

MULTI-SECTORAL NUTRITION

Global Learning and Evidence Exchange

Washington, DC



Water, Sanitation, and Hygiene (WASH) Interventions for Improved Nutrition

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Test your WASH Knowledge

1. In the Lancet Series of 2013, what percent of stunting could be averted in high-burden countries by scaling 10 nutrition-specific interventions to 90% coverage?

a) 20%

b) 45%

c) 70%

Bonus Question:

What was voted the greatest medical milestone of the last century and a half?

Source: Bhutta, ZA, Das, KJ, et al. (2013). Evidence-based interventions for improvement of maternal and child nutrition. The Lancet Series 382(9890): 452-477.

Source: A. Ferriman (2007). BMJ readers choose the “sanitary revolution” as greatest medical advance since 1940. BMJ. 2007 Jan 20; 334(7585): 111.

Test your WASH Knowledge

2. How many people in the world practice open defecation?

a) 2.5 million

b) 467 million

c) 946 million

Good news!

Ethiopia achieved the largest decrease in the proportion of the population practicing OD – reduced from 92% (44 million people) in 1990 to 29% (28 million people) in 2015 – an average reduction of over 4% per year over 25 years.

Source: WHO/UNICEF Joint Monitoring Programme 2015

http://www.who.int/water_sanitation_health/monitoring/jmp-2015-update/en/

Objectives of our Session



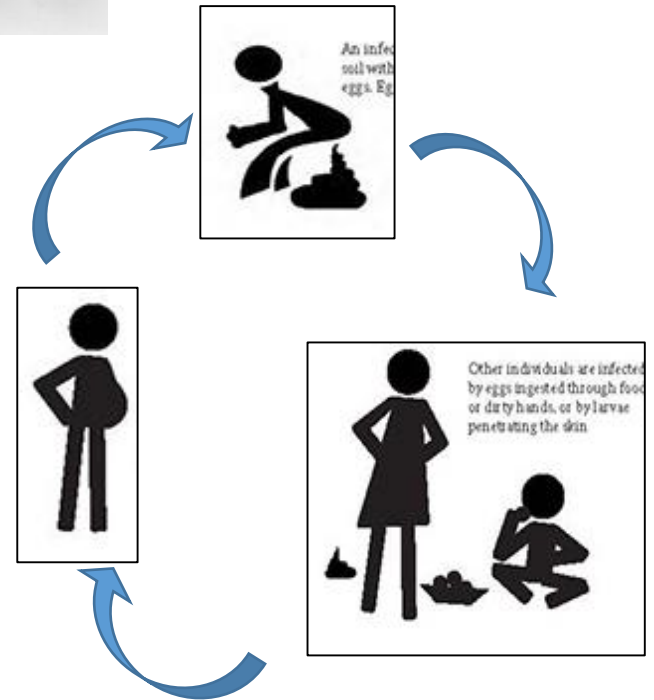
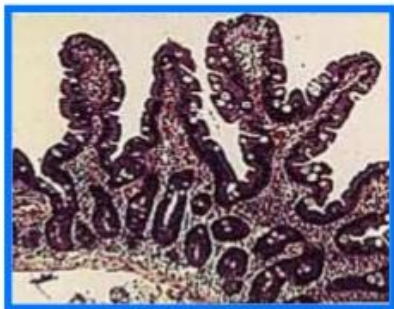
USAID
FROM THE AMERICAN PEOPLE

- 1. The 'Why' of WASH**
- 2. The 'How' of WASH**
- 3. The 'How' of WASH-Nut Integration**

