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The Human Dimension of Programs in Water, Sanitation and Hygiene

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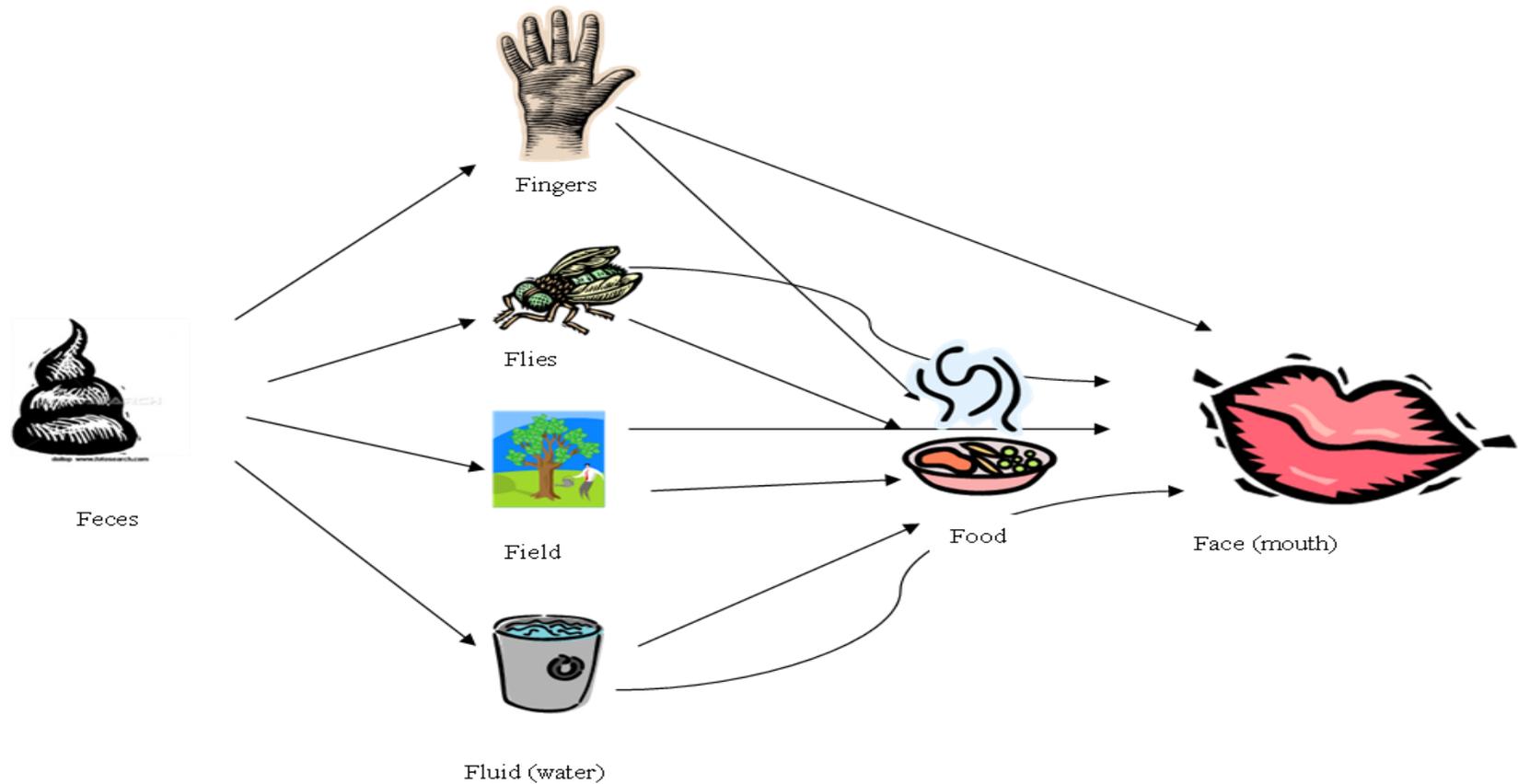
Mayo 2013

