



East Central and Southern African Health Community (ECSCA-HC)

Developments in ECSCA Regional Standards and the Food Control Manuals

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**Flour Fortification Training Workshop on QC/QA
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ECSCA Health Community



Outline

1. Introduction of ECSCA
2. Background to the ECSCA Regional FF Initiative
3. Process of development of Regional Standards
4. Food Control Manuals
5. Conclusions and Next Steps



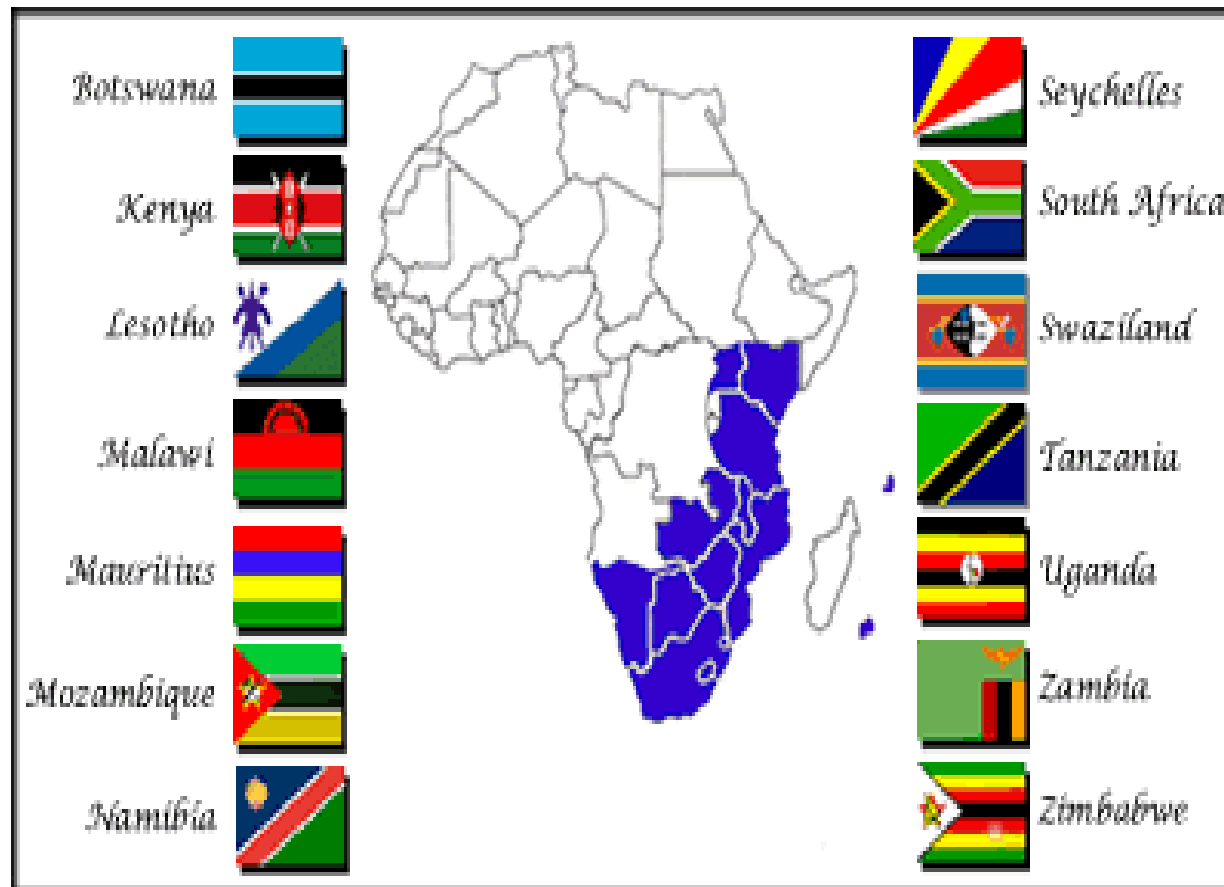


1. Introduction

- Intergovernmental organization established in 1974 under auspices of Commonwealth Secretariat in London – Commonwealth Region Health Community (CRHC)
- Autonomous regional organization in 1981, ratification of convention and adoption of new name ECSCA-Health Community in 2005
- Headquarters – Arusha, Tanzania.
- Mandate of the organization is “**to promote and encourage efficiency and relevance in the provision of health services in the region**”



Membership



37 Years of Collaboration in Health



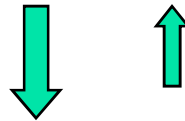
ECSC Health Community

Structural Organization

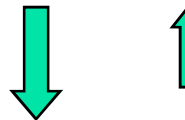
Health Ministers Conference



Advisory Committee (PSes)