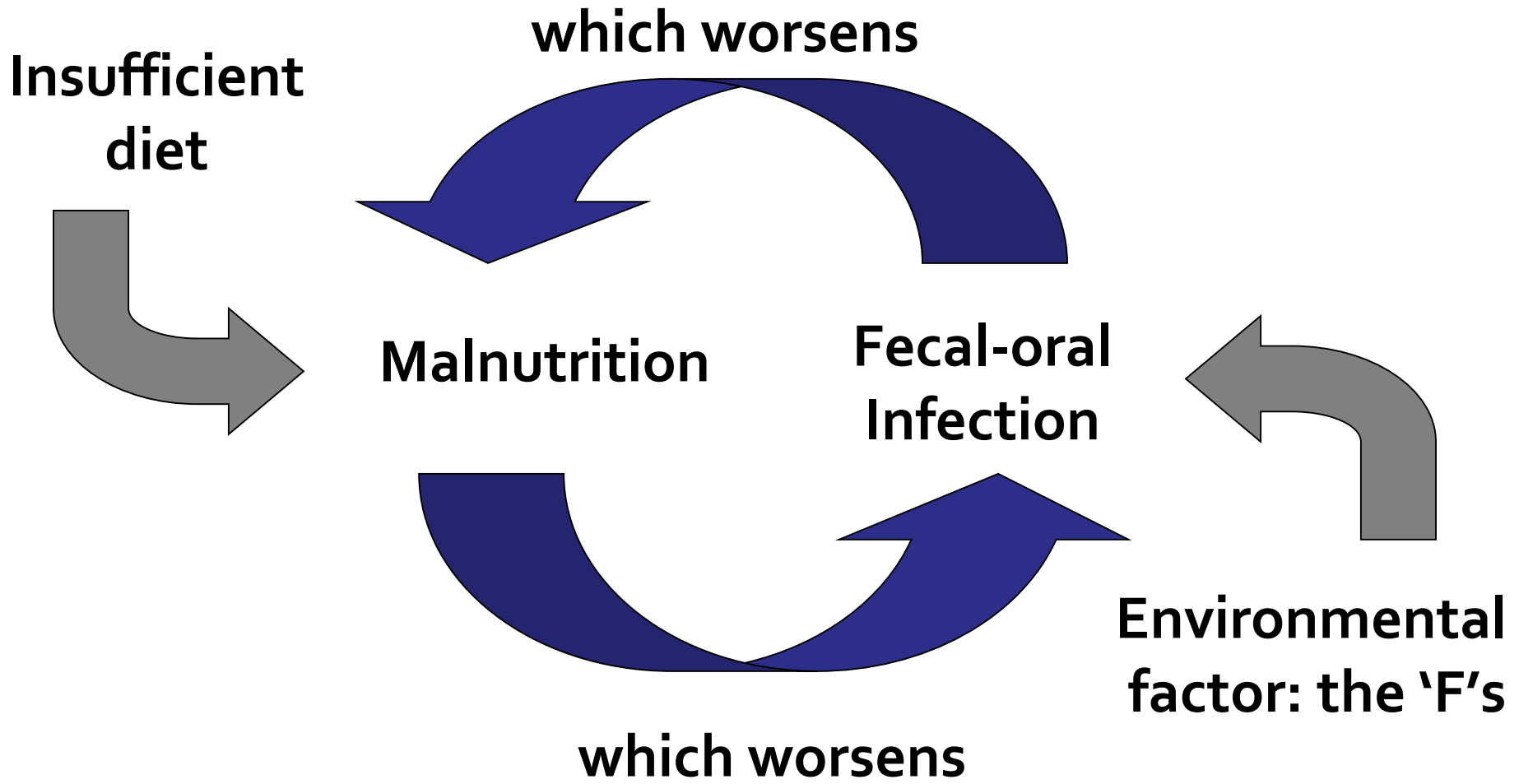


Part 1:

The 'Why' of WASH



WASH-Nutrition Pathways



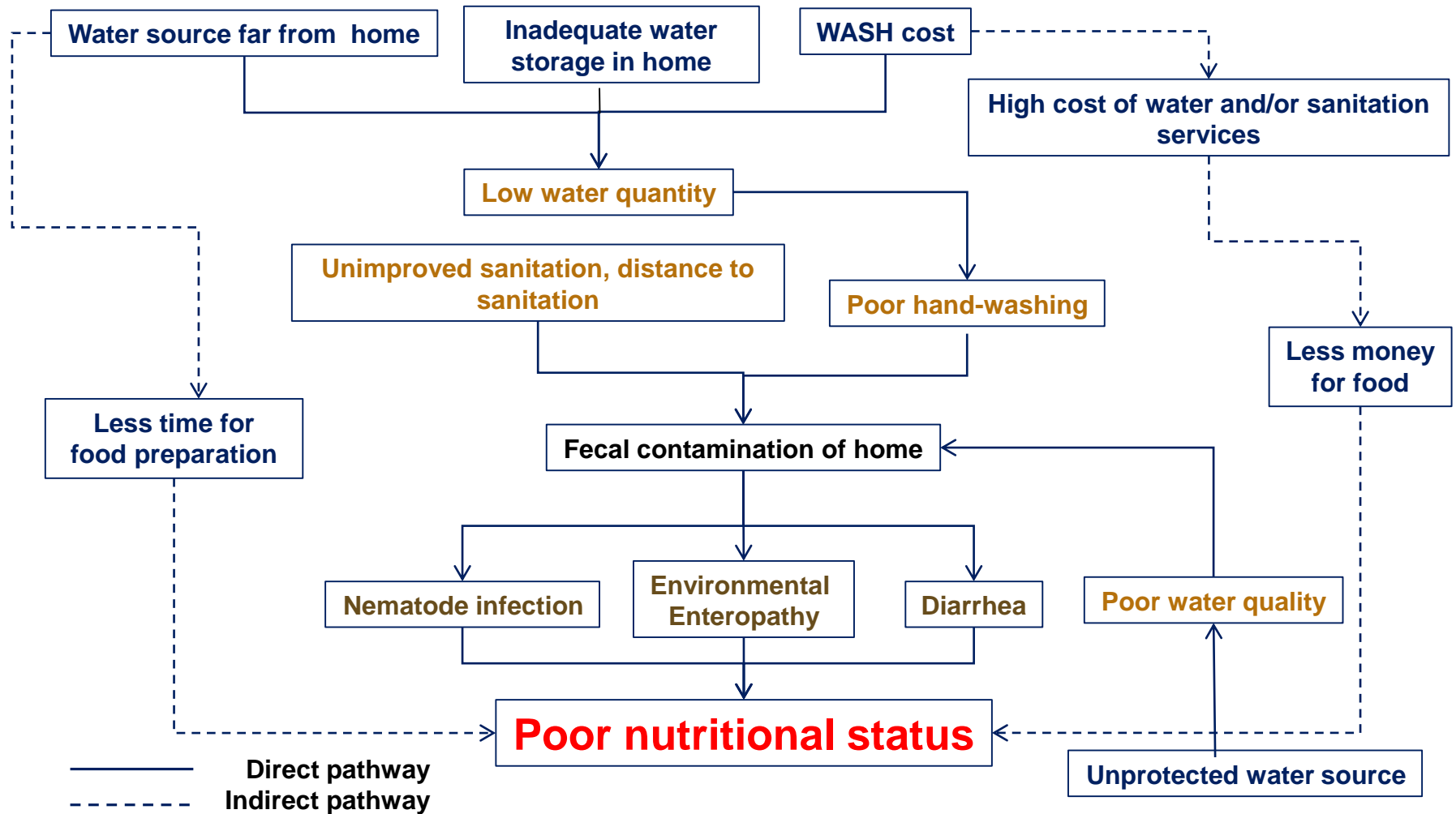
WASH-Nutrition Pathways

1. **Cycling of diarrhea and malnutrition**
2. **Parasitic infections (e.g. soil transmitted helminths, STH)**
3. **Gut malfunction & poor absorption of nutrition (i.e. 'environmental enteropathy')**

And they're not independent of one another...

Q: Can anyone think of any indirect pathways between WASH & Nutrition?

