

# WASH away those worms and other NTDs



Marci van Dyke, USAID Renuka Bery, FHI 360

> Mini University 7 March 2014







### Who and Where....

- Who is in the audience?
- Where in your environment.....exercise









### Where in your environment.....





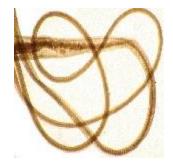




## What are NTDs?

- Soil transmitted helminths (Worms)
  - Round worm
  - Whip worm
  - Hook worm
- Schistosomiasis
- Trachoma
- Lymphatic filariasis (elephantiasis)
- Onchocerciasis (river blindness)











## How to address NTDs?

- 1. Preventive chemotherapy
- 2. Innovative and intensified disease management
- 3. Vector control and pesticide management
- 4. Safe drinking water, basic sanitation and hygiene services and education
- 5. Veterinary public health services







### **Elimination or Control**

 Trachoma is targeted for elimination by 2020

 Schistosomiasis and STH are targeted for control









- Seeking opportunities to reduce prevalence of 3 neglected tropical diseases (NTDs) – soil-transmitted helminths, schistosomiasis, trachoma – beyond mass drug administration
- Exploring potential for integrated activities including WASH for long-term control of disease
- Test integrated approaches and develop recommendations
- Contribute to global conversation on WASH/NTDs







Lympatic Filariasis	Onchocerciasis	Schistosomiasis	Soil- transmitted <u>Helminth</u>	Trachoma
				Hygiene Hands Flies
Mosquitoes	Black flies	Snails	Direct fecal contamination	
120 Million <i>Infected</i> 1.2 Billion <i>at risk</i>	37 Million <i>Infected</i> 0.4 Billion at risk	200 Million <i>Infected</i> 0.7 Billion <i>at risk</i>	800 Million <i>Infected</i> 1.2 Billion <i>at risk</i>	84 Million <i>Infected</i> 1.2 Billion <i>at risk</i>





### STH - Worms

### MDA is first line of defense



### To prevent reinfection

- Effective Sanitation
- Sewage disposal and treatment
- Shoes (to prevent for hook worm)





### Schistosomiasis

#### Mass drug administration

## To break the cycle/prevent reinfection

- Improved sanitation
- Save drinking water
- Snail control
- No peeing in rivers/lakes









### Trachoma

### SAFE Strategy

- Surgery for people with trachoma troustrichaisis
- Antibiotics to reduce chlamydial infection
- Facial cleanliness to reduce transmission risk
- Environmental improvements
  - Sanitation, hygiene behaviors, face washing









- Phase 1: Desk review: Global review and review of the WASH and NTD landscapes of 8 countries
- Phase 2: In-depth assessment in 2 countries to identify possible integrated activities with a focus on WASH
- Phase 3: Integrated activity in 1-2 countries







### **Desk Review**

- Global scan of WASH and NTDs
- Reviewed 8 countries
  - USAID countries of interest
  - Mix of need and existing activities
  - Countries with varying political will







- Good understanding of WASH related to NTDs of interest
- Contributes to the global conversation of WASH inputs to reducing NTD prevalence
- Highlights
  - Countries with good policy context
  - Countries with engaged WASH presence
  - WASH-integration activities in countries

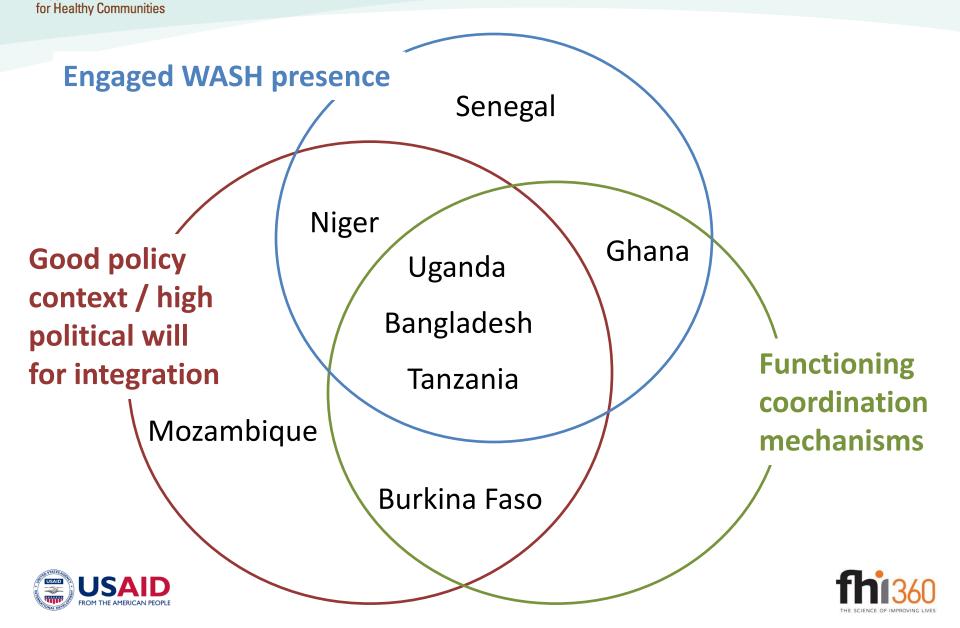




### **Desk Review Results**

**Wash**plus

**Supportive Environments** 





### **Purpose of Country Assessments**

- Evaluate existing landscape of WASH activities, NTD control activities, and integrated WASH/NTD control efforts in a country
- Identify possible opportunities and partnerships
- Recommend feasible actions with current funding
- Apply lessons learned to refine global understanding about effective integrated programming for WASH/NTDs







- High population density; environmental conditions challenging for sanitation
- Soil-transmitted helminth (STH) infection countrywide – ≥15% of all school-aged children infected (2013 study, MOHFW)
- Mass treatment 2x year; high reinfection rates
- One-third of children stunted, 48% moderately underweight (WHO Bangladesh)



Photo of *ascaris* (roundworm): CDC





## Bangladesh Assessment

### Process

- Multidisciplinary team
- Stakeholder interviews
- Field visits
- Opportunities identified
  - Used Gates meeting framework
  - WASH-nutrition nexus
  - WASH in schools links







- Significant progress over past 25 years
- Strong LF/STH program with 2x/annual deworming
- High political will for WASH within GOB
- Stakeholders see WASH as critical component for continued development
- High knowledge of WASH practices at community level particularly HW and fixed point defecation
- Integrated WASH-nutrition programming exists







- Knowledge vs. Practice
- Insufficient infrastructure especially in schools
- Implementation of national hygiene strategy
- Diffusion of programs
- Coherence in learning approaches/messaging
- Evidence base of WASH impact on STH







## Recommendations for Bangladesh

1. Create and facilitate a national Hygiene Stakeholder Group

2. Develop a teachertraining strategy / innovation workshop on WASH to *emphasize behavior change* rather than knowledge creation.







## **Small Group Discussions**

Gather with the people near you (3-5 people)

- Identify what you are doing currently in WASH or NTDs
- Discuss what you could do to integrate WASH and NTDs
- What might help facilitate this integration?
- What might the barriers to integration be?

You have 15 minutes.









- Marci van Dyke <u>mvandyke@usaid.gov</u>
- Renuka Bery <u>rbery@fhi360.org</u>