Directors Joint Consultative Committee – Health Experts



Secretariat



Programmes



2. The ECSA Regional Food Fortification Initiative

- Started in response to a Resolution passed by the ECSA Health Ministers in 2002 instructing Secretariat to work with countries to promote food fortification
- In 2004, Secretariat in collaboration with USAID organized a regional workshop for ECSA countries in Lusaka Zambia to develop strategies and action plans to implement the Ministers' resolution
- Workshop developed a consensus statement:

“Building regional collaboration will facilitate the implementation of this vital national public health intervention”

The ECSA Regional Food Fortification Initiative was thus BORN





The ECSA Regional FF Initiative cont'd--

Main Objective:

To fast-track the implementation of food fortification in the ECSA Region through adequate policy and legislation, technology and research, promotion and advocacy, monitoring and surveillance

Specific Objectives for the Initiative:

- ✓ Fortify sugar with vitamin A
- ✓ Fortify edible oil with vitamin A
- ✓ Fortify flour with iron, zinc, vitamin A, folate, vitamins B-1, B-2, B-6 and B-12
- ✓ Ensure that >90% of households in the region have access to adequately fortified salt





The ECSA Regional FF Initiative Cont'd..

Approach used:

Formation of 4 technical working groups to harmonize and accelerate food fortification activities in the Region

1. Regulations, Standards and Food Control
2. Laboratory Strengthening and Network
3. Technical and Trade Support
4. Advocacy, Coordination and Resource Mobilization

Technical Groups developed and presented action plans to the countries through convened Regional Workshops

- Planning and implementation of the initiative was through multi-stakeholder collaboration (ECSA, USAID, UNICEF, GAIN, ICCIDD, MI Member States' chief nutritionists, food standards officers, regional trade officers, food manufacturers, fortificant suppliers)





3. Development of the ECSCA Regional Standards

1. Collection of data to determine national availability and consumption



2. Technical Meeting in 2005 – Malawi – 1st set of Draft guidelines – presented to a regional workshop



3. Review of guidelines in 2007.



Some countries adopted/adapted guidelines





Standards development cont'd

- Standards presented during a regional workshop in Nairobi in 2009- countries noted the presence of WHO guidelines which were a little different from the ECSCA guidelines
- In July 2010, held a meeting to review the guidelines, considering the WHO guidelines and HIES data from countries.
- Next Step:
 - Prepare standards and submit them to EAC and COMESA for adoption



Role of standards in food fortification ↔ Biological Impact of Food Fortification

INTAKE = Σ [Nutrient content] x amount consumed x frequency



Technology



Consumer Behavior

BIOEFFICACY

→ [**BIOAVAILABILITY
& BIOCONVERSION**]

x **INTAKE**



4. Food Control Manuals

- i) With support from A2Z, developed 17 food control manuals for salt, oil, sugar, maize flour and wheat flour.

Scope of Manuals:

- i. Internal Monitoring (Quality Control and Quality Assurance) procedures for large and small scale factories (in the case of salt and maize flour)
- ii. External Monitoring (Technical Auditing and Inspection) combined with QC) in large and small scale factories
- iii. Manual for commercial Inspection of fortified foods
- iv. Manual for Inspection of fortified foods at importation sites.



