

# The WASH and Nutrition Nexus Current Operational Approaches, Lessons Learned and Practical Considerations for Future Programming

WSP BBL April 1, 2014, Washington, DC Francis M. Ngure







- The bottom line
- The background
- Evidence on WASH and nutrition
- Three examples of approaches to integration
- Key questions from the field examples
- Practical recommendations for future programming
- Next steps

# **Bottom line**

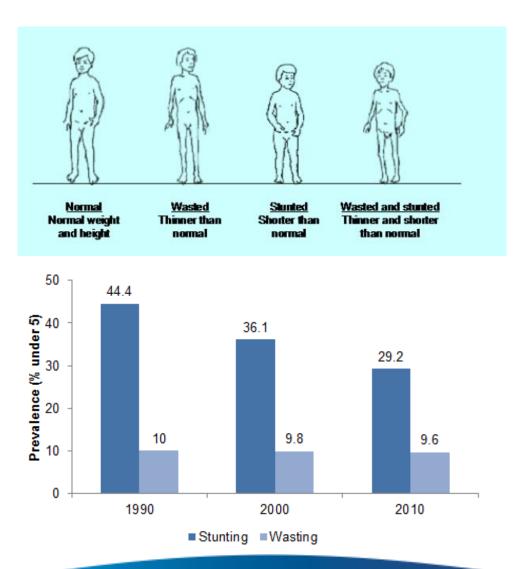


- There is enough evidence to support integration of WASH and nutrition programming
- There are opportunities for integration on behavior change, targeting and combining WASH sensitive with nutrition specific interventions
- Targeting poor, as opposed to universal coverage, can accelerate reductions in child undernutrition
- Leveraging existing resources and delivery channels has potential to increase scale, coverage and efficient use of resources

# The burden of undernutrition

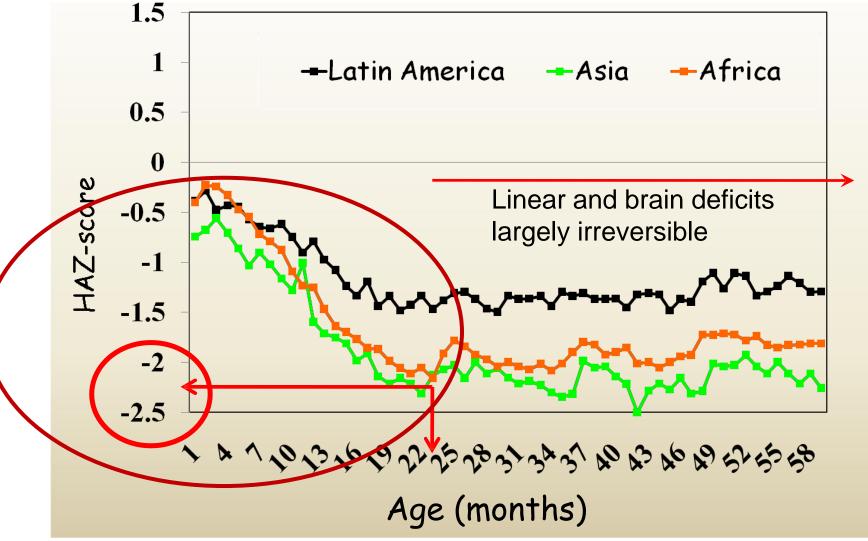


- Undernutrition manifests as stunting (low height-forage), underweight (low weight-for-age), and wasting (low weight-forheight)
- Undernutrition causes 45% of all child deaths<sup>1</sup> and is responsible for 21% of global disease burden for children younger than 5 years<sup>2</sup>
- Globally, stunting has decreased since 1990; wasting has stayed the same<sup>3</sup>



