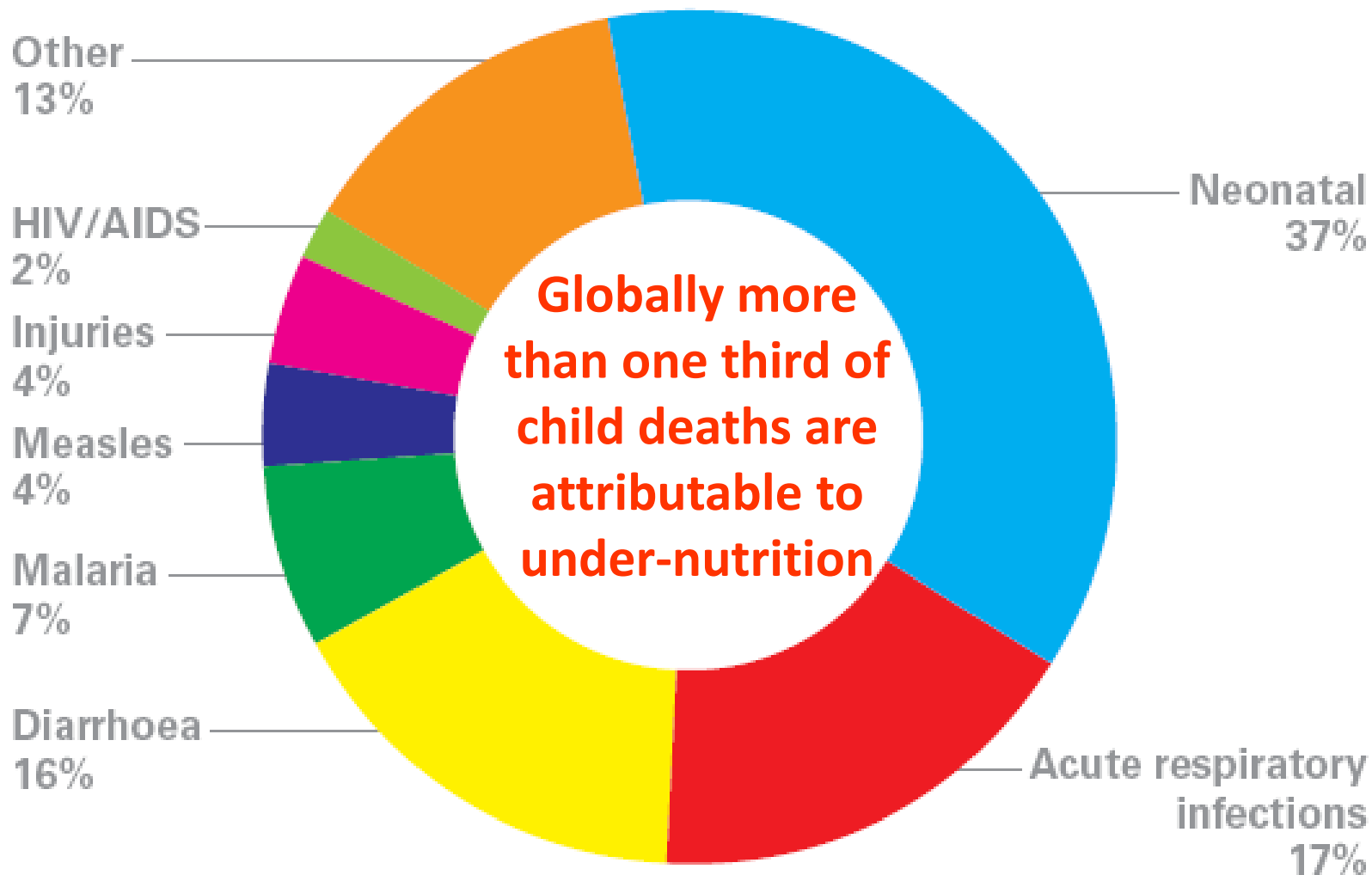


Overview of Micronutrient Issues And Action In The Eastern And Southern Africa Region