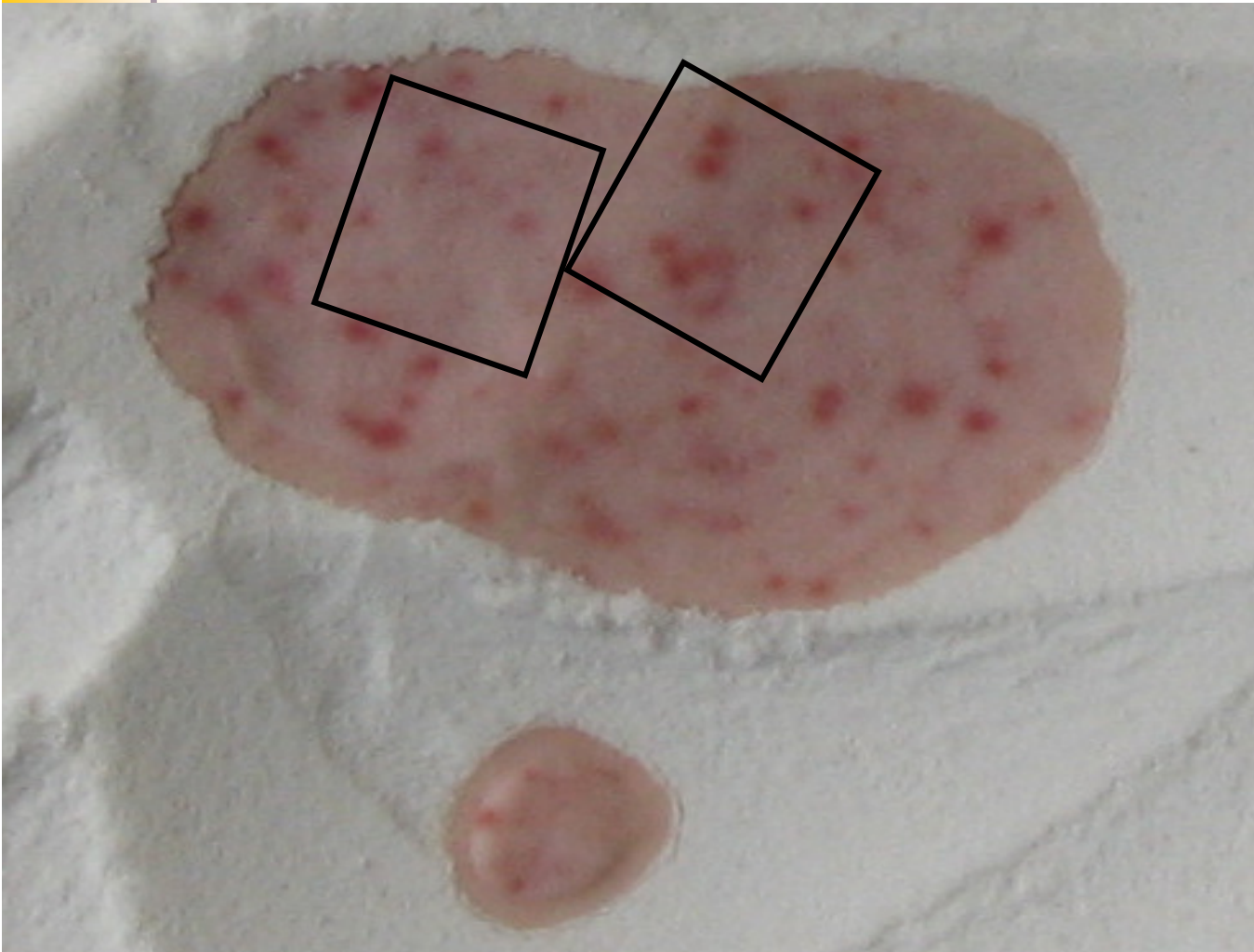
- ii) Trained countries on the use of these manuals and are using (Uganda, Kenya, Malawi and Tanzania).

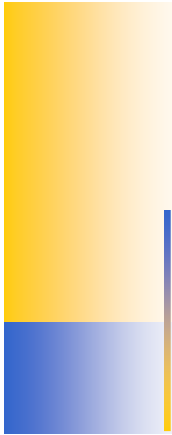


Good Collaborations are necessary!

Thank you for your attention!!