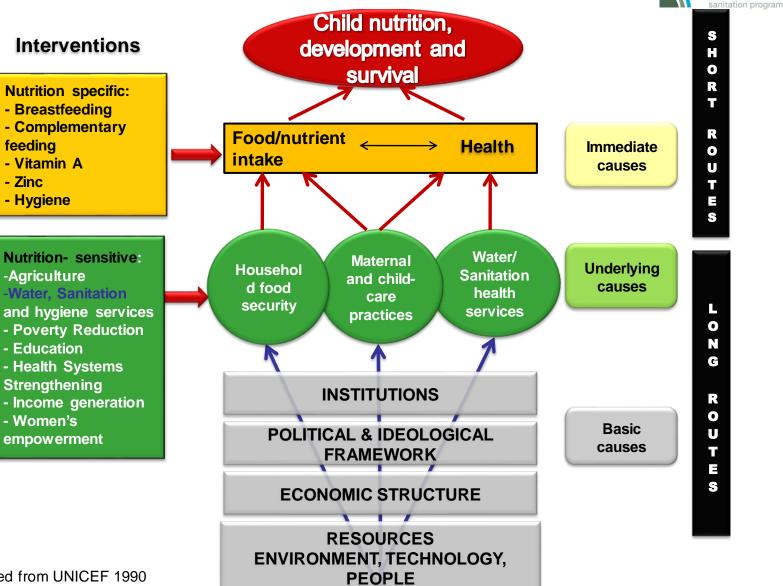
# Irreversible damage beyond 2 years





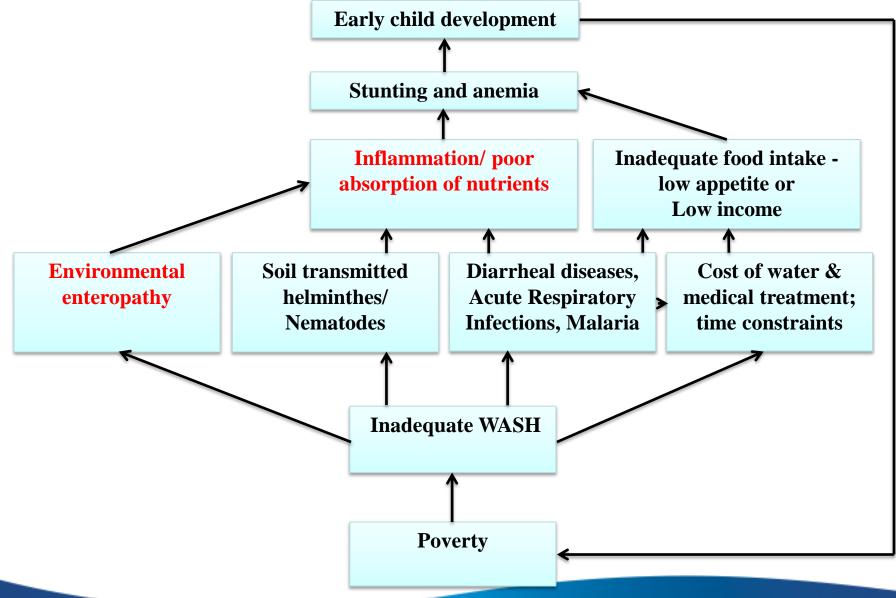
Source: Victora CG, et al 2010

# **Current Interventions**



# **Pathways linking WASH and Nutrition**





# **Current Evidence on WASH and Nutrition**



Direct and indirect links	Quality of evidence	Strength of evidence
OD and stunting	Econometric analysis/ DHS	Strong
WASH and stunting	Most from observation studies	Suggestive
Water, hygiene and stunting	Experimental	Suggestive. Modest effect
WASH and underweight	Evidence from observation studies	Suggestive
Undernutrition through diarrhea	Substantial evidence but inconclusive on stunting	Suggestive on wasting. Relative contribution to stunting unresolved
Undernutrition through environmental enteropathy	Substantial evidence based on biological mechanisms	Strong on stunting. Suggestive on underweight

Lack of experimental evidence on impact of improved sanitation and water supply on HAZ



