pop. In school age
30% of MIFs
Median urinary iodine: 65, 4 µg/L
(MISAU, 2004)



INSUFFICIENT
Intake
Slightly Deficiency

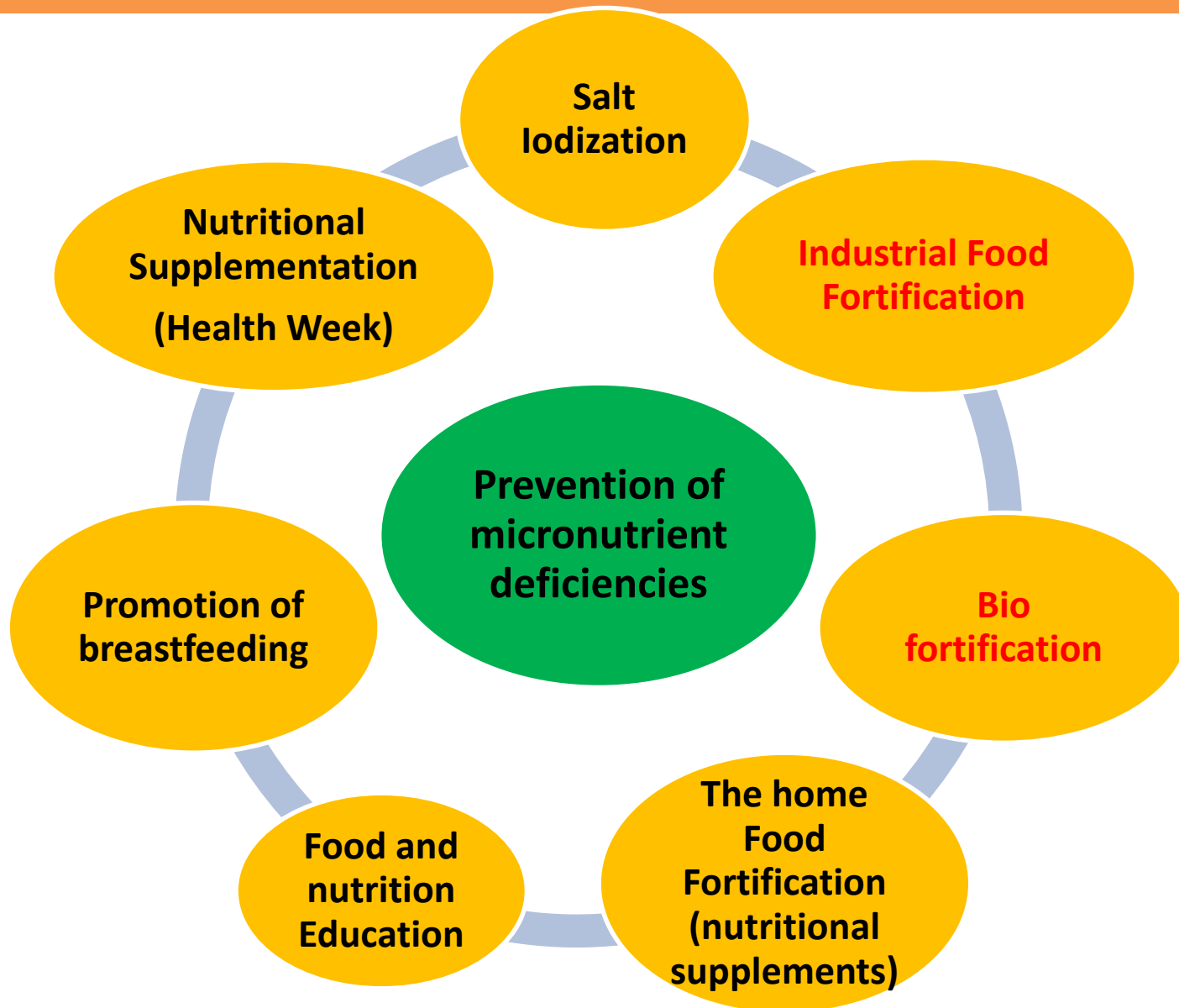
Anemia

74% (2002) >> 68,7% (2011)
48%(2002) >> 53,9% (2011)
(MISAU, 2002 and IDS 2011)



Huge Public Health Problem

Mozambique Interventions for prevention of micronutrient deficiencies



BIOFORTIFICATION

Biofortification:

- ❑ **Biofortification: breeding crops to** increase their nutritional value.
- ❑ Develop basic rich crops (staple) in order to achieve **micronutrient is the provitamin A**, and the concentrations of **iron and zinc**, from deficiency of these micronutrients and with a view to improving the nutritional status of the population.
- ❑ Easy reach rural populations in situations of **malnutrition**
 - Intervention low cost
 - No recurring costs beyond the cost of maintenance of varieties

Status of Biofortification in the Country

- ❑ Mozambique's policy framework is enabling for agriculture and nutrition interventions, although reforms are recommended.
- ❑ Biofortification as a food based approach, is **still not adequately covered into the national agriculture and nutrition's policy framework available**, such as PAMRDC, ESANII, and PEDSA/CAADP.
- ❑ A balanced alliance with **nutrition , health, agriculture potential implementers**, advocacy and media needs to be built;

Status of Biofortification in the Country

- ❑ The need to engage the high Government officers from agriculture and health for their commitment, specially in the proposed policy agenda setting;
- ❑ From demand side: need to engage the private sector (SMEs).