A larger sample is more representative

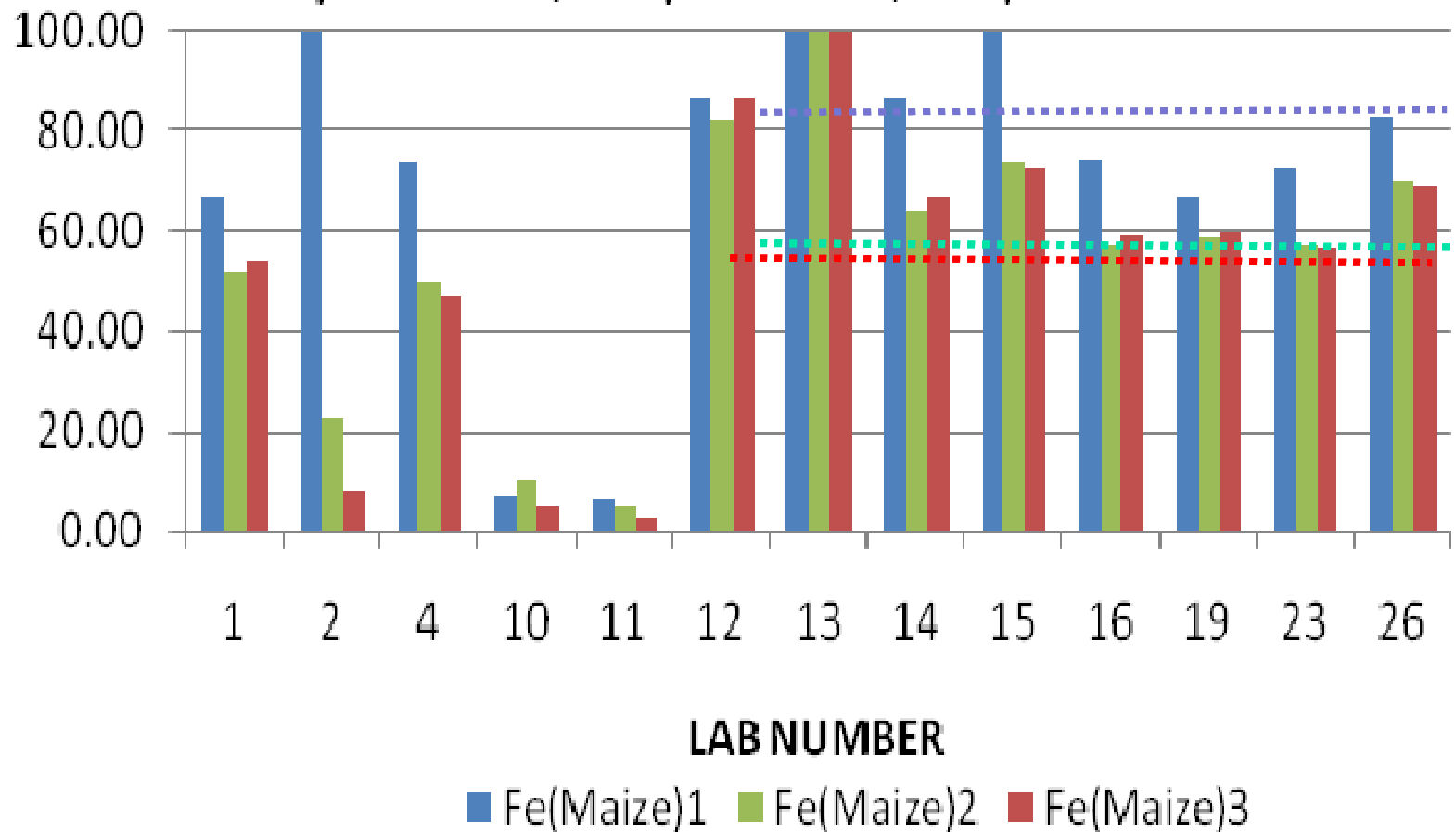




IRON IN MAIZE FLOUR (mg/kg)

Assigned Values

Sample 1 = 86.0; Sample 2 = 61.2; Sample 3 = 61.4



Food Control & Monitoring

FLOW CHART OF A MONITORING AND EVALUATION SYSTEM FOR FOOD FORTIFICATION

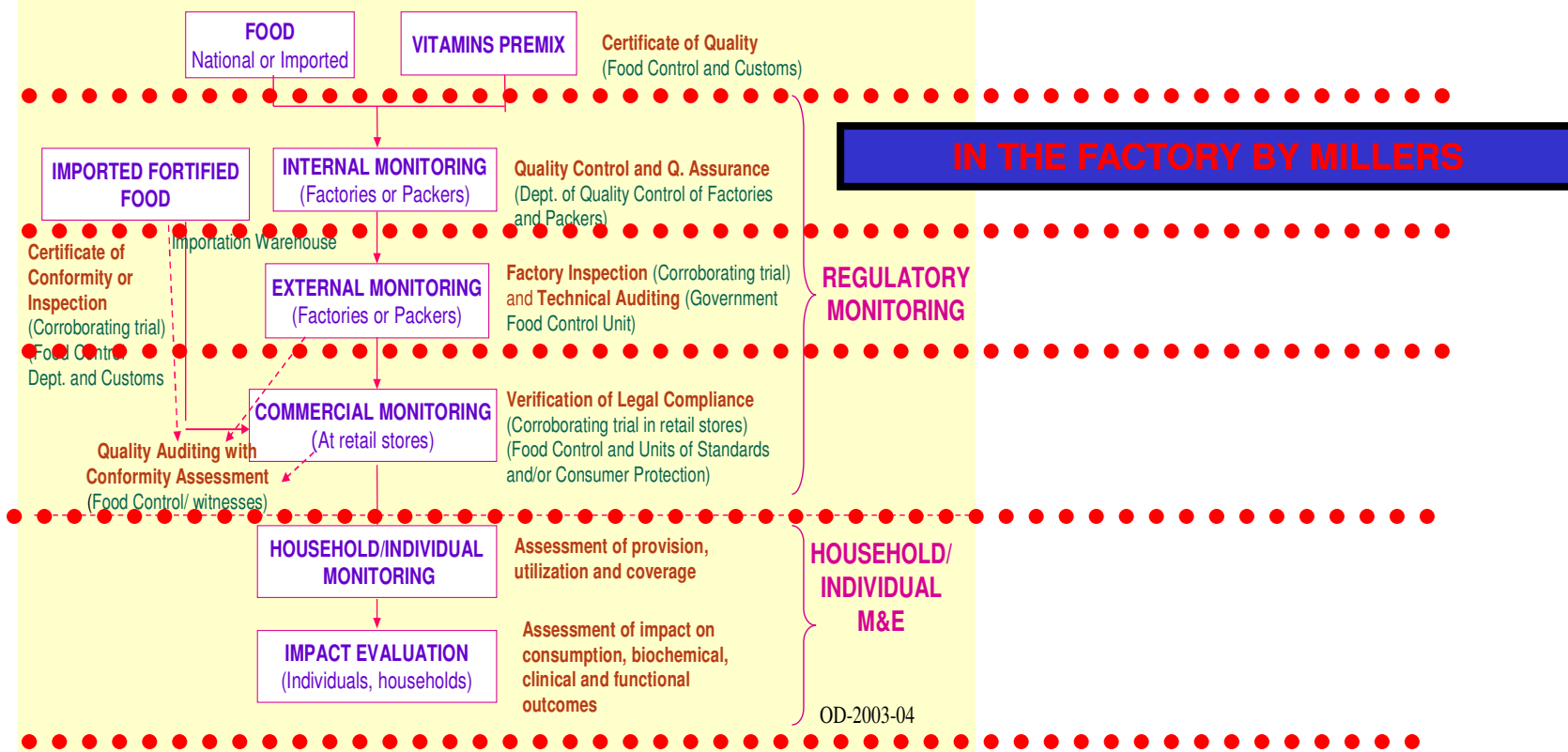
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Food Control & Monitoring

