

# Unexpected Realities of Introducing a New Intervention

## The Zinc and Diarrhea Story from Policy to Present

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# Global Diarrhea Treatment Policy

- WHO and UNICEF issued a joint policy for the treatment of diarrhea in children in May 2004
- Treatment should include:
  - Liberal use of low-osmolarity Oral Rehydration Solution to correct and prevent dehydration
  - **Zinc supplementation for 10-14 days to shorten duration and severity of diarrhea**
  - Continued feeding and additional fluids

WHO/UNICEF. Joint statement on the clinical management of acute diarrhea. 2004.



# Rolling Out Zinc For Diarrhea

## Early Progress

**May 2004:**  
UNICEF/WHO  
Joint Statement

**March 2005:** Zn  
added to WHO  
Essential Med List

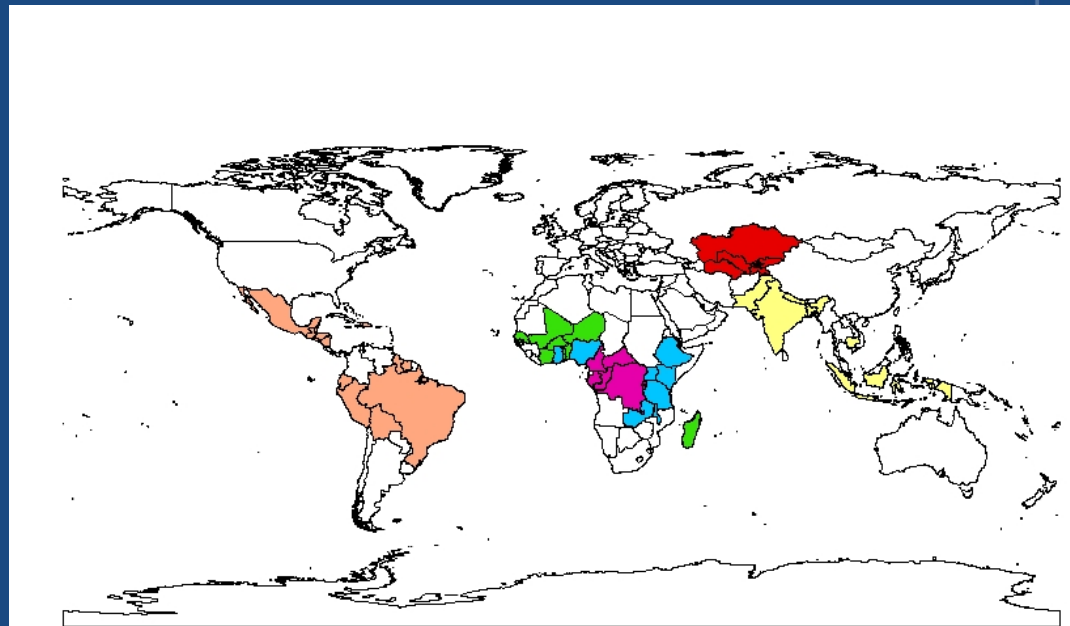
**June 2004:** Initial  
Call for Global  
Zinc Task Force

**Sept 2005 – May 2007:**  
Global ZTF receives  
funding from BMGF for  
planning grant



# Improved Diarrhea Management Advocacy & Technical Training Workshops

- 5 regional & 2 country planning workshops
- Trained 245 health specialists from 45 countries
- Purpose: to update policy makers and program planners on zinc for diarrhea management, and to assist with policy adoption, roll-out plans and national scale-up



# Essential Manufacturing A Global Zinc Supply

PRE JULY 2006: no manufacturers met WHO prequalification standards

JULY 2006: Nutriset/Rodael met WHO prequalification standards and zinc dispersible tablets available directly from Nutriset or through UNICEF warehouse

DEC 2006: UNICEF had two qualified suppliers for whom countries can procure quality products meeting WHO prequalification