FOOD FORTIFICATION IN MOZAMBIQUE

Lesson Learned

Food Fortification:

- ❖ Simple Process their **success depends** on the correct selection of food to be used as a **vehicle for fortification** and the type of **compound or micronutrient** to be added.
- ❖ Strategy more **cost-effective** and **sustainable** prevention of multiple micronutrient deficiencies
- ❖ Being the **food industry the focus** of activities for adding micronutrient

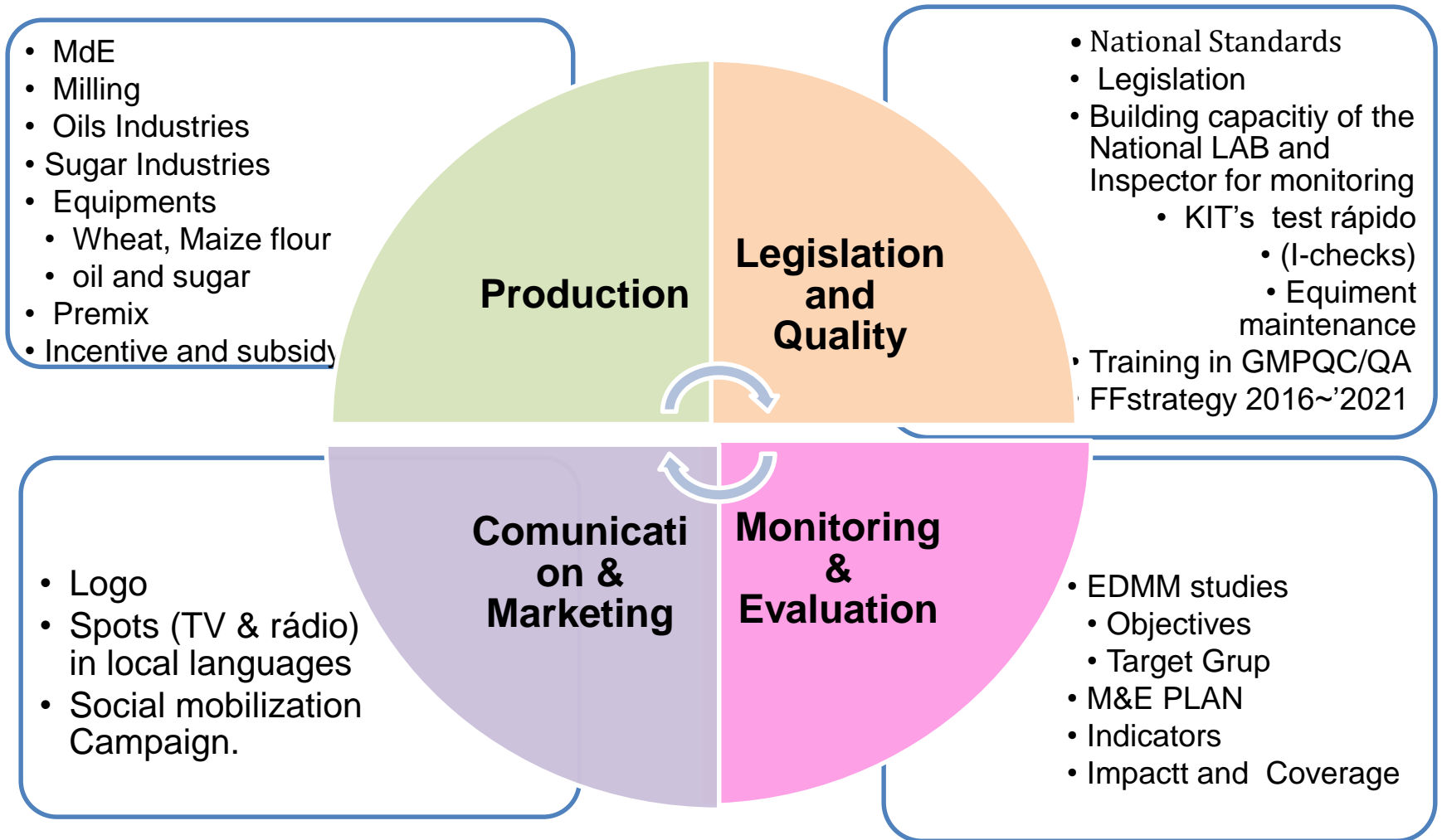
Fortified Vehicles in Mozambique

- **Wheat flour and Maize flour** (NaFeEDTA, Zn, B12, Folic Acid)
- **Edible oil and Sugar** (Vit A and D);
- **Salt (Iodine)**