FLOW CHART OF A MONITORING AND EVALUATION SYSTEM FOR FOOD FORTIFICATION

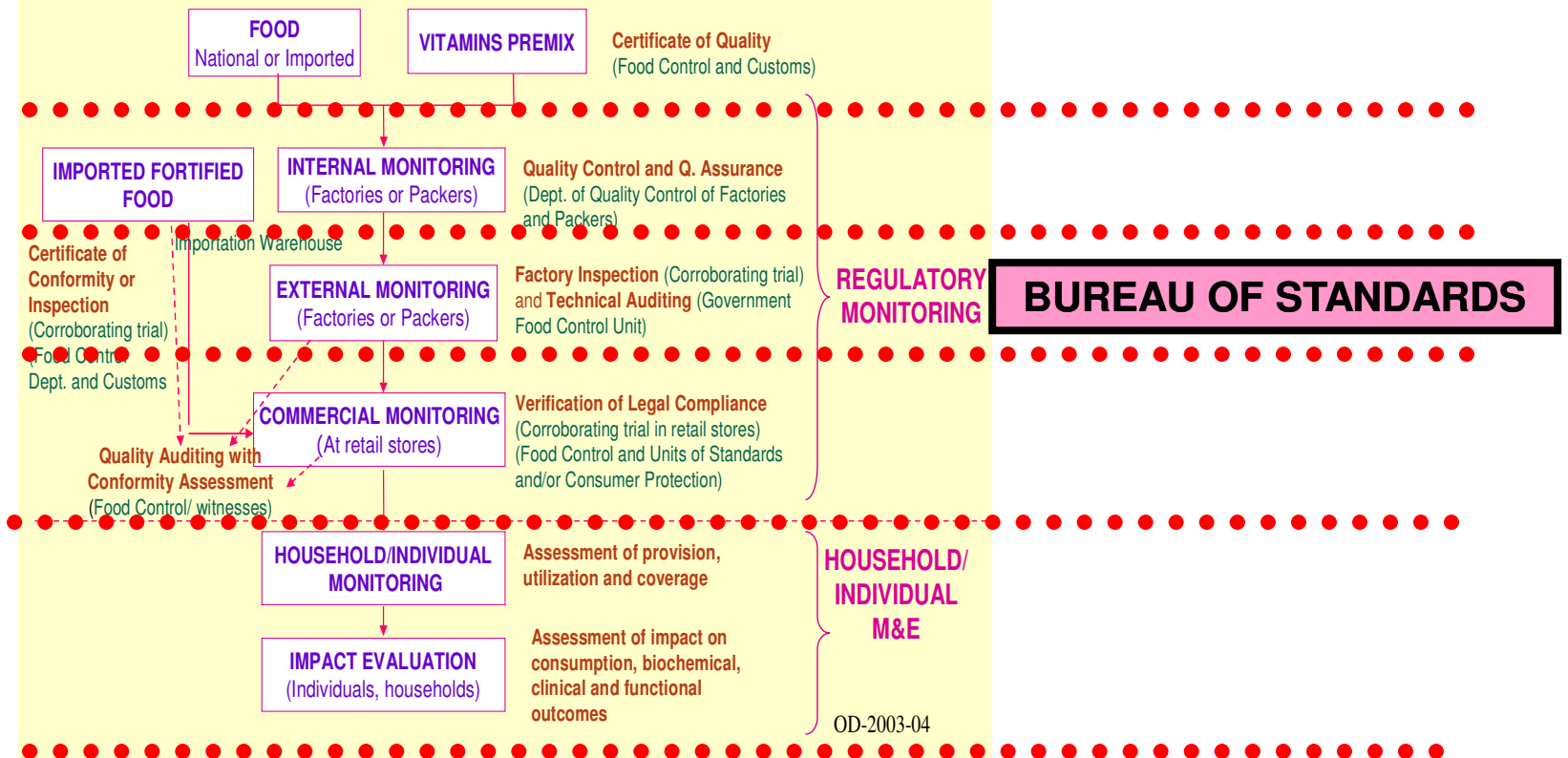
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Food Control & Monitoring