Saba Mebrahtu
Regional Nutrition Advisor
UNICEF ESARO

**Harmonization Workshop for
Wheat and Maize Flour Fortification
Nairobi, Kenya
19-22 April 2010**

Causes of Mortality in Children Under-five Years Old

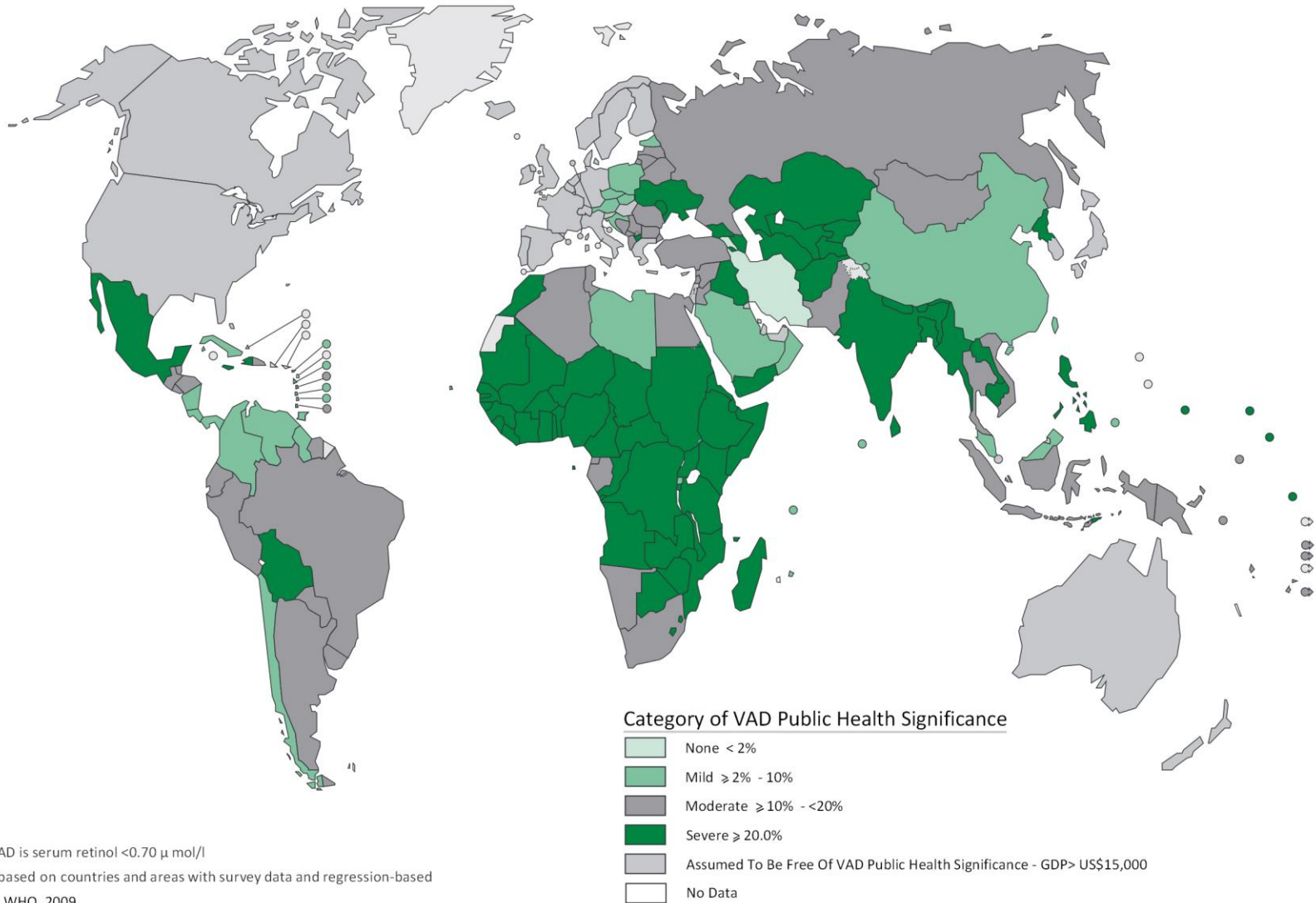


Not Only An Issue Of Child Survival

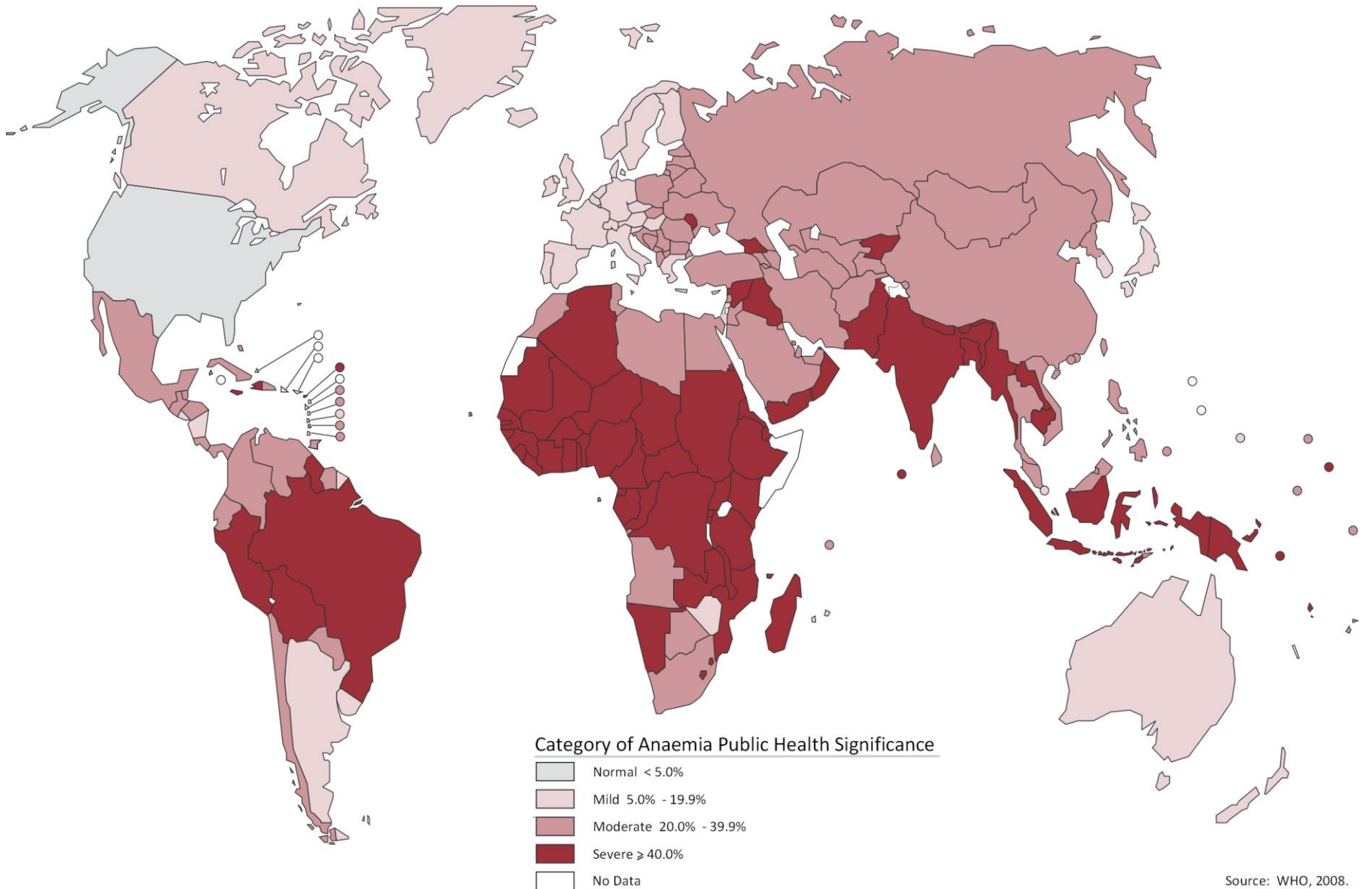
- Nutrition is also important for:
 - Physical growth
 - Behavioral development, cognitive function
 - School attendance, performance
 - Ultimate income-generating capacity, economic development
 - Risk of non-communicable diseases