10-04-2014

Food Fortification Program



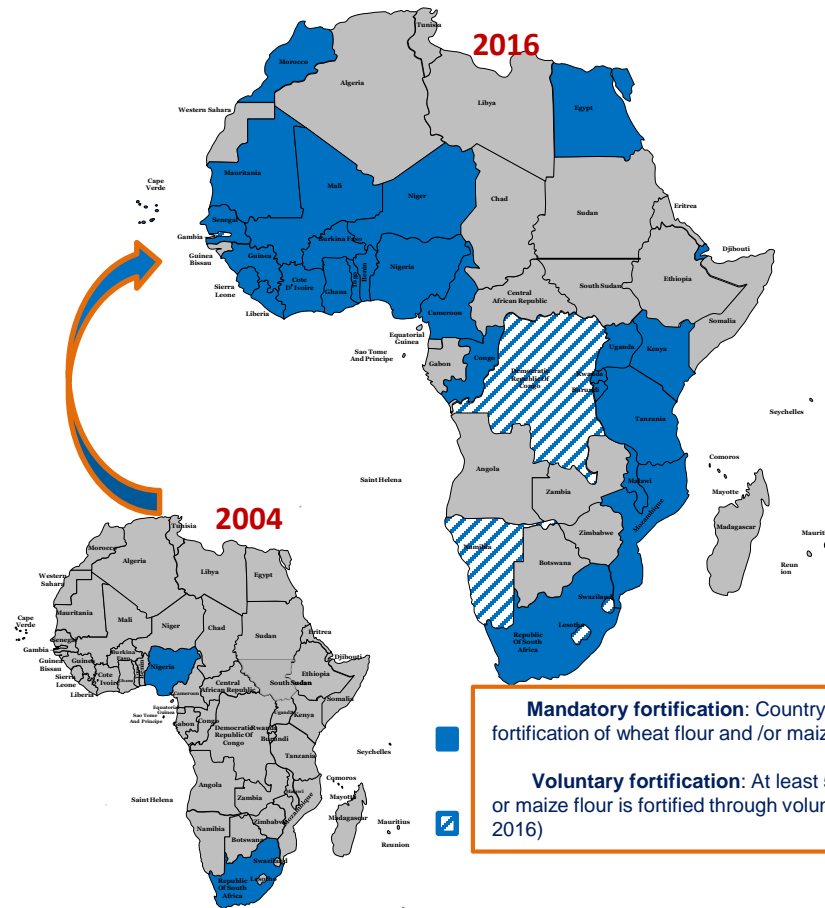
Status of Food Fortification in the Country

- Mozambique has recently approved the Regulation that obligates Large, Medium and Small commercial scale mills to fortify; **Decreto 9/2016 of 18 of April and from 15th of October** it goes live.
- **Large and Medium Scale Millers** have been trained on Best Practices and Quality Control
- December 2016 approval of the new **Food Fortification Strategy 2016 -2021** and **Social Mobilization Strategy**
- Premix mechanism **Positive List**

Level of Fortification

Vehicle	Min	Max
Wheat flour	20mg Iron/kg	140mg Iron/kg
Maize flour	20mg Iron/kg	140mg Iron/kg
Oil	15 mg de Vitamin A / L	43 mg de Vitamin A/L
Sugar	1mg/100g Vitamin A	3mg/100g Vitamin A
Salt	25ppm/kg KIO3	55ppm/kg KIO3

Fortification in Africa: 12 Years of Progress



Main Challenges and Next Steps Fortification

- Extend the program to cover **Smaller millers which still cover significant amounts** of our population;
- Use of the Mozambican Standard
- **Millers association;**
- Total dependency of imports for micronutrients and equipment's/ maintenance;
- Availability and quality of local raw materials.
- Capacity building of all stakeholders

Main Challenges to Implement Biofortification and Next Steps

Drafting of country OFSP advocacy and resource mobilization for develop a National strategy

- ❑ Partner with Government/SETSAN and NGOs needs to integrate policy reform agenda into the Government's priority in nutrition;
- ❑ Capacity building scheme is crucial to galvanize synergies between resource mobilized and OFSP implementation capacity by stakeholders and maximize the resource utilization;
- ❑ OFSP's potential to create a value chain can be used to attract the private sector/SMEs interest and investment;
- ❑ Media net work as an ally can play important role in raising public awareness and on setting agenda for policy reform.

THANK YOU!!!



PROGRAMA
NACIONAL DE
FORTIFICAÇÃO
DE ALIMENTOS