



# **Drivers of Policy Change: The Kaleidoscope Model**

May 13, 2015 USAID Agriculture Officers' Training

# Zambia micronutrient case study materials

Table 1. Stakeholder inventory Summarizes role of 13 stakeholders.

- a. Participants draw one stakeholder card at random.
- b. They then present to the group their position on Vitamin A fortification.
- c. They summarize by placing their institution's post-it note on the Circle of Influence graphic at the front of the room.

## **Ministry of Health (MOH)**

Role in nutrition policy:

- Makes health and nutrition policy
- implements micronutrient supplementation programs
- monitors fortification programs

Position on Vitamin A fortification:

- highly concerned about Vitamin A deficiency (VAD) levels; conducts 1997 VAD survey finding 66% children suffer from VAD
- supports Vitamin A supplementation, but finds existing programs insufficient, reaching only 28% of under-5 children
  - recommends maize fortification
  - supports sugar fortification as second best alternative

## **National Food and Nutrition Council (NFNC)**

Role in nutrition policy:

- reviews available evidence on nutritional status in Zambia
- advises cabinet and MOH on food and nutrition policy

- supports supplementation, but finds it insufficient in reaching vulnerable groups
- recommends maize fortification
- supports sugar fortification as second best alternative
- refuses to support "sweet and healthy too" advertising campaign proposed by the USAID-funded Zambia Integrated Health Project (ZIHP) to support the Vitamin A fortification law

#### **Zambia Sugar Company**

Role in Zambian sugar market

- privatized in 1996; experiences early financial problems as fortification discussion unfolds
  - produces 92% of domestic sugar
- imported sugar (mostly from Malawi) accounts for 10% 25% of domestic sugar sold in the late 1990's, when fortification was being considered Role in nutrition policy:
  - not normally involved in nutrition policy
- invited to stakeholder consultations to consider alternative forms of micronutrient fortification
  - implements Vitamin A fortification of sugar
- receives \$250K in equipment and 1 year supply of fortificants from donors to facilitate implementation of the fortification program

Position on Vitamin A fortification:

- supports fortification of sugar provided legislation also prohibits sale of unfortified sugar
  - requests \$1 million in donor funding for equipment, advertising and fortificants
  - raises domestic price of sugar 70% following fortification requirement
  - complains of sugar smuggling from Malawi, which undercuts domestic sugar price
- complains of slow implementation of donor-promised publicity campaign promoting Vitamin-A fortified sugar

#### **Kalungwishi Estates**

Role in Zambian sugar market:

- produces 1% of domestic sugar
- experiences financial problems

Role in nutrition policy:

- not normally involved in nutrition policy
- implements Vitamin A fortification of sugar
- receives no donor funding

- requests donor funding for equipment, advertising and fortificants
- complains that fortification raises costs by 5% and reduces profits by 20%

#### **Zambia Millling**

Role in nutrition policy:

- as the nation's largest maize processor, they are a key private sector agricultural sector stakeholder
- invited to the 1996 NFNC stakeholder consultation to consider alternative forms of micronutrient fortification

Position on Vitamin A fortification:

- opposed to maize meal fortification on the grounds that unregulated hammer mills will not fortify and thus will gain a cost advantage over Zambia Milling
  - neutral on sugar fortification

## Zambia National Farmers' Union (ZNFU)

Role in food and nutrition policy:

• represents farmer interests to all levels of government

- pleased about the sharp rise in sugar price following fortification law, since this potentially benefits farmers
- campaigns against sugar smuggling that emerges following fortification requirement in 1998 and the ensuing domestic price spike; sends out mobile patrols to monitor key border crossings with Malawi; worries that smuggling of unfortified sugar will depress domestic sugar prices and therefore farmer prices

#### **Sugar importers**

Role in nutrition policy:

• not normally involved

Position on Vitamin A fortification:

- 70% increase in sugar price is good for the import business
- demand for cheaper, unfortified sugar from Malawi grows rapidly following Zambia's fortification law
  - however, crackdown on unfortified imports puts them out of business

## **Tropical Diseases Research Centre (TDRC)**

Role in food and nutrition policy:

- conducts technical research on public health and nutrition
- $\bullet$  conducted a 2000 study documenting children receiving Vitamin A supplements and fortification reduce VAD to 7%

Position on Vitamin A fortification:

• in favor of all interventions that effectively increase increased Vitamin A intake by vulnerable groups

#### USAID

Role in food and nutrition policy:

- provides large-scale financial support for various nutrition interventions Position on Vitamin A fortification:
  - strong early proponent and continued supporter
  - finances 1997 VAD survey
- finances consultancy of Dr. Omar Dary with experience from Guatemala who advises MOH and NFNC on lessons learned from Guatemala's successful experience requiring Vitamin A fortification of sugar
- provides \$250K to support donor financing of start-up costs for Zambia Sugar (equipment, 1 year of fortificants) and public health advertising campaign promoting fortified sugar
- supports fortification efforts through funding of the Zambia Integrated Health Project (ZIHP)

## **Indaba Agricultural Policy Research Institute (IAPRI)**

Role in food and nutrition policy:

- conducts empirical research on food policy
- conducted a 2013 review of sugar markets before and after implementation of fortification requirement

Findings from sugar market study:

- domestic sugar prices tracked world prices until 2000 when Vitamin A fortification was imposed; since then domestic prices have increased sharply over world prices
  - domestic sugar pricing appears unrelated to supply and demand factors
- imports have declined since fortification requirement imposed, increasing the market and pricing power of Zambia Sugar
- Zambia, though a low-cost producer (\$169 per ton vs world average \$263) charges consumers higher retail prices than elsewhere; domestic sugar prices exceed world prices by 50% to 100%
- Zambian sugar sells for less in DRC (\$0.92/kg) than in Zambia (\$0.98), suggesting price discrimination

- against legally mandated sugar fortification because fortification reinforces the monopoly power of Zambia's dominant supplier of sugar, enabling them to increase sugar prices to artificially high levels
- recommends alternative methods of increasing Vitamin A intakes (supplementation; biofortification of sweet potato and orange maize)

## Food and Drugs Control Laboratory (FDCL)

Role in food and nutrition policy:

- advises government in setting food safety standards
- tests for compliance of food products with existing food safety standards

Position on Vitamin A fortification:

- suppliers must meet the legal fortification requirements
- early tests suggest wide variation in fortification level from Zambia Sugar; FDCL finds most samples under required 10 mg/kg
- inadequate operational funding prevents FDCL from travelling to Zambia Sugar factory in Mazabuka to monitor Vitamin A levels

#### **International Eye Foundation**

Role in food and nutrition policy

• supported 1996 Zambia workshop on micronutrient deficiencies, organized by NFNC and UNICEF

Position on Vitamin A fortification

• strongly in favor of all interventions that increase Vitamin A intake

# UNICEF

Role in food and nutrition policy

• co-sponsored the 1996 Zambia workshop on micronutrient deficiencies, organized by NFNC

Position on Vitamin A fortification

• strongly in favor of all interventions that decrease micronutrient deficiencies in children and pregnant women