Overview of the Nutrition Situation: Micronutrient Deficiencies

Vitamin A Deficiency Among Preschool Children by Country: 1995 - 2005

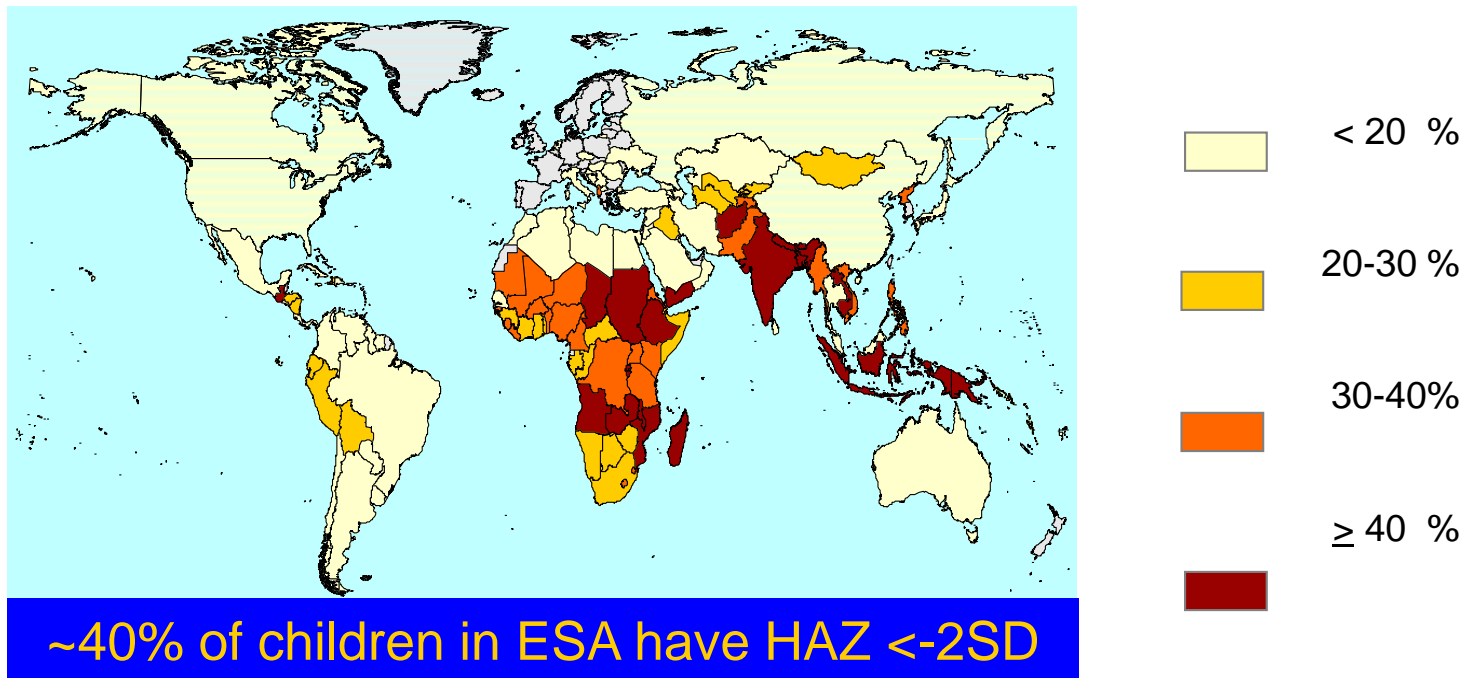


Anaemia Among Preschool Children By Country

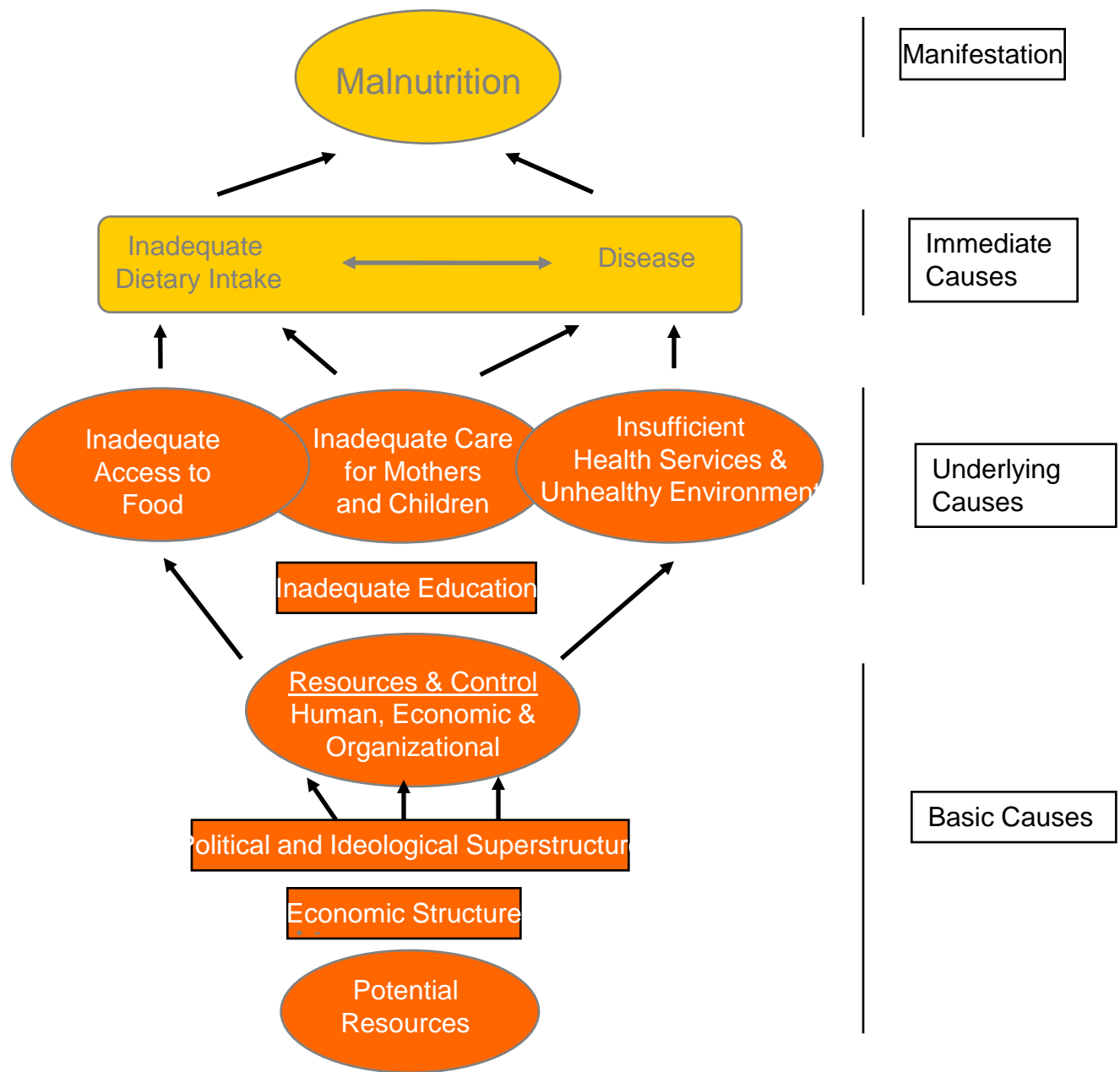


Risk of Zinc Deficiency

- Limited information based on biomarkers of zinc status
- Current estimates based of prevalence of child stunting
- Assessments should be added to all planned nutritional status surveys in countries with an elevated risk of zinc deficiency