WASH-Nutrition Pathways



Source: O. Cumming, London School of Tropical Medicine and Hygiene, 2013

WASH-Nutrition Evidence

Linkage (Direct/Indirect)	Quality of Evidence	Strength of Evidence
OD ↔ Stunting	Econometric analysis/ DHS	Strong
WASH		
Water, hygiene		ect
WASH ←		
Diarrhea ←		g; g?
Environment		
Undernutrition	biological mechanism	suggestive on underweight

“There is sufficient evidence (from a variety of studies) of a link between WASH programming and nutritional outcomes – particularly for stunting – *to promote WASH as nutrition-sensitive interventions.*”

Source: Latagne, 2014; Kotloff et al., 2013

WASH-Nutrition Evidence

Linkage (Direct/Indirect)	Quality of Evidence	Strength of Evidence
OD ↔ Stunting	Econometric analysis/ DHS	Strong
WASH ↔ Stunting	Mostly observational studies	Suggestive
Water, hygiene ↔ Stunting	Experimental	Suggestive- modest effect
WASH ↔ Underweight	Observational studies- evidence	Suggestive
Diarrhea ↔ Undernutrition	Substantial evidence; inconclusive on stunting	Suggestive on wasting; contribution to stunting?
Environmental Enteropathy ↔ Undernutrition	Substantial evidence- biological mechanism	Strong on stunting; suggestive on underweight

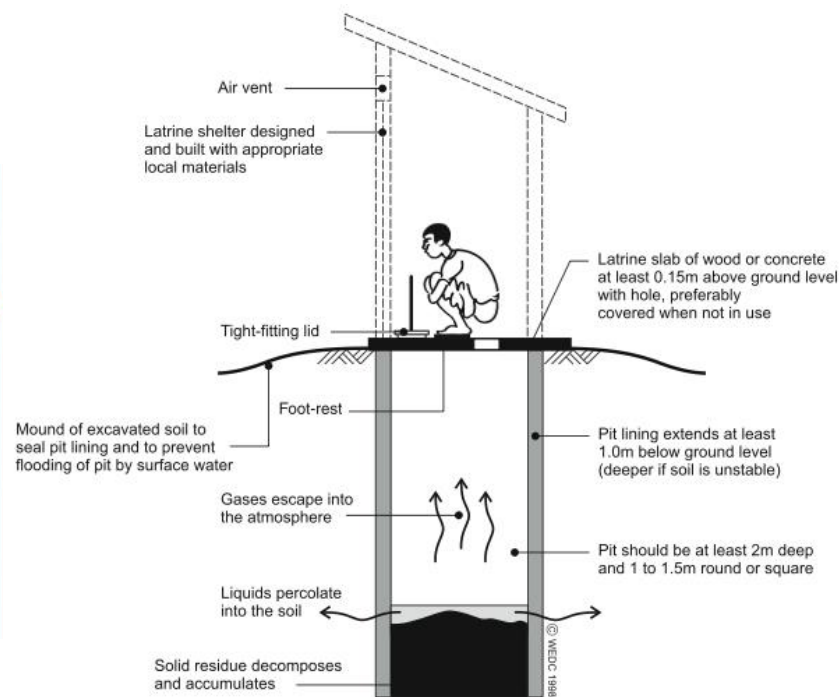
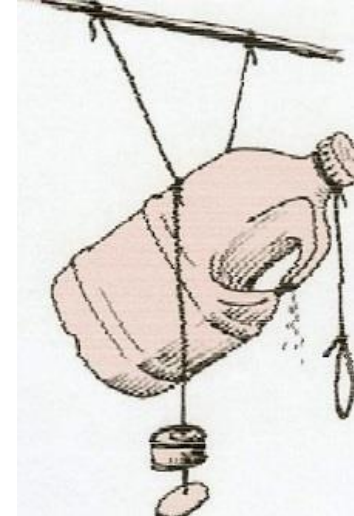
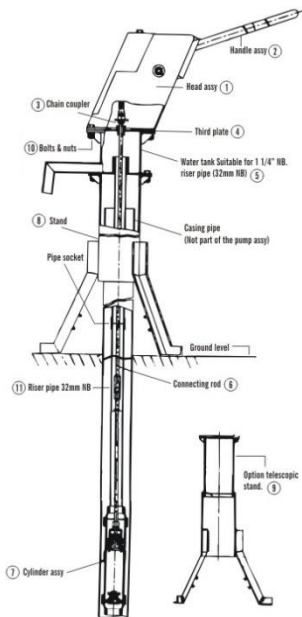
Source: Latagne, 2014; Kotloff et al., 2013

Exercise: Why WASH?