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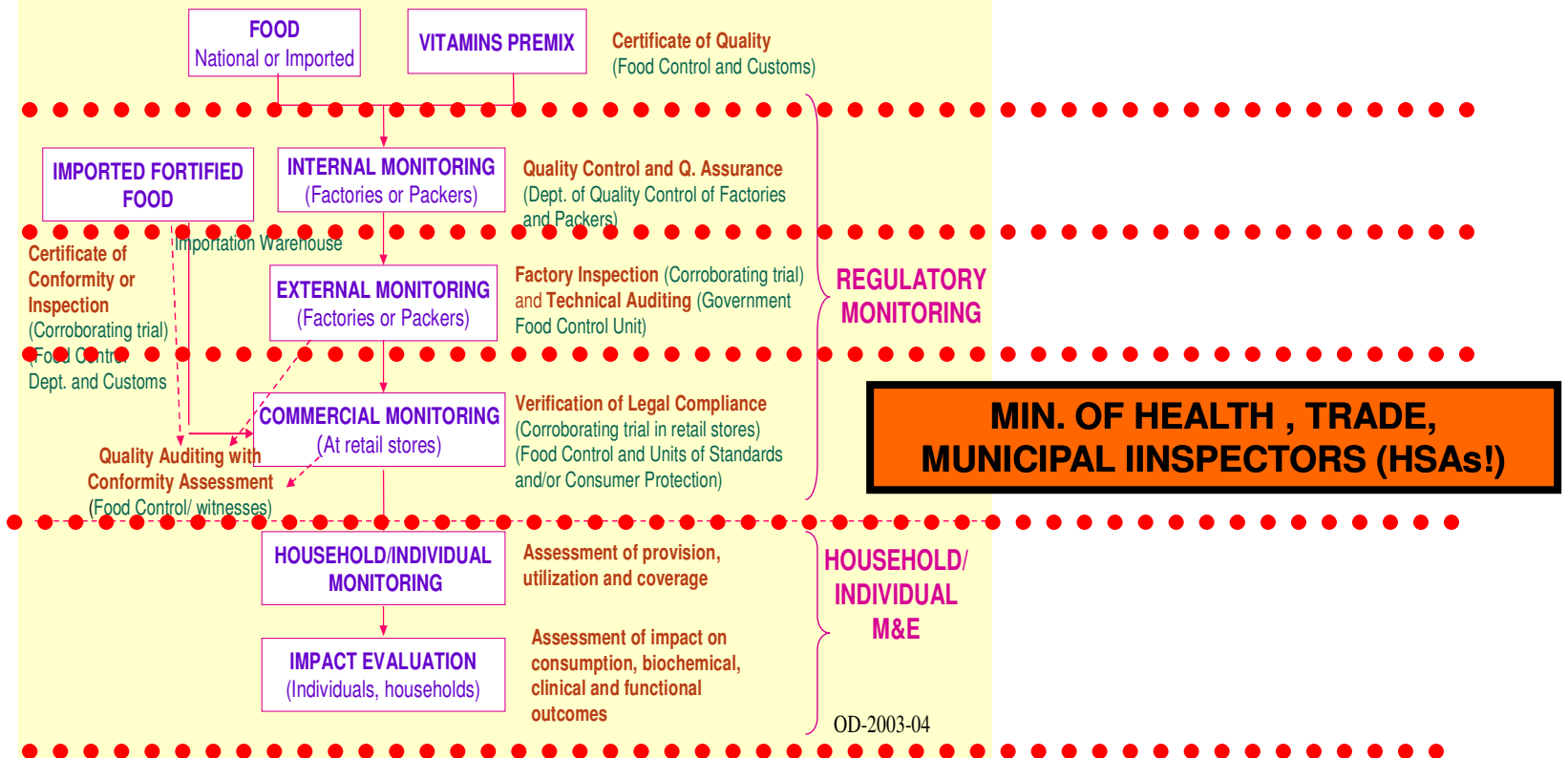
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Food Control & Monitoring