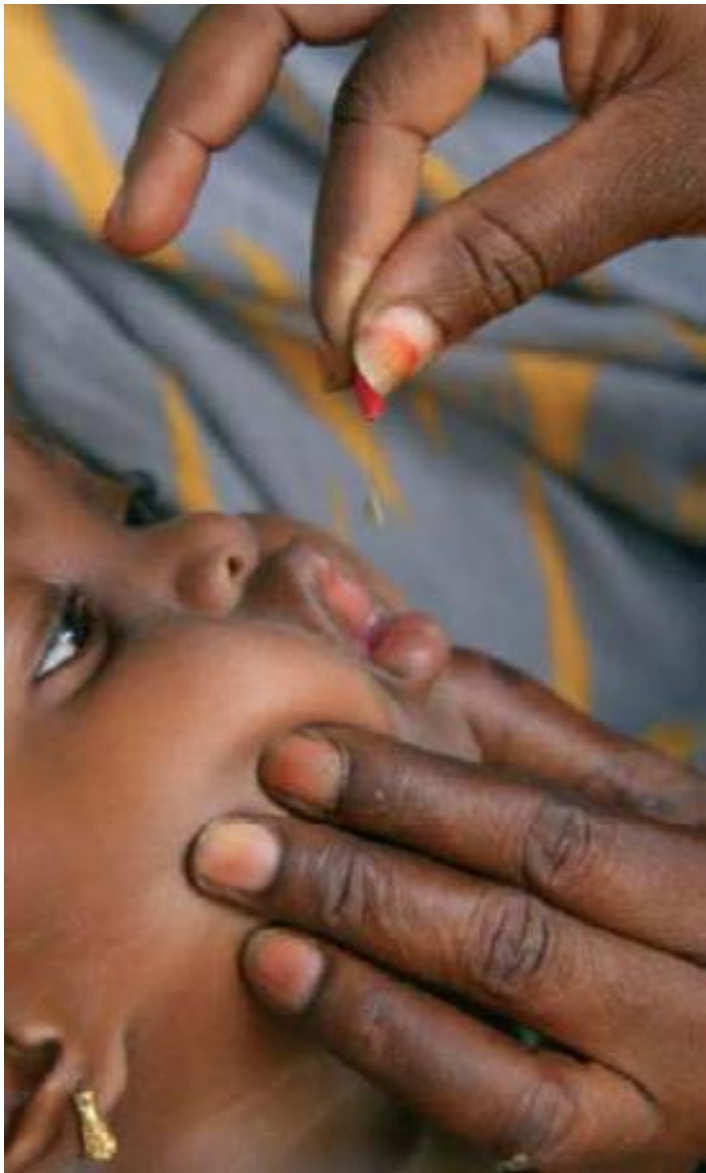
The UNICEF Conceptual Framework



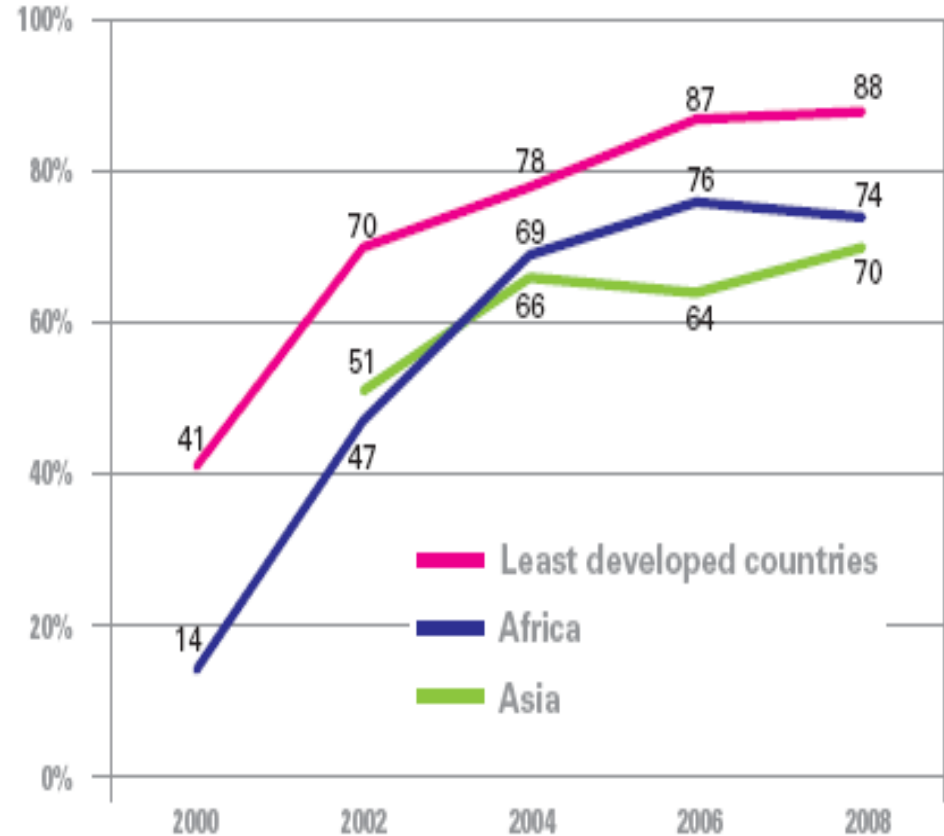
Key Interventions for Elimination of Micronutrient Deficiencies

Supplementation

- Single or multiple micronutrients
- **Fortification**
 - Foods for the general population (flour, oil, salt, sugar)
 - Fortification of specific foods, incl home-fortification