PRESENTATION OUTLINE

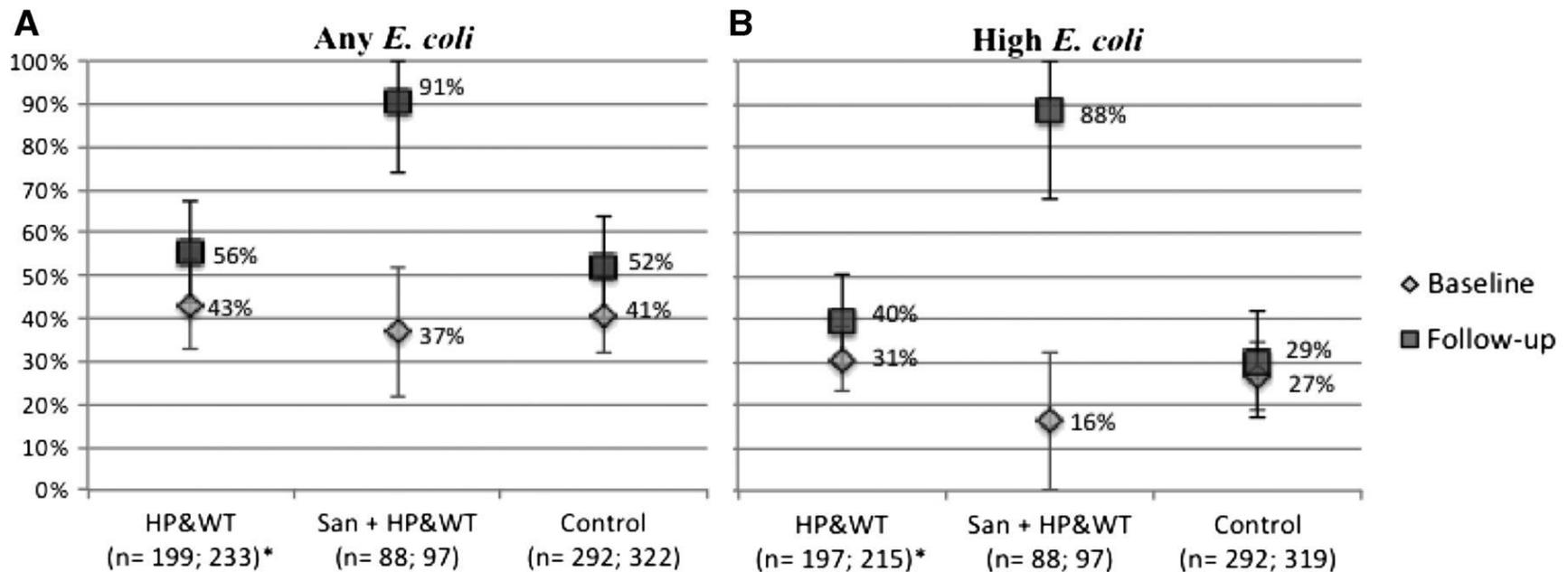
- Conceptual and empirical importance of the human dimension
- The integration of supply and demand concerns as the basis for any WASH behavior change strategy
- Effectiveness of interventions to promote WASH in homes and institutional settings



F Diagram for transmission of bacteria causing diarrhea from one host to another



Fecal Contamination of Hands, WASH in Schools Program, Kenya



Greene, L., M. Freeman, D. Akoko, S. Saboori, C. Moe, and R. Rheingans. 2012. Impact of a school-based hygiene promotion and sanitation intervention on pupil hand contamination in western Kenya: a cluster randomized trial. *American Journal of Tropical Medicine and Hygiene*. Sep;87(3):385-93.

HP=Handwashing Promotion
San = Sanitation
WT = Water Treatment

Role of WASH in Diarrheal Disease Prevention, Recent Meta-analysis

WASH Component	Studies Reviewed (random or quasi-random control trials)	Self-reported diarrheal disease in different age groups
Water quality improved (treatment at source or at point of use)	38 studies	15-61% separate studies 17% pooled effect
Sanitation (any measure to hygienically dispose of human feces)	8 studies Bangladesh, China, Ivory Coast, Kenya, Nigeria, USA	8-63% separate studies 36% pooled effect
Handwashing with soap	17 studies Australia, Burundi, China, Peru, Malawi	42-48% separate studies 43% pooled effect

Cairncross S., C. Hunt, S. Boisson, K. Boesten, V. Curtis, I. Fung y, and W. Schmidt. 2010. Water, sanitation and hygiene for diarrhea prevention. *International Journal of Epidemiology*, 39: i193-i205.