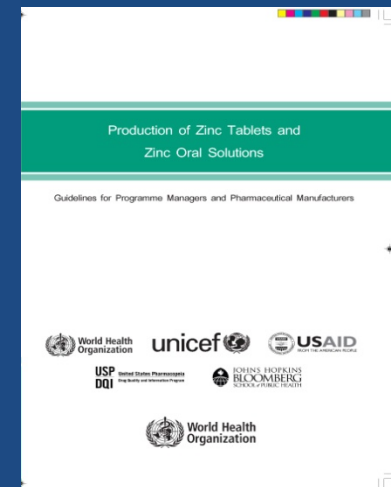
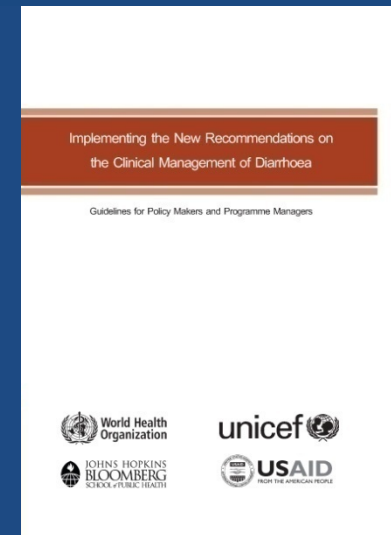
# Essential Manufacturing Local Zinc Supply

- India:
  - More than 15 local suppliers
  - Bibcol – completed technology transfer in 2009
- Bangladesh: Multiple manufacturers
- Tanzania, Indonesia, Pakistan, Nepal, Egypt, Benin, El Salvador, Bolivia, Cambodia



# The Development Of Support Materials

- Implementing the New Recommendations on the Clinical Management of Diarrhoea
- Production of Zinc Tablets and Zinc Oral Solutions
- Updated technical materials supplied by WHO/UNICEF including:
  - IMCI technical updates
  - Guidelines for the Treatment of Diarrhoea
  - Guidelines for the Treatment of Shigella



# Rolling Out Zinc For Diarrhea

## Where Are We Today

**May 2004:**  
UNICEF/WHO  
Joint Statement

**March 2005:** Zn  
added to WHO  
Essential Med List

**Jan 2009:** More  
than 1/2 UNICEF  
priority countries  
still do not have Zn  
& low ORS in  
national policy

**June 2004:** Initial  
Call for Global  
Zinc Task Force

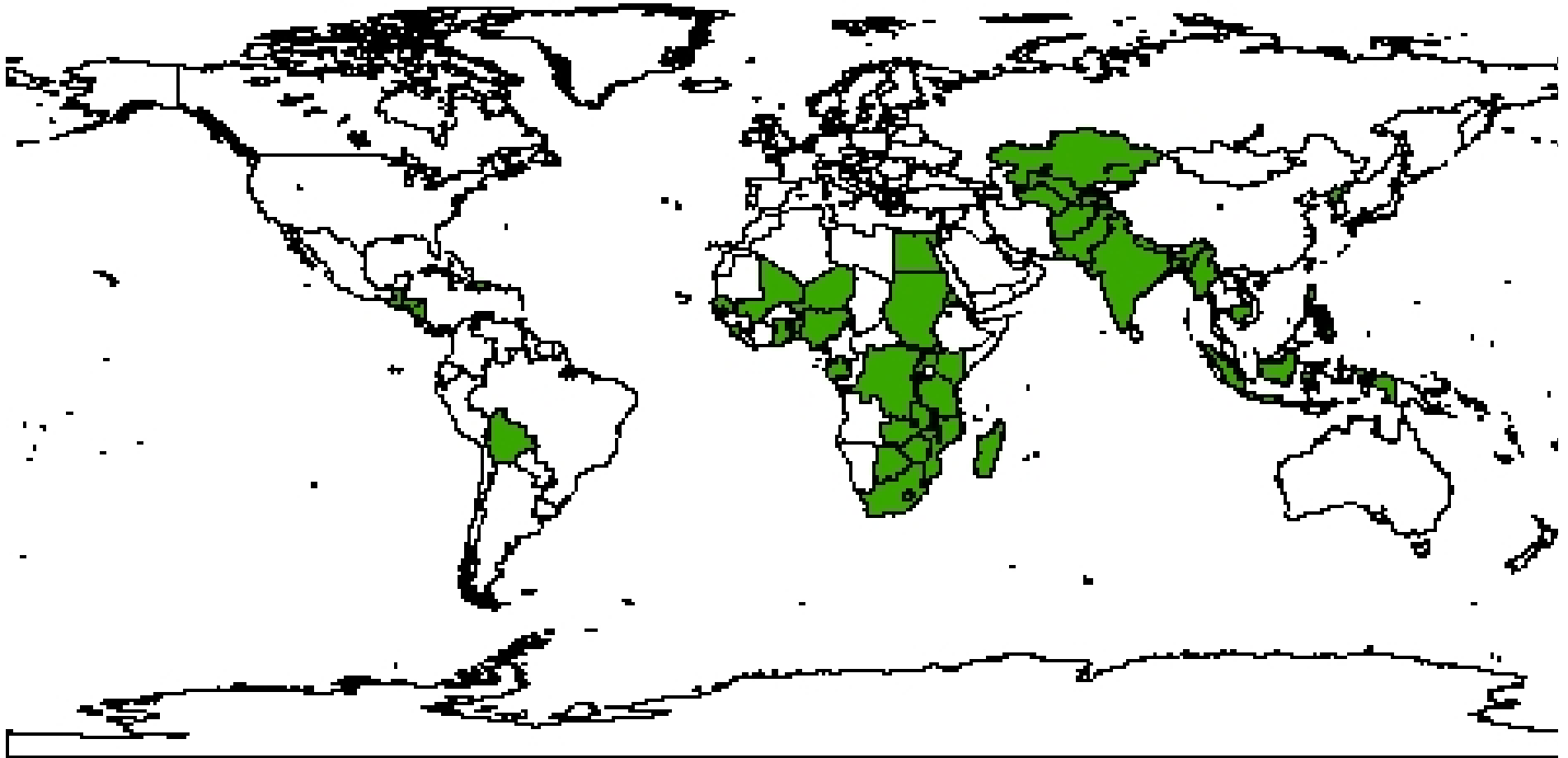
**Sept 2005 – May 2007:**  
Global ZTF receives  
funding from BMGF for  
planning grant