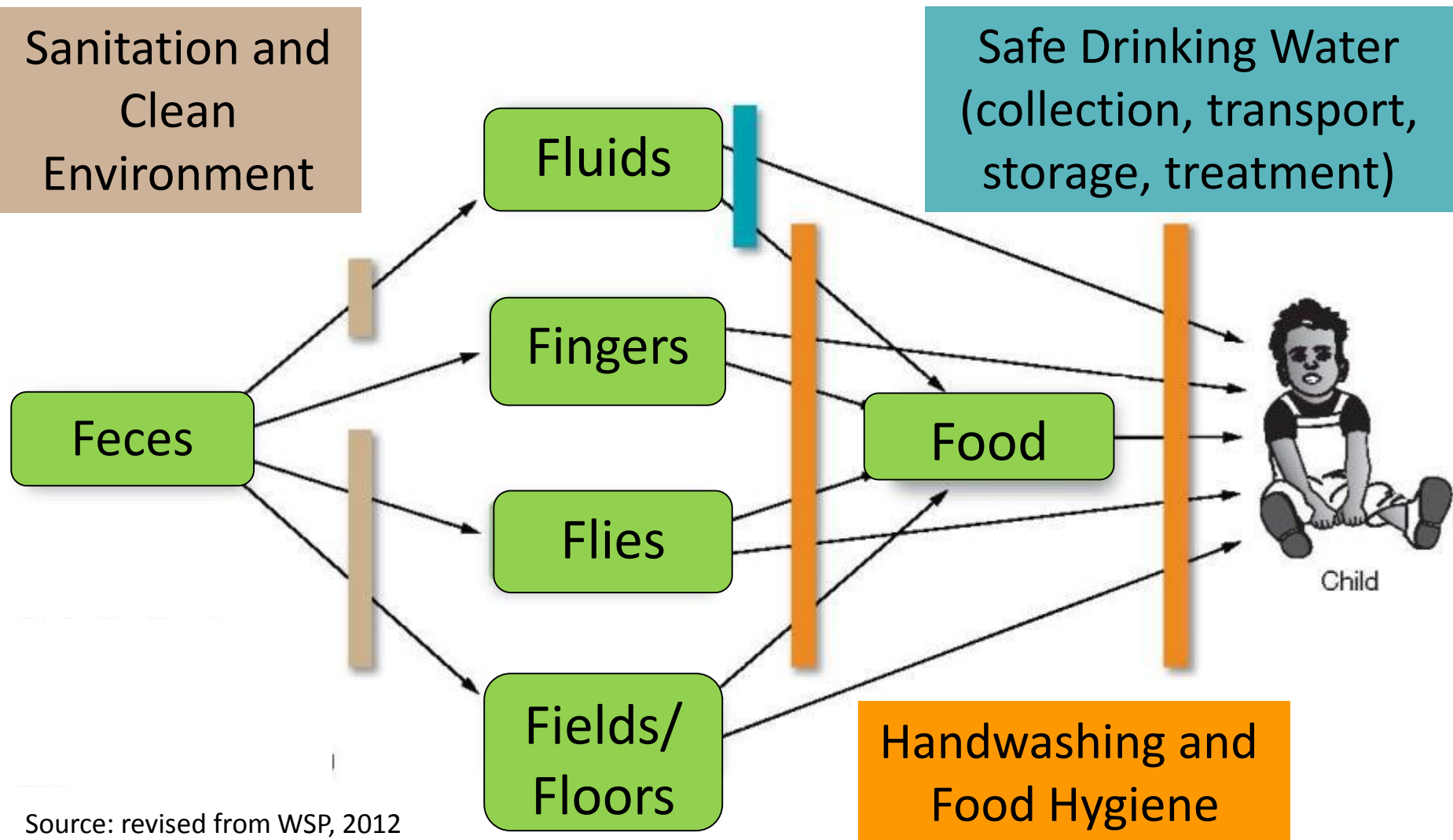
Group Exercise

1. Groups of 3-5 people
2. You have 5 minutes to develop a convincing argument to pitch to a stakeholder (e.g. mission director; AOR; Nutrition Program lead) on **why you should integrate WASH into a nutrition program**
3. Each group will have 3 minutes (timed!) to pitch your argument. Props are welcome!

Part 2: The 'How' of WASH



Routes For Pathogen Exposure



Source: revised from WSP, 2012

High Impact WASH Interventions



Safe Feces Disposal



Handwashing With Soap



Drinking Water Supply



Drinking Water Treatment & Safe Storage



Food hygiene



30%

