# *'More than Soap and Water'*

## Taking Handwashing with Soap to Scale:
## An Introductory Training Module

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# Learning Objectives:

1. Understand the public health benefits of hand washing with soap;

2. Appreciate the links between hand washing and sanitation behaviour change programs;

3. Understand the shift in approach in hand washing behavior change programming;

4. Be familiar with the underlying principles and key components towards design and implementation of a hand washing with soap program;

5. Be acquainted with the pros and cons of various tools and monitoring approaches for hand washing programs;

6. Be familiar with best practice examples of implementation of these concepts from ongoing campaigns and studies; and

7. Know where to go to get more information or help to develop a program.

# Overview of this Session

1.  Background: The Evidence

2.  Handwashing Promotion: Evolving Approaches

3.  Taking Handwashing to Scale: Key Elements
    - Formative research
    - Identifying target audiences
    - Design of communications program
    - Communication channels
    - Monitoring

# Traditionally.......

- **Programs focused on providing information and increasing knowledge rather than changing behavior**

- **Messages often didactic, negative and focused strictly on the avoidance of illness as a motivator;**

- **Standardized messages: not based on any in-depth knowledge of the local situation;**

- **Messages "educated" the audience on a very wide range of health related subjects;**

- **Health education efforts tended to be one shot efforts and were often carried out very early in a project phase;**

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# Programming Trends

| | Year | Total responses not counting n/a | Yes | No | Partially | Percentage 'yes' of total non blank and non n/a answers |
|---|---|---|---|---|---|---|
| **Is there a national behaviour change communication programme that promotes correct and sustained hand washing with soap?** | 2010 | 140 | 87 | 26 | 27 | 62% |
| | 2009 | 136 | 83 | 23 | 30 | 61% |
| | | | | | | 39% |
| | 2008 | 135 | 53 | 49 | 33 | |

**Decentralization of GHD to districts translates into more HWWS programming in schools, health centres (jump from 300,000 to 715,000 schools to in excess of 1 million schools participating in 2011), more teacher training etc.**

**Media campaigns supported by UNICEF – reached almost half a billion people in 2010. An estimated 42 million were reached directly through community hygiene promoters,**

# National HWWS Programs & Mainstreaming Efforts

- *Nepal PPPHW*

- Bangladesh SHEWA-B

- Sierra Leone – HWWS as part of a larger sanitation marketing/CLTS program

- Regional SOPO efforts in East &Southern Africa  (Kenya, Malawi)

- Various countries – HWWS stations as part of ODF criteria

- HWWS communications as part of combined national diarrhea strategies

- Instilling HWWS as a daily ritual/social norm in schools (India, Philippines)



Hello I am SOPO

# Major goals of handwashing promotion programs
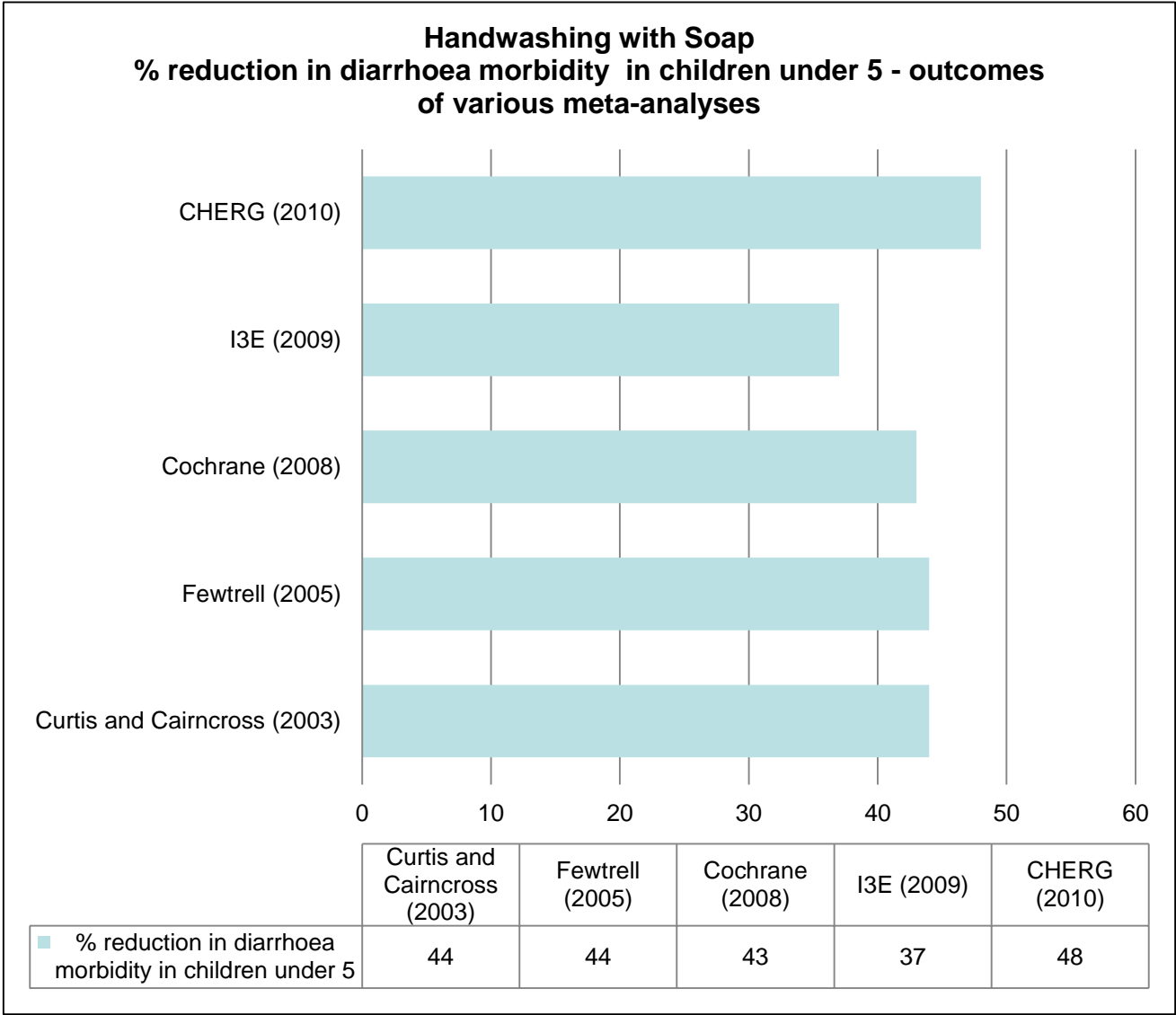
# Major goals of handwashing promotion programs