Areas of Significant Statistical Differences Between Latrine Owners and Open Defecators , in Amhara, Ethiopia (Hygiene Improvement Project)

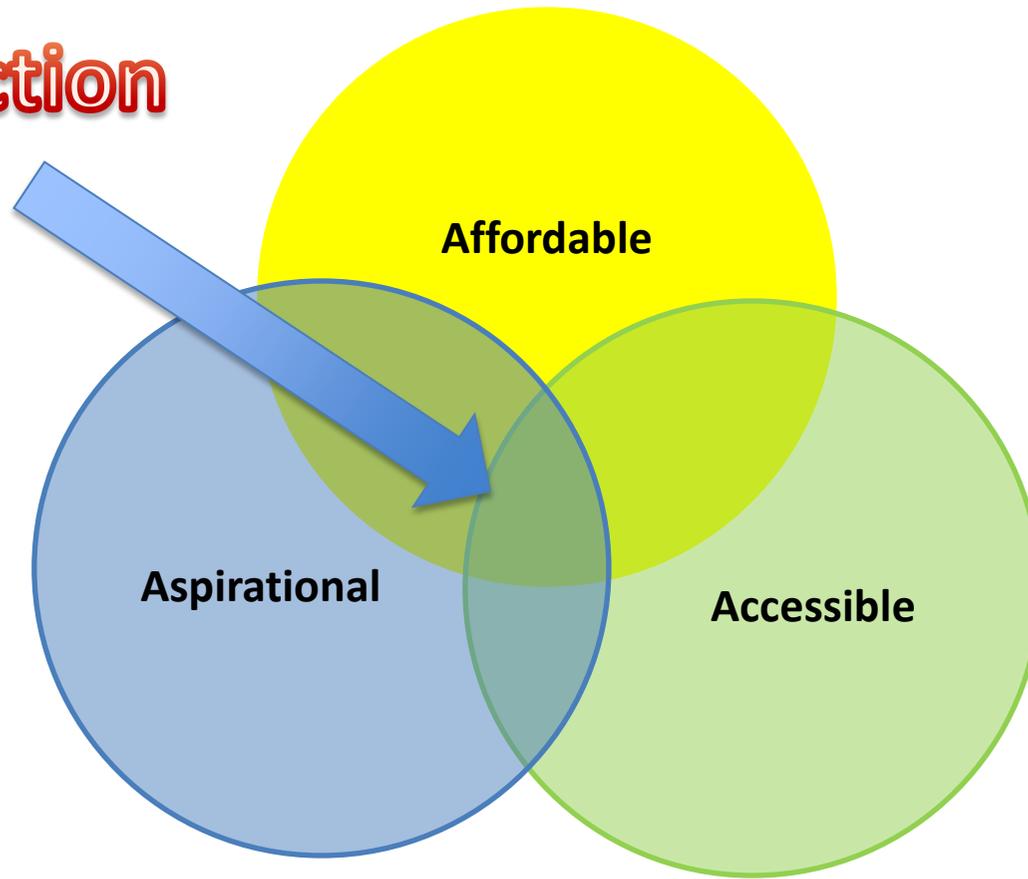
Percepcion Areas	Specific Content	Role
Personal/Family Image	Makes you popular	✓
	Gets you community respect	✓
	Makes you respected by visitors	✓
	It makes you look modern	✓
	Makes your family proud	✓
Comfort/Safety	Provides safety to women all day long	✓
	Makes easier defecation for elderly	✓
Cleanliness	Keeps compound clean	✓
Health	Reduces diarrhea	⊘
	Reduces disease	⊘

Sanitation in Cambodia: Why and How (International Development Enterprises)