Each of these can reduce diarrhea by at least 30% in children under five living in unhygienic conditions

Actual reduction depends on correct, consistent and sustained adoption of the behavior



WASH Sustainability: Rural Water

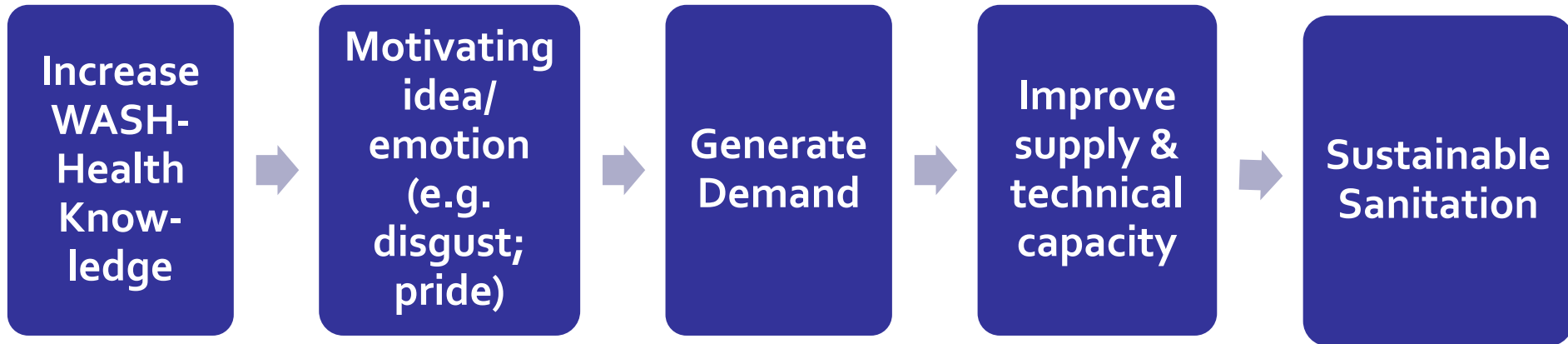


Lack of community organization, commitment and capacity to adequately design and site system, maintain technology, and protect water source

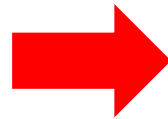
Rural Water Borehole with Manual Pump

WASH Sustainability: Sanitation

Giving away latrines does not work



Demand-driven sanitation should facilitate options & improvements.