- **Promotion of optimal feeding & diversified diets**
 - Optimal breastfeeding (early BF initiation, EXBF for 6 months, continued BF for up to 2 years)
 - Micronutrient-rich foods, including animal source foods
- **Public health measures**
 - Infection control
 - Hygiene
 - Immunization



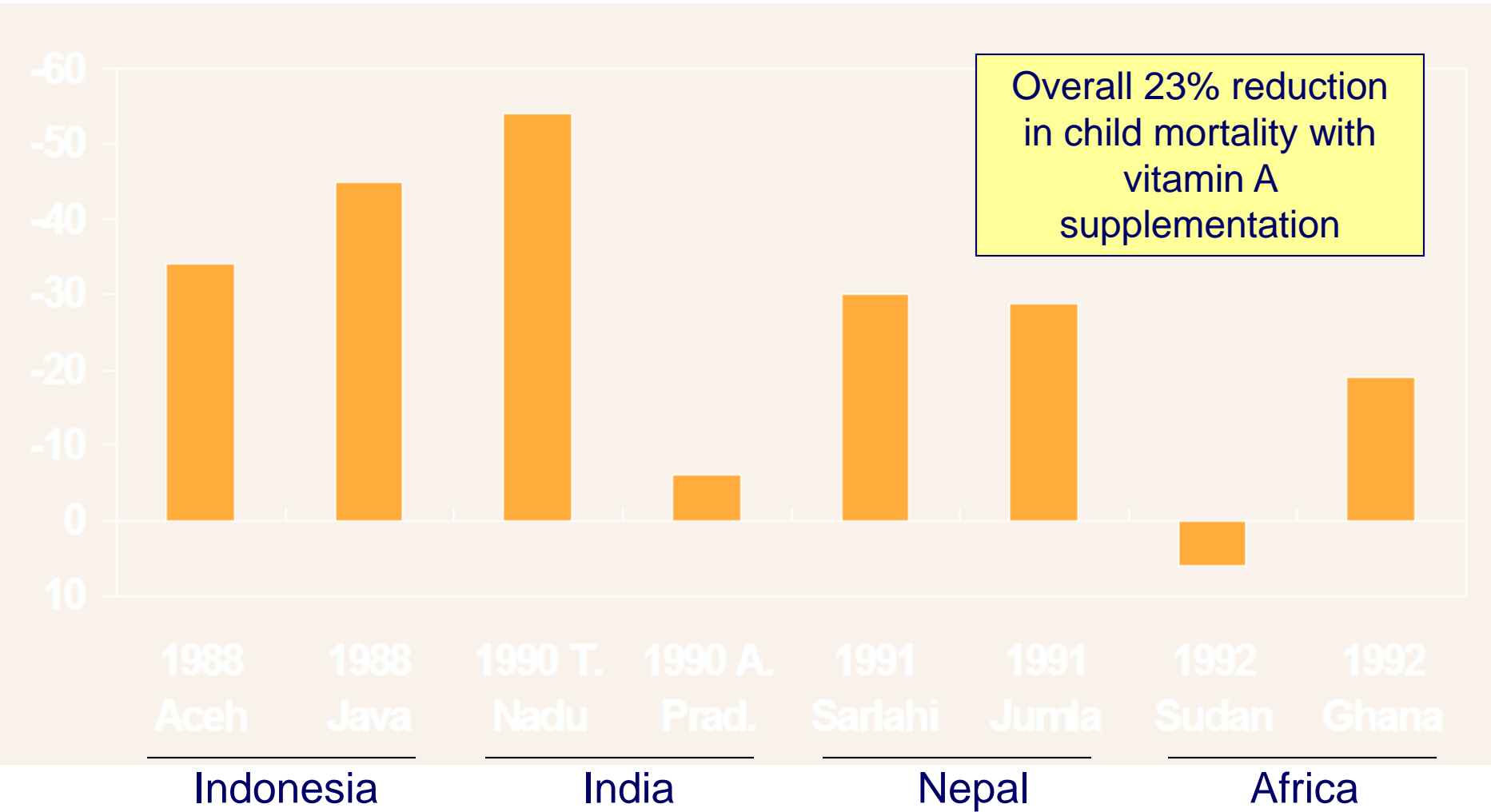
Progress on 2 dose Vitamin A Supplementation Coverage