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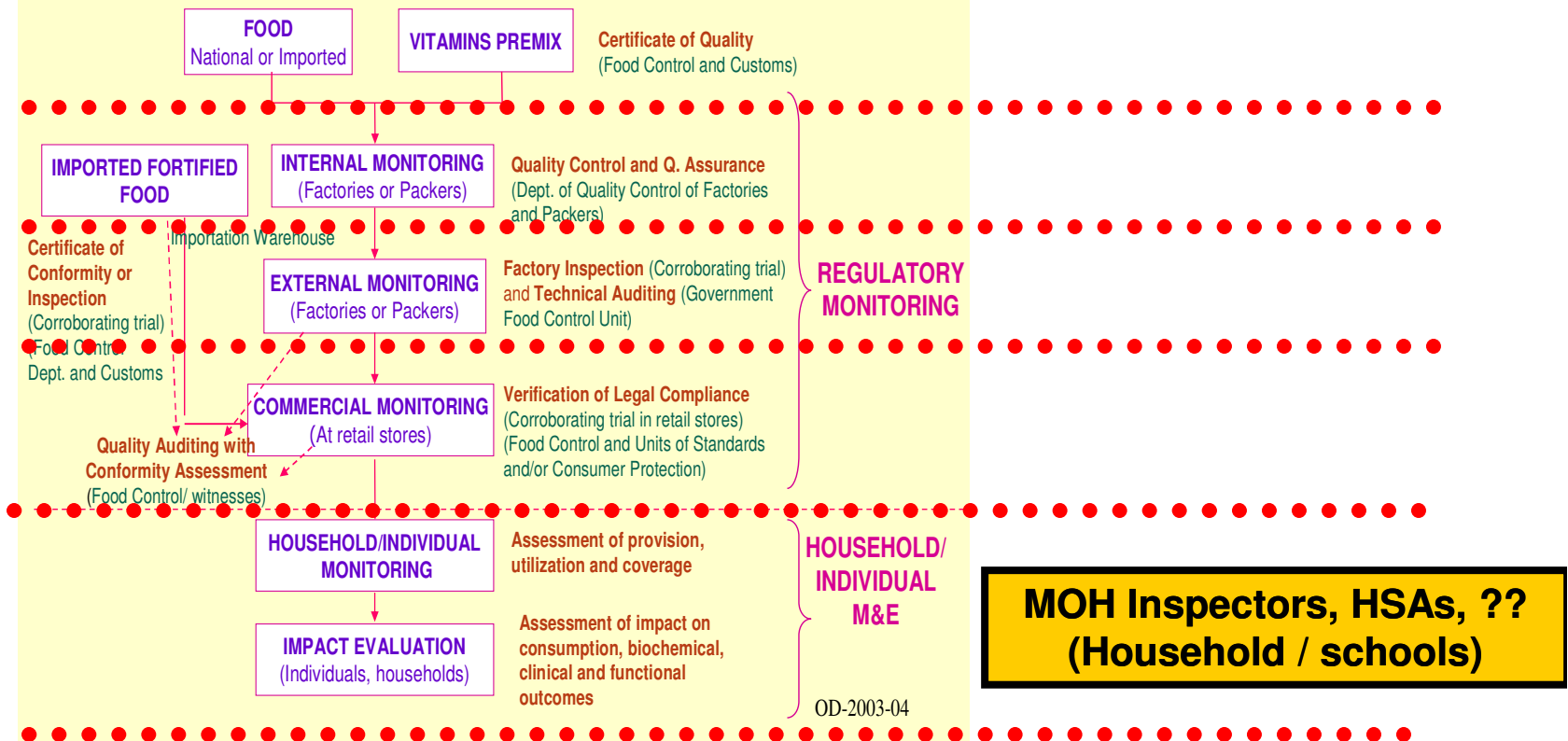
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Food Control & Monitoring

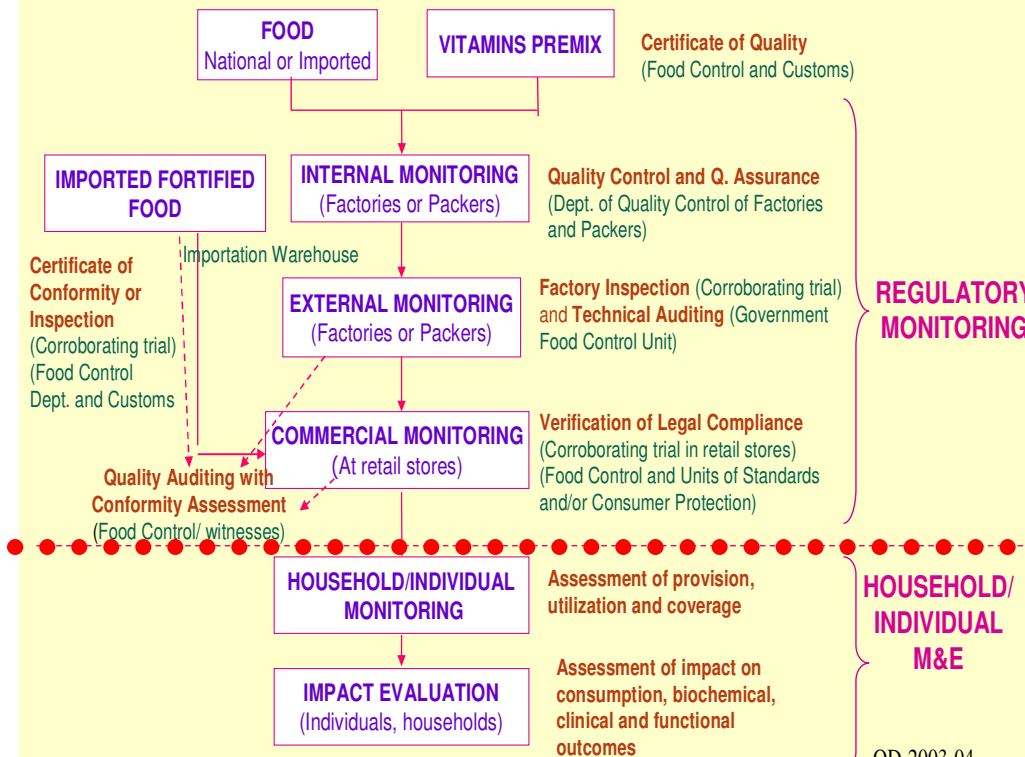
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Food Control & Monitoring

FLOW CHART OF A MONITORING AND EVALUATION SYSTEM FOR FOOD FORTIFICATION



OD-2003-04



Food Control & Monitoring

1.