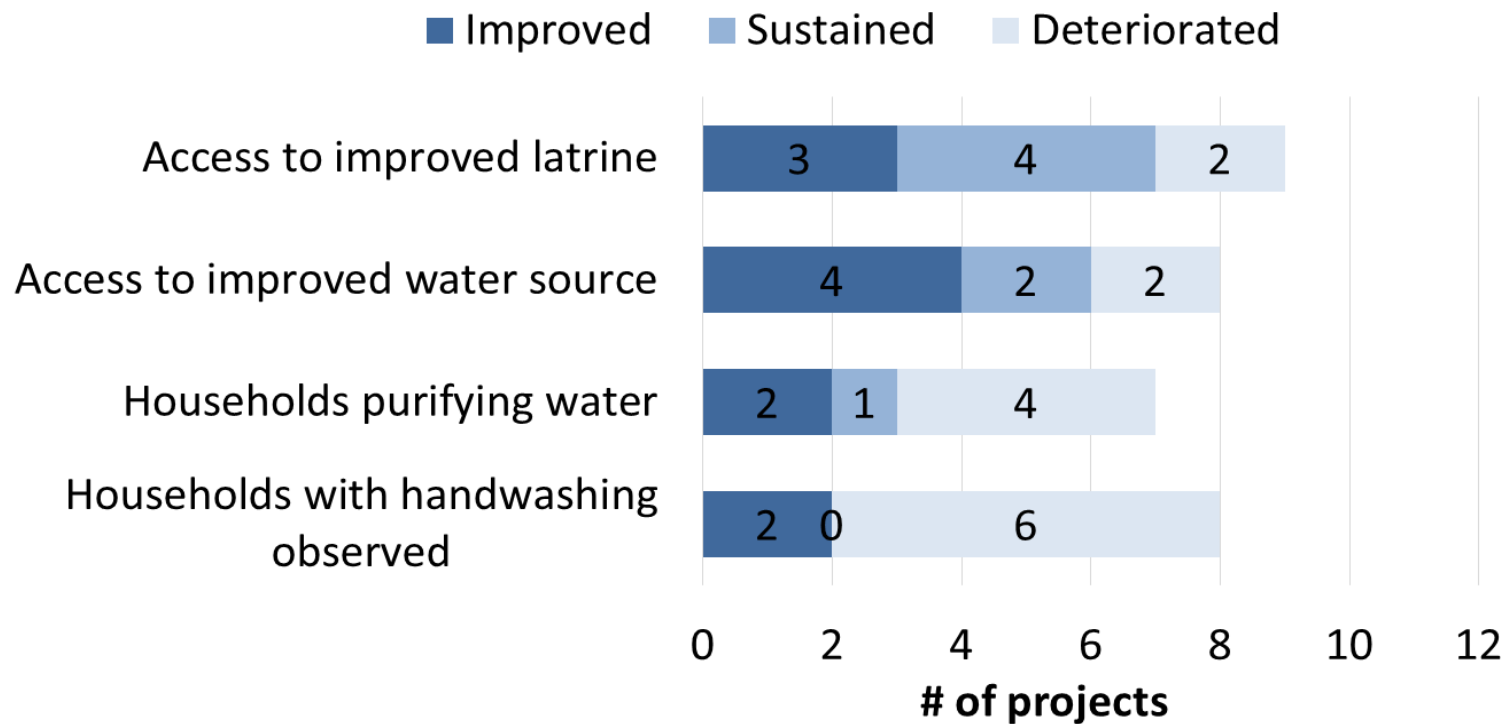
WASH Sustainability



Sustainable WASH is achieved when country partners and communities take **ownership of the service** and there are **local systems to deliver inputs** needed to maintain results and deliver impacts **beyond the life of project funding.**

WASH Sustainability

Ex-post evaluation of FFP WASH Interventions (3-5 year ex-post)



Governance and institutional



Social and Behavior change



Financial



Technical



Environmental



Example: Safe disposal of feces

Technical	Governance/ Institutional	Social/ Behavioral	Financial	Environment
<p>Appropriate latrine options</p> <p>Supply chains</p> <p>Trained technicians for installation/repair</p>	<p>National sanitation policies</p> <p>Financing structures</p> <p>Community governance</p> <p>Health Agents</p>	<p>Attitude changes – CLTS, messaging aspiration</p> <p>Contest for “healthy families”</p> <p>Habit formation</p> <p>Engage women AND men</p>	<p>Social marketing</p> <p>Voucher system</p> <p>Micro-finance</p> <p>Public private partnerships with manufacturers</p>	<p>Water sources (quantity and quality)</p> <p>Contamination</p>

Exercise: Sustainable WASH

1. Table groups
2. Each group will look at a “death spiral” of a water or sanitation service
3. Identify an intervention for each step along the spiral that could halt or reverse the negative spiral of poor services (7 minutes)
4. Extra credit if you identify an intervention that would help resolve multiple steps of the spiral!