Note: Vitamin A supplementation two-dose (full coverage) trends are based on a subset of 16 African countries and 18 least developed countries with data in even years between 2000 and 2008 and on a subset of 11 Asian countries with data in even years between 2002 and 2008. The trend line for Asia begins in 2002 because of a lack of data for trend analysis prior to that.

Source: UNICEF, 2009

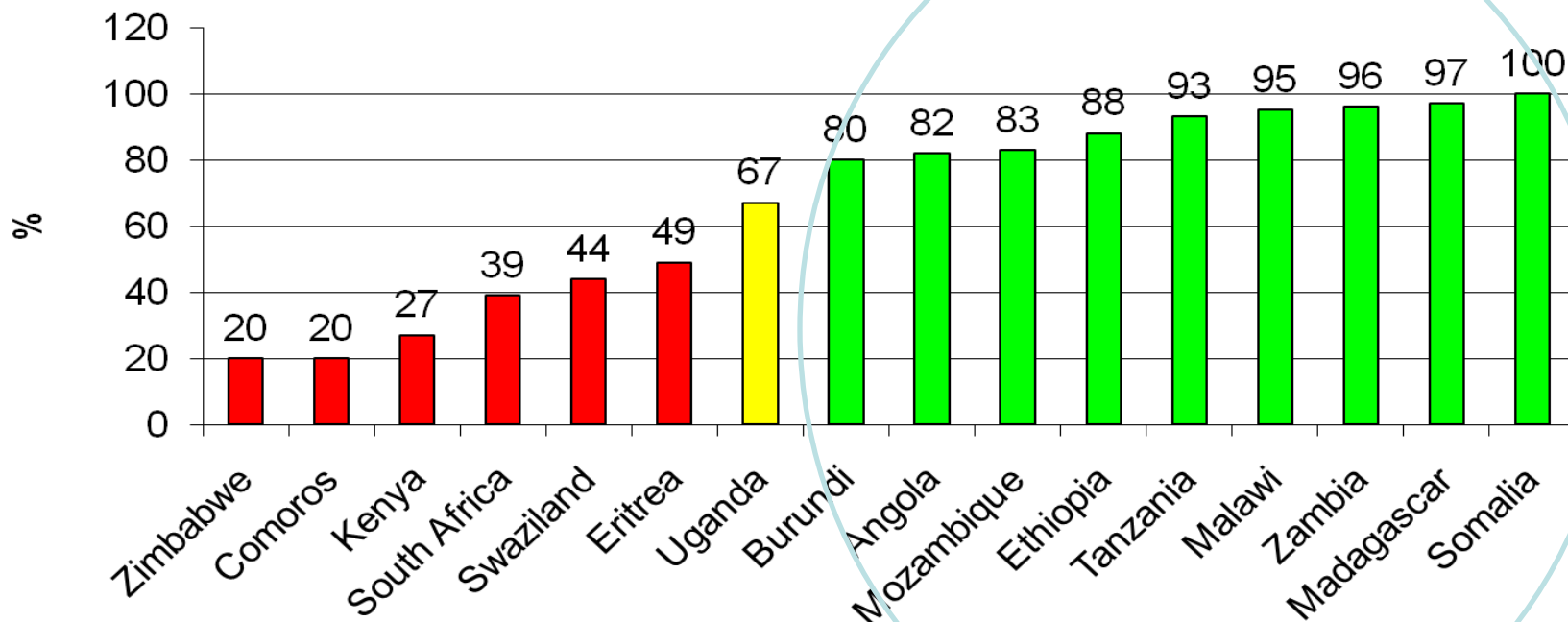
Impact of vitamin A on child mortality



Nine ESA Countries Have Achieved 80%+ Two Dose Vitamin A Coverage

Two Dose Vitamin A Coverage of Children 6-59 months

Source: UNICEF SOWC Special Edition, Nov. 2009



Measures for Sustainability of VAS/CHDs

Include VAS/CHDs in NDPs, PRSPs, SWAps:

- Safeguard VAS budget (capsules and operational costs) and advocacy

Support Complementary Strategies:

- Food fortification - sugar & oil fortification with Vitamin A – e.g. Zambia, Malawi, and Uganda
- Dietary improvements - promotion of breastfeeding, diversified diets e.g. Malawi
- Public health measures - hygiene, immunization, de-worming, ITNs distribution etc.