**End 2006:** UNICEF  
has 2 qualified zinc  
suppliers, local  
manufacturing  
beginning, and  
implementation guides  
available





## Countries with Current Child Health Policies adapted to Include Zinc for Diarrhea Management (2009)



## Challenges for Countries: Changing Diarrhea Treatment Policy

- Countries do not perceive diarrhea as a problem and therefore little priority is given to timely changes
- Countries struggle to change a policy to recommend a drug that is not available in the public or private sector
  - Manufacturers are not interested in producing something that is not recommended
  - Manufacturers want to see demand in the community
  - How to create demand for a product that does not exist and no one has ever heard of or has experience using.



## Challenges for Countries: Funding for Start-up and Procurement

- Zinc procurement has been a major obstacle for many countries until zinc is included in the health budget.
- Zinc Procurement Fund
  - Bridge funding may help accelerate progress until national budgets can incorporate zinc into routine programming
- Program funding will need to go beyond the status quo – how much money will this cost?

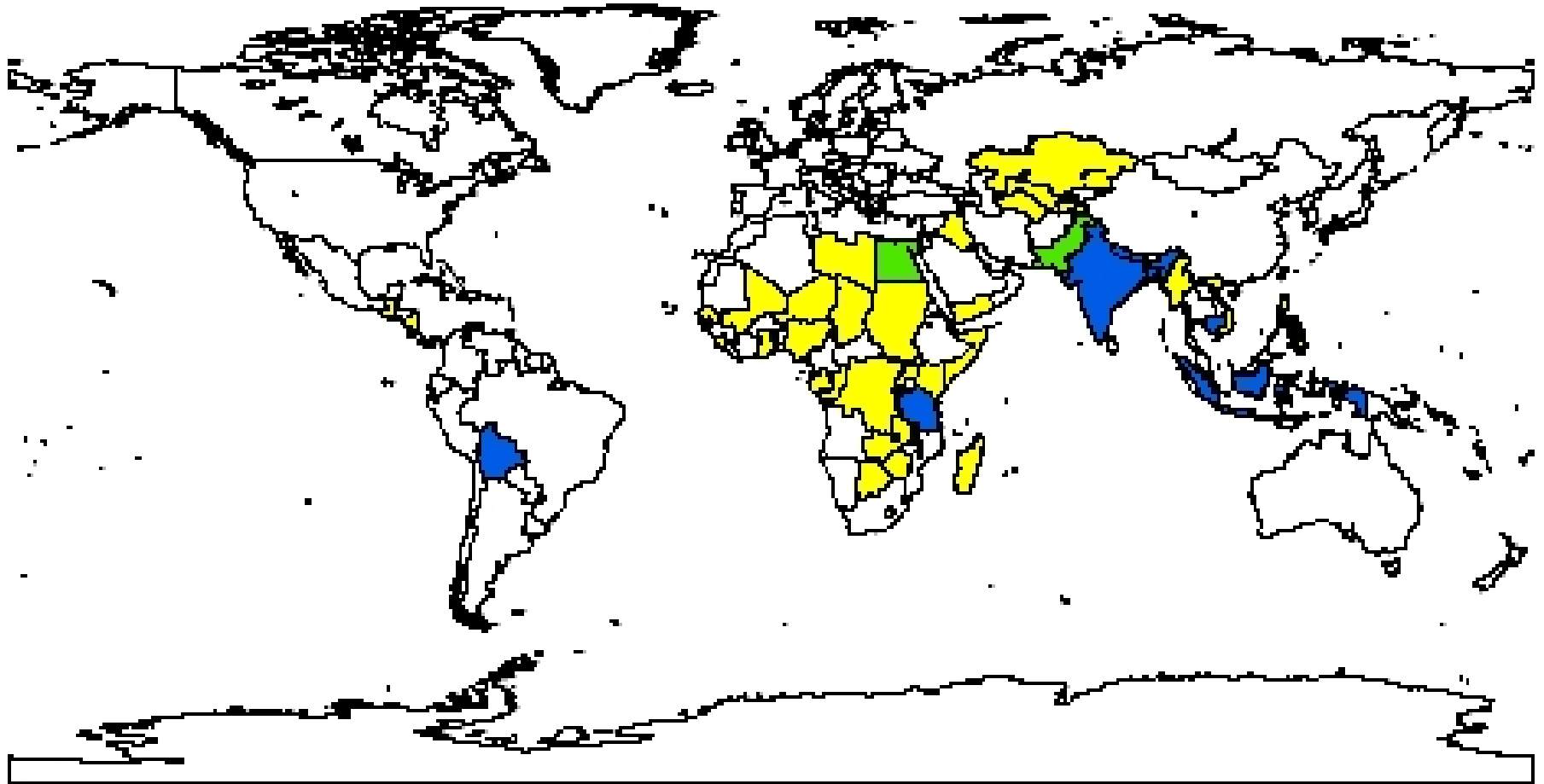


## Challenges for Countries: Training

- WHO has revised treatment guidelines and training materials
  - Are local adaptations needed?
- Countries must consider the national training needs and corresponding costs:
  - Who needs to be trained and when should training be done?
    - Public sector
    - Private sector
    - Informal sector



# Zinc for Diarrhea Available Regionally or Nationally Global Progress To Date



Public Sector