Exercise: Sustainable Rural Water Supply

2

A donor offers to provide water and its consultants select the site. A borehole is dug and a pump installed.

4

A neighboring community hears about the water and women come early in the morning to get water. This creates conflict.

6

Money is slowly raised, but people question whether all families have to pay the same amount.

8

No one else is sure what part to get or how to fix the pump.

9

Women and girls have started to use the stream again.

The community has very limited access to water. They use a stream that is 5 Km away

1

3

The consultant conducts a community meeting, trains a community member he selects and leaves a manual.

5

Something goes wrong with the pump. The trained community member thinks a part is needed. No one has money for the part.

7

Meanwhile the trained community member has left for another town.

The Donor brings the Ambassador on a site visit. The donor pledges to bring the same team back to fix the pump.

In Summary...

WASH Infrastructure ≠ Access to service

Access to service ≠ Sustained service

**Sustained service ≠ Anticipated health, economic
and other benefits from
investments**

Part 3: The 'How' of Integration?



Some other ways:

Joint design?

Joint budgeting?

Interdisciplinary teams?

Consolidate reporting?



From the new *WHO-USAID 'Practical Solutions'* publication:
www.who.int/water_sanitation_health/publications/washandnutrition/en/

A whole spectrum of implementation modes

Cooperation

Collocation

Coordination

Collaboration

Convergence

Source: USAID/Uganda CDCS

Guiding Questions:

- What are the big gaps and sustainability challenges in the country for WASH and Nutrition?
- What are the Mission's objectives for WASH and Nutrition?
- What are the potential points of overlap between the desired WASH and Nutrition objectives?
- What are the governance structures (institutional frameworks) for WASH and Nutrition in the country?
- What are the WASH and Nutrition capacities of the potential implementing partners in the country?
- What are the current flavors of funds available to the mission for WASH and Nutrition programming?

Potential Integration Points



Integration Example

Nutrition

- 🥕 Exclusive breastfeeding for the first 6 months
- 🥕 Continued breastfeeding with complimentary feeding
- 🥕 Dietary diversity
- 🥕 Use of family food

WASH

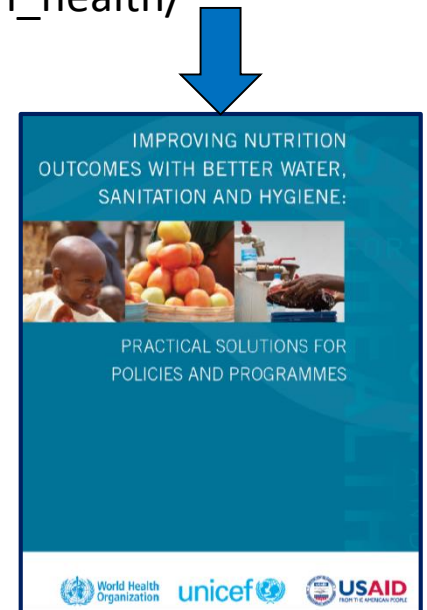
- 🧼 Handwashing
- 🧼 Food hygiene
- 🧼 Household water treatment
- 🧼 Build and use hygienic latrines, including for disposal of child feces

- Training health care workers and community members
- Social mobilization/mass media
- Work with private sector to ensure product availability
- Demonstrations – cooking & handwashing

Resources

Online resources

- www.usaid.gov/what-we-do/water-and-sanitation
- www.washplus.org/wash-nutrition
- www.who.int/pmnch/knowledge/publications/summaries/ks30/en
- **NEW document!!!!** http://www.who.int/water_sanitation_health/publications/washandnutrition/en/
- USAID Water Update (internal)
- Global Waters (external)
- USAID Webinars & training
- WASH Advisors at USAID/W
& Missions





Questions?

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