Five ESAR countries have reached USI

Reached USI ($\geq 90\%$)

Burundi – 98%

Uganda – 96%

Kenya – 91%

Lesotho – 91%

Zimbabwe – 90%

Closing in on USI Goal (50-89%)

Rwanda – 88%

Comoros – 82%

Swaziland 80%

Zambia – 77%

Madagascar – 75%

Eritrea – 68%

Botswana – 66%

Namibia – 63%

South Africa – 62%

Malawi – 50%

Lagging Behind (<50%)

Angola – 45%

Tanzania – 43%

Mozambique – 25%

Ethiopia – 20%

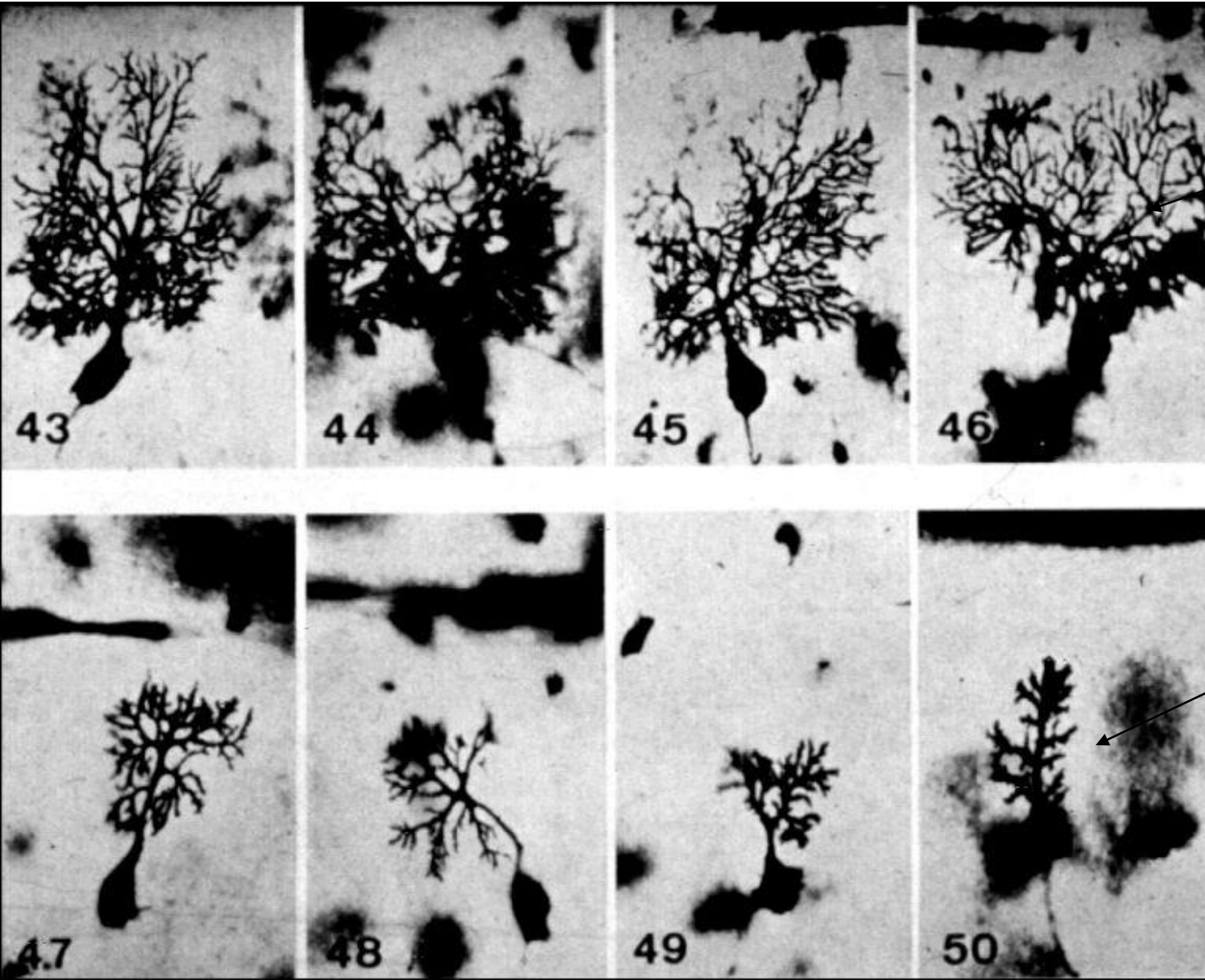
Somalia – 1%

No Data

- Mauritius
- Seychelles



Brain Damage due to Iodine Deficiency



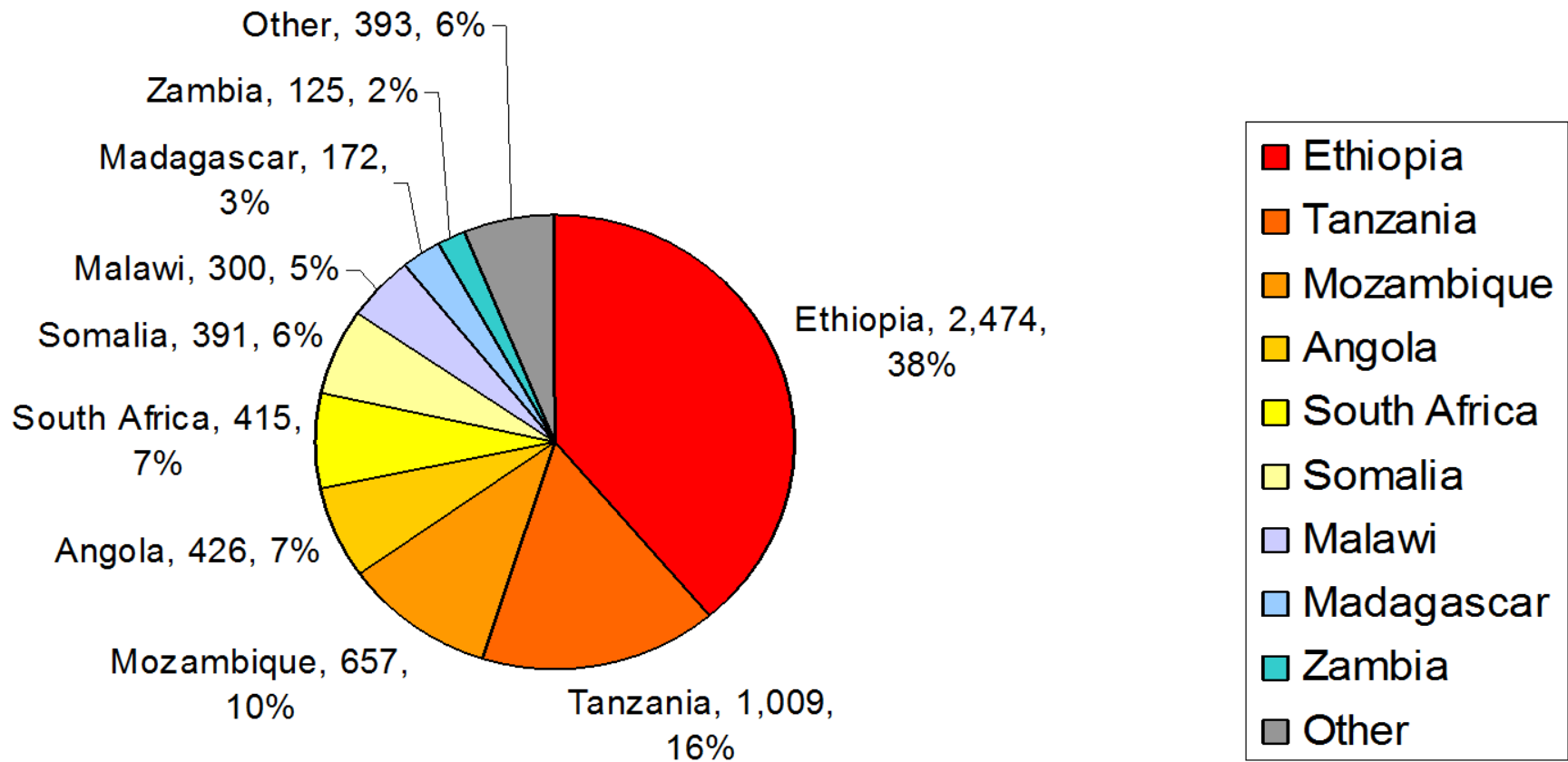
Human brain
Iodine sufficient

Human brain
Iodine deficient

Nine High IDD Burden Countries

Iodine Deficiency Unprotected Infants (000)

Source: UNICEF SOWC Spec Ed, Nov 2009



Flour, Sugar, and Oil Fortification

- **Why It's Important:**

- In most of the region, diets are deficient in vitamin A, iron deficiency affects well over half of preschool children and women, and there is wide risk of zinc deficiency.
- Everyday bulky foods do not offer the density of essential nutrients that people need, particularly during periods of high physiological needs and acute vulnerability - pregnant women and infants, children and adults who are suffering from infectious diseases such as HIV.
- Large scale of micronutrient malnutrition and its consequences for economic development call for immediate and large-scale action.