Topics	Parameters
<p>Motivation behind latrine ownership</p>	<p>Dignity Pride Modernity Convenience Safety Usable by visitors and relatives Health preservation</p>
<p>Characteristics of aspirational toilets</p>	<p>Washable (water purifies) No bad odors (water seal) Off-set pit Ceramic slab Concrete superstructure Tile walls</p>

Principles guiding innovations that respond to the needs and wants of clients

Intersection

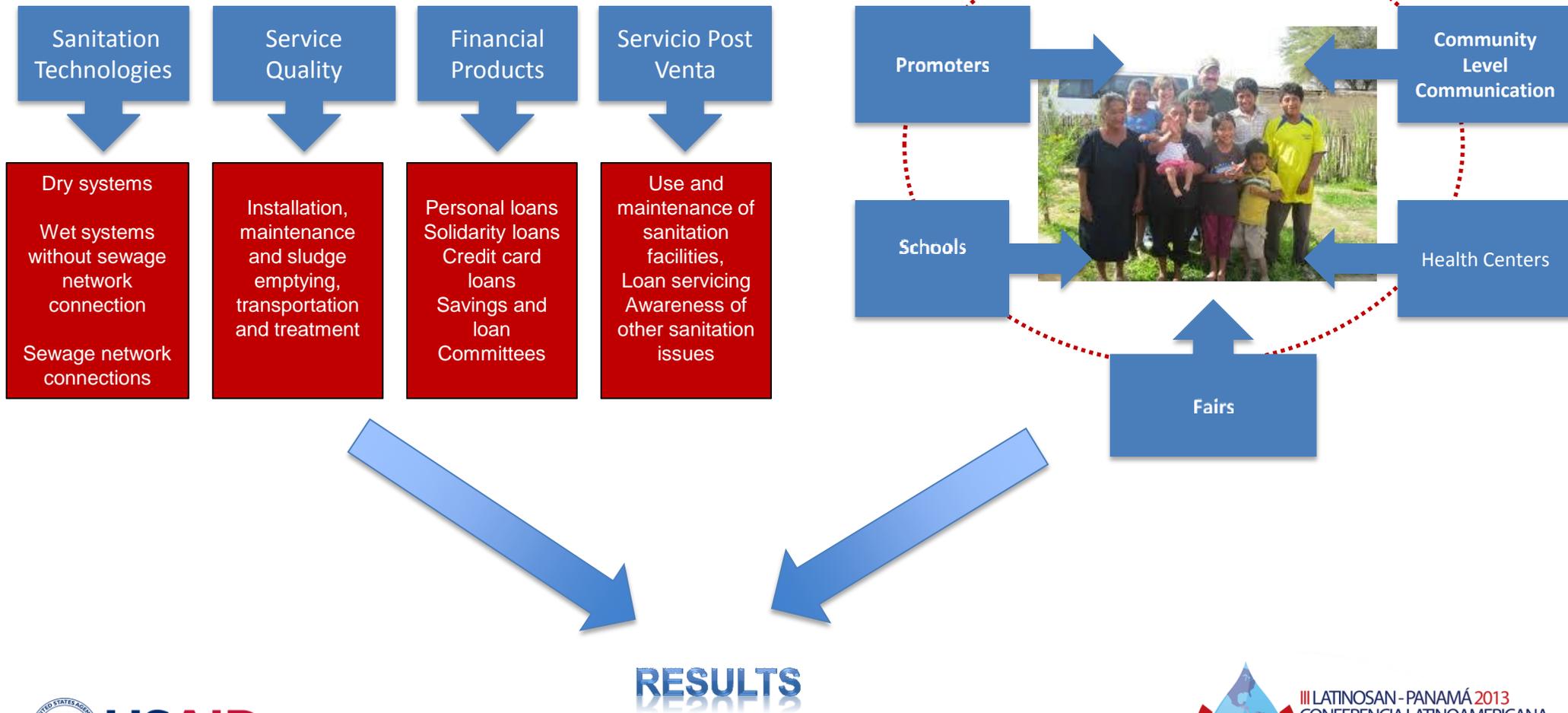


Accomplishments of Easy Latrine Program in Cambodia

Result Categories	Parameters
Sales and coverage	17424 latrines sold, 10621 Easy Latrines 8% coverage increase in 16 months Poorer households are consumers
Revenue	29 businesses with average annual income increase of 259%