# Is there enough evidence to justify integration of WASH and nutrition programming?



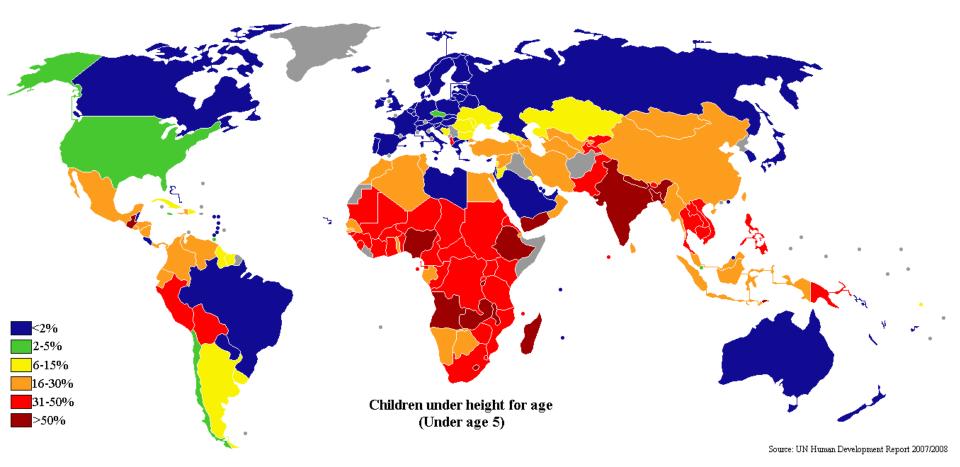
# Three approaches to integration

- Targeting nutritionally vulnerable group
- WASH and nutrition behavior change
- WASH and nutrition-sensitive interventions

**Approaches to Integration (1): Targeting Nutritionally Vulnerable** 

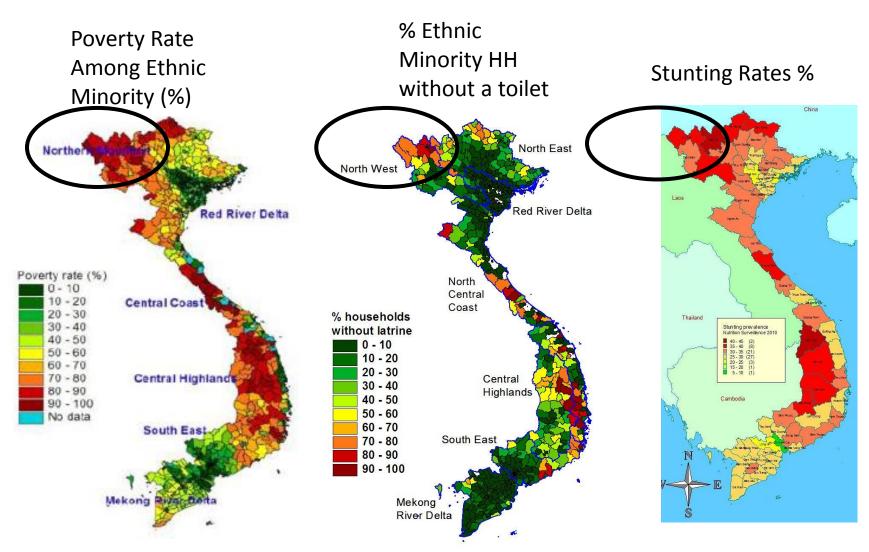


**Global Prevalence of Stunting** 



# Targeting Nutritionally Vulnerable Zones

sanitation program



# **Example:** Targeting Nutritionally Vulnerable



#### SHOURHADO Project – Bangladesh



# **Example:**

**Targeting Nutritionally Vulnerable** 



SHOURHADO Project – Bangladesh

# <u>Outcomes</u>

- ✓ Diet diversity score increased by 26 %
- ✓ Improved Vit A coverage
- $\checkmark$  Access to safe water increased from 57 to 72%
- $\checkmark$  Access to safe sanitation from 14 to 55%
- ✓ Stunting decreased from 56 to 40 % over 3 years among 6-24 months