| | Purpose | Audience | Example activities |
|---|---|---|---|
| **Advocacy** | Influence public policy and resource-allocation decisions | Stakeholders Funders Government | Radio/TV ads Billboards, pamphlets Celebrity events |
| **Education** | Increase knowledge of benefits of using soap for hand washing and critical times for hand washing | Community Caregivers Schools | Community meeting School assembly |
| **Behavior Change / Build - up** | Build up and sustain good handwashing practice and form handwashing habits | Caregivers Schools Community | Interpersonal communication for behavior change at the household level, community level or schools |
| **Health Impact** | Improve child health by preventing diarrhea and respiratory illness | Community members Schools | Any activity intended to build up and sustain handwashing with soap |

# 1. Background

# Outcomes of various handwashing meta-analyses on the reduction in diarrhoea morbidity in children under 5

**Handwashing with Soap**
**% reduction in diarrhoea morbidity in children under 5 - outcomes of various meta-analyses**

|  | Curtis and Cairncross (2003) | Fewtrell (2005) | Cochrane (2008) | I3E (2009) | CHERG (2010) |
|---|---|---|---|---|---|
| % reduction in diarrhoea morbidity in children under 5 | 44 | 44 | 43 | 37 | 48 |

# Handwashing with Soap

**Most Cost-effective**

…to prevent diarrhoea related deaths and disease.

**Acute respiratory infections (ARI's)**

Reduction by around 23 %

**Maternal handwashing**

44% increase in neonatal survival rate

(1 study in Nepal)

**Critical measure in controlling pandemic outbreaks of respiratory infections.**

e.g. Washing hands with soap more than 10 times a day cut the spread of SARS (2006) by 55 per cent.

**Water alone is not enough, but soap is rarely used for handwashing. Laundry, bathing and washing dishes are seen as the priorities for soap use.**

# Handwashing with Soap (2)

## Primary schools and daycare centers

Handwashing with soap reduces the incidence of diarrhoea by an average of 30 per cent.

## Rates are low.

Observed rates of handwashing with soap at critical - range from zero per cent to 34 per cent.

## The lack of soap is not a significant barrier to handwashing

With the vast majority of even poor households having soap. Soap was present in 95 per cent of households in Uganda, 97 per cent of households in Kenya and 100 per cent of households in Peru.

## School Absenteeism.

In China, for example, promotion and distribution of soap in primary schools resulted in 54 per cent fewer days of absence among students compared to schools without such an intervention.

# Cost-effectiveness of water, sanitation & hygiene *as health interventions* (US $ / DALY)

| Intervention | Cost-effectiveness |
|---|---:|
| *Water supply* | |
| Hand pump or standpost | 94.00 |
| House connection | 223.00 |
| | |
| *Water sector regulation & advocacy* | 47.00 |
| | |
| *Basic sanitation* | |
| Construction & promotion | ≤270.00 |
| Promotion only | 11.15 |
| | |
| *Hygiene promotion* | **3.35** |

**DALY = Disability-Adjusted Life Year -** a time-based measure that combines years of life lost due to premature mortality and years of life lost due to time lived in states of less than full health

# The Case for HWWS AND Sanitation

• HWWS and improved sanitation are primary barriers in fecal-oral disease transmission.

• When combined with improved sanitation, HWWS could reduce the incidence of diarrhea by 66% (PFC 2005).

HOWEVER… 2.5 billion without adequate sanitation (WHO/UNICEF, 2008); Prevalence of HWWS is low – averaging approximately 17% (Curtis, 2009); 1-2% in schools (IRC, 2008).