WASH Behavior Change in Peru: Integration of Supply and Demand with a Focus on Segmentation of Different SE Groups





Safe Water Access Model in Small Malgache Communities



Self-help investments



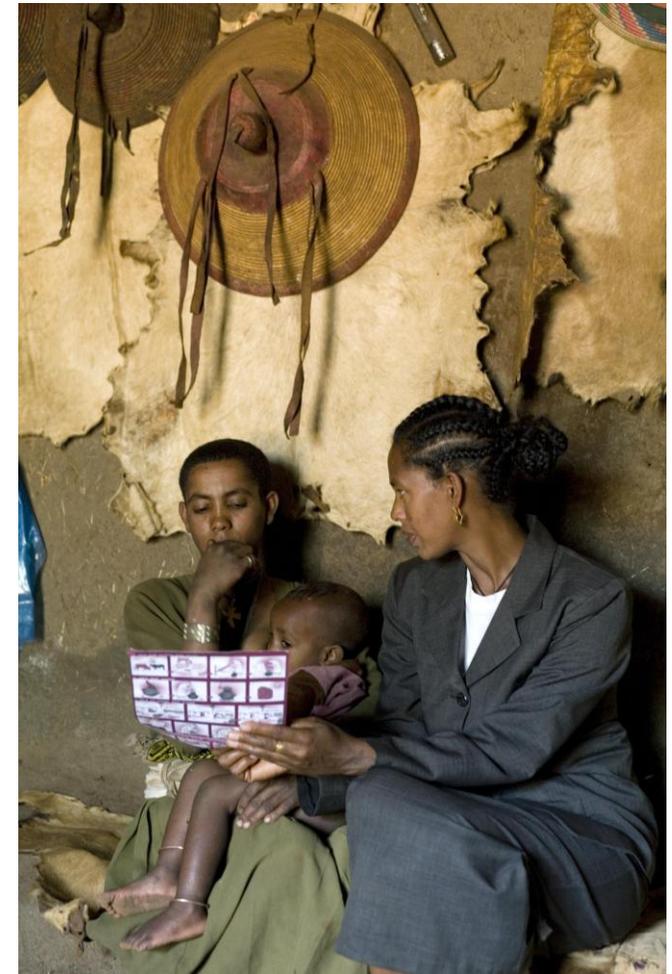
Universal Motivational Factors Involved in Handwashing with Soap

Factors	
Disgust:	Avoid organic material/waste that is dirty, smells bad/poorly
Comfort:	Seeking perception of cleanliness, freshness, purity, trust
Nurture:	Duty to care of under age children
Rank:	Seeking respect and admiration from others
Attraction:	Please others through cleanliness
Affiliation:	Interest in participating in social group practicing handwashing
Contamination:	Fear of contracting disease

Adapted from: Curtis, V., L. Danquah , and R. Aunger. 2009. Planned, Motivated, and Habitual Hygiene Behavior: An Eleven Country Review. *Health Education Research*, August 24 (4), 655-673.

Former Hygiene and Sanitation Program in Ethiopia soon to be evaluated for sustainability

- Systems Approach – use of ‘multiples’ (sectors, administrative levels, behaviors, etc.)
- CLTS+ (handwashing added)
- Negotiation de promoted behaviors through household visits and using job aids
- School component