Targeting by age and poverty, as opposed to universal coverage, can accelerate reductions in child undernutrition

# Approaches to Integration (2): WASH and Nutrition Behavior Change





# **Example:**

WASH and Nutrition Behavior Change



Health Extension Program – Ethiopia

# Health & Nutrition

- ✓ Maternal and child health
- ✓ Family planning,
- Immunization
- ✓ Adolescent health
- ✓ Disease prevention and control (HIV, TB, malaria, first aid)
- ✓ Nutrition

# <u>WASH</u>

- ✓ CLTHS
- ✓ Water safety
- ✓ Food hygiene
- ✓ Personal hygiene
- ✓ Excreta disposal systems
- ✓ Solid and liquid waste management

### Raises complexity in messaging

# **Approaches to Integration (3):** WASH + Nutrition-sensitive interventions





Cash transfers with conditionalities on behavior change on health

# **Example:**

WASH + Nutrition-sensitive interventions



# Health and Nutrition

Target audience: Pregnant women and households with children under 14

Health conditionalities:

- ✓ Immunization
- Weight monitoring & nutritional counseling
- ✓ Deworming (age 6 14)
- ✓ Pre and post-natal care
- ✓ Family development sessions (FDS)

# <u>WASH</u>

Target audience: 4Ps beneficiaries + community

- CLTS + sanitation supply chain (community)
- ✓ Access to financial products & latrine product demonstration as part of FDS (4Ps)
- ✓ Behavior change messages on sanitation as part of FDS (4Ps)

# **Challenges to integration**



- WASH interventions aim for community wide coverage (e.g. sewerage, CLTS), while nutrition interventions are targeted
- Lack of data on nutrition, poverty and WASH access to guide targeting decisions
- Multiple messages increases complexity for implementing agency and for target audience
- Adequate infrastructure is required for successful WASH interventions complicating **coordinated approach**
- Proper **timing and sequencing** of infrastructure inputs is essential for maximum exposure time to intervention

# **Key questions from field examples**



- How can optimal **targeting** be done to accelerate reductions in child undernutrition?
- How can behavior change messages be **designed** to not overburden front-line staff and target audience?
- How can existing resources and delivery channels be effectively leveraged for integration?
- What are the appropriate process indicators and outcome measures for integrated approaches?
- How can better co-ordination be done to achieve shared objectives?

# Practical Recommendations- Design and Implementation



- Strengthen enabling environment for **integration** at various administrative levels and with donors
- Utilize evidence base for advocacy and increase understanding of nutrition in WASH and other sectors
- Joint training in both sectors to break down sector silos through training and capacity building
- Nutrition to influence WASH targeting, and WASH to work with a nutrition lens
- Think multi-sectorally but act sectorally

# **Practical Recommendations - Evaluation**



- Develop an effective monitoring and evaluation framework to facilitate process and impact evaluation
- Include nutrition sensitive indicators in WASH projects (e.g. child height, weight, anemia)
- More work is needed to identify context specific WASH indicators that predict nutrition outcomes
  - Development of predictive biomarkers for EE is underway
  - Develop operational measures of environmental hygiene

## **Next steps**



- Further consultations to document potential models for integration
- Develop and refine practical recommendations for design, implementation and evaluation further
- Identify potential operational research questions to address evidence gap
- Develop a theory of change for how crosssectoral approaches in WASH and nutrition can reduce undernutrition

# **Bottom line**



- There is enough evidence to support integration of WASH and nutrition programming
- There are opportunities for integration on behavior change, targeting and monitoring and evaluation
- Targeting poor, as opposed to universal coverage, can accelerate reductions in child undernutrition
- Leveraging existing resources and delivery channels has potential to increase scale, coverage and efficient use of resources

# **Thank You**

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