- Fortifying major food vehicles - wheat or maize flour with iron, folic acid and other micronutrients, or sugar and oil with vitamins A and D, is highly most cost-effective strategy to address micronutrient malnutrition.

Global deaths and disability-adjusted life-years (DALY) among children <5 yrs attributed to MN deficiencies

Deficiency	Death	% of death in children < 5yr	Disease burden (1000 DALYs)	% of DALYs in children < 5yr
Vitamin A	667,771	6.5	22,668	5.3
Zinc	453,207	4.4	16,342	3.8
Iron	20,854	0.2	2,156	0.5
Iodine	3,619	0.03	2,614	0.6

What Can We Draw from USI Successes and Lessons

The Critical Success Factors for Universal Salt Iodization

- 1 **Enhanced national commitment** - national policy & action plan on sustained IDD elimination with adequate national budget allocation
- 2 **Functional national coalition for sustained IDD elimination**
 - **Public-private-civil collaboration**
- 3 **Regular quality assurance & monitoring and reporting**
 - Product quality – standardized processes
 - WHA Resolutions – WHA 60.21
- 4 **Effective law enforcement**
 - Legislation
 - Standards - Oversight
- 5 **Continuous Advocacy and Communication**
 - Government sectors (agriculture, education, health)
 - Private sector (producers, processors, traders)
 - Civil society (farmers, religious groups)
 - General public



Thank you

Merci Beaucoup

Obbrigado

Asante Sana