Negotiation Card: Small Doable Actions

የምክክር ካርድ

የአባት/የእናት ስም _____ የጤና ሰራተኛው ስም _____
 መንደር _____ የጉብኝት ቀናት _____

1. እያንዳንዱ ቀልፍ ባህሪያት መካከል ቤተሰቡ ምን እያደረጉ እንደሆነ ይረዳና አሁን እየተገባና ያለው ላይ በተሰጠው ሳጥን ውስጥ ምልክት ያድርጉ::
2. በምክክር ሊሻሻሉ የሚችሉ አንድ ወይም ሁለት ተግባራትን ይምረጡና ለችግሩ መፍትሄ ምን እንደሆነ ከቤተሰቡ ጋር ይወያዩ:: ሁሉንም ነገር በአንድ ጊዜ ለማድረግ አይቻልም:: በመቀጠልም የሚከተሉትን ጥያቄዎች ይጠይቁ::
 - የትኛዎቹን መሞከር የሚችሉ ይመስላል?
 - አንድ ቀልፍ ማድረግ ይቻላል?
 - ከቤተሰብዎ መካከል የሚቃወምዎት ካለ ምን በማድረግ ሊረዳዎት ይችላል?
3. “በቀላሉ ሊደረግ የሚችል” ተግባር ላይ ተስማሙና ምልክት ያድርጉበት:: በመቀጠል ወደ ተኝ ያለውን ተግባር ላይ ተመክኩ:: በሰተተኝ ያሉት ተግባራት በሰተግራ ካሉት ተግባራት የተሻሉ ናቸው::
4. ቤተሰቡ ለመረጡ የተስማማበት ተግባር ላይ ምልክት በማድረግ ቃል እንዲገቡ ያድርጉ:: ምን ለመሰራት እንደተስማሙ ያስታውሳቸው:: ካርዱንም ግድግዳ ላይ በመለጠፍ ወይም የቤተሰብ ጤና ካርድ ውስጥ በማስቀመጥ በጥንቃቄ እንዲይዙት ይገነዘቡ::

“ሚያ ላይ በመጠየቅና ንጹህና በጉደለው ልምድ የሚመጡትን በሽታዎች ማቆም የኛ ኃላፊነት ነው!”

ሀ. አይን ምድርን ማስወገድ



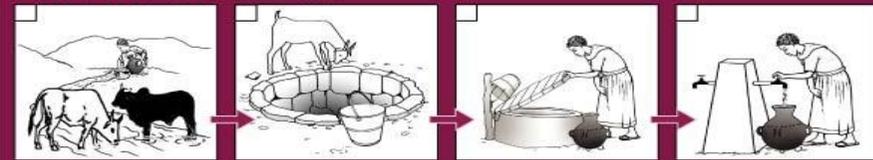
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ሐ. ከተጠቃሚነት በኋላ እጅ መታጠብ



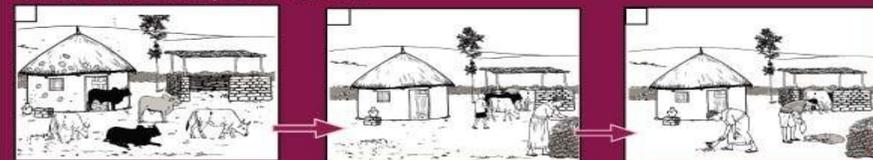
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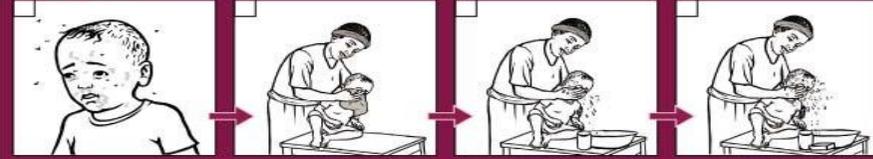
ሠ. የውሃ ንጹህና አጠባበቅ



ረ. የቤት እና የአካባቢ ንጹህና አጠባበቅ



ሰ. የፊት ንጹህና



እጅ መታጠብ የ ጊዜያት: ሁሉም አስፈላጊ ጊዜያት ናቸው::



Reasons for 24% drop in Open Defecation in Ethiopia

Dimensions	Factors	p	Odds Ratios
Intervention Characteristics	Community did 'Walk of Shame'	.00	2.23
	Household visited by outreach worker to discuss sanitation condition improvement	.05	1.75
Perceptions Associated with the Intervention	Latrine ownership contributes to community health	.00	2.6
	Latrine ownership contributes to community development	.00	1.8
All Factors >>		8.38

Habit formation

- Needs stable context (Verplanken y Wood, 2006)
- Trigger servers as a reminder and reinforcer
- Handwashing stations meet both criteria



Dimensions at work institutionally

- Importance of peer education, China RCT example
- Collective HW in schools, UNICEF's strategy



THANK YOU!!

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