ECSCA invested in guidelines for countries to adopt - same procedures!



Food Control & Monitoring

■ ECSA PRIORITY AREAS IN FOOD CONTROL

1. DEVELOP FORTIFICATION **STANDARDS** - ENSURE ADEQUACY AND ARE REALISTIC
2. PROVIDE INDUSTRY AND INSPECTORS WITH TOOLS TO FACILITATE **PROPER IMPLEMENTATION OF STANDARDS**
3. ENSURE **LABORATORY CAPACITY** AT COUNTRY LEVEL
4. PROMOTE **APPROPRIATE REPORTING** – REGULAR & USER FRIENDLY REPORTING



Food Control & Monitoring

1. DEVELOP FORTIFICATION STANDARDS - ENSURE ADEQUACY AND ARE REALISTIC
 1. ADEQUACY : Formulator (based on WHO) to determine %EAR expected. Using local consumption data
 2. REALISTIC: Regulatory levels at factory, market take into account limitations (factory process variation, analytical errors, anticipated losses – stability of nutrients)

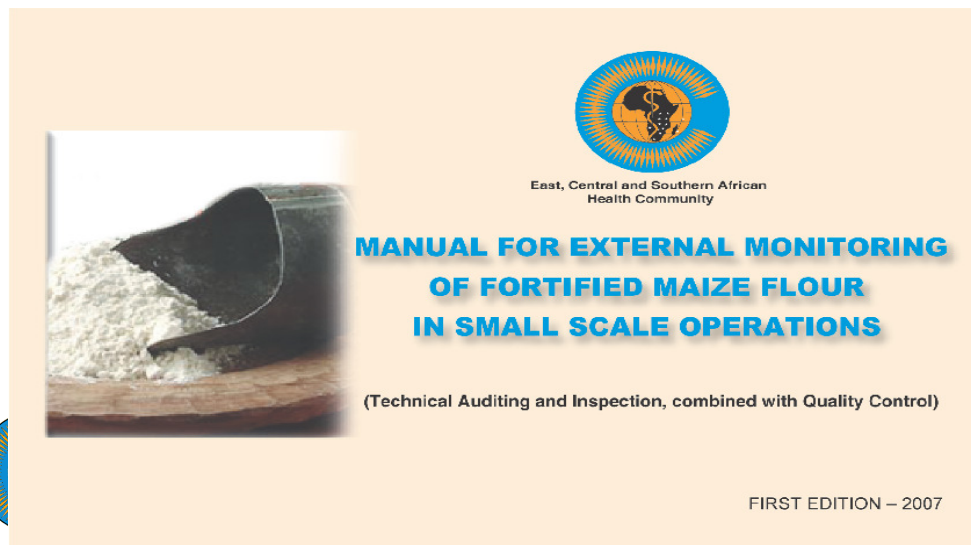


Food Control & Monitoring

1. PROVIDE INDUSTRY AND INSPECTORS WITH TOOLS TO FACILITATE PROPER IMPLEMENTATION OF STANDARDS

1. QA/QC Manuals for Internal and External Monitoring

Criteria			
Internal		External	
Expected factory range	>80%		
Expected Market Minimum	ALL		
Min Household Level	ALL		



Food Control & Monitoring

1.

ENSURE LABORATORY CAPACITY AT COUNTRY LEVEL

1. Laboratories (MBS/MOH/REF)
2. Personnel
3. Methods (Reliable & Affordable)
 1. UV Spec vs HPLC
 2. Iron Extraction vs Ashing
 3. Standard Addition for Oil (in progress)
 4. Vitamin A Method (20sec to >5 min)



Food Control & Monitoring

LABORATORY METHODS (3 PARTS)

PART 1
Iodine in Salt

PART II
ViT. A in Oil and
Sugar

PART III - FLOURS
Iron, Vitamin A,
Roboflavin



East, Central and Southern African
Health Community

MANUAL OF LABORATORY METHODS FOR FORTIFIED FOODS

(Vitamin A, Riboflavin, Iron and Iodine)

PART III
(DETERMINATION OF IRON, VITAMIN A AND
RIBOFLAVIN IN FORTIFIED FLOURS)

FIRST EDITION – 2007



END