Private Sector

Both

## Challenges for Countries: Increasing Coverage

- Major challenge to increase coverage in both the public sector and the private sector
- With ORS rates terribly low in most countries, successful strategies are NOT in place in most countries
- Formative assessment may be needed to identify current care seeking and treatment behaviors
  - **India:** Formative assessment found 95% sought care for diarrhea from private doctors
  - **Mali:** Pilot phase found 73% sought treatment from drug kits and 17% from health centers



## Challenges for Countries: Increasing Coverage

- Building on knowledge and experience from ORS campaigns in the 1980s
  - Carefully crafted campaigns
  - Global commitment of funds
  - Took political center stage – movie stars, celebrities, politicians
- Why should implementing zinc be any different?



# Challenges for Countries: Alternative Delivery Strategies

- Need to think creatively
- Research is not over when efficacy studies and effectiveness studies end
- Though zinc for diarrhea research money is essentially finished, no one knows the answer to the most critical question:

**HOW DO YOU INTRODUCE A SUSTAINABLE NATIONAL PROGRAM THAT TRULY CHANGES TREATMENT PRACTICES?**





## Conclusion: 2008 Innocenti Consensus

Given clear WHO policy and guidelines, zinc is underutilized for treating diarrhea.

Despite advances a quality product is needed that meets GMP standards for pharmaceuticals.

Programs implemented at scale in diverse settings with strong monitoring and evaluation components to document performance and effectiveness are needed.

The MN community must advocate and mobilize funds for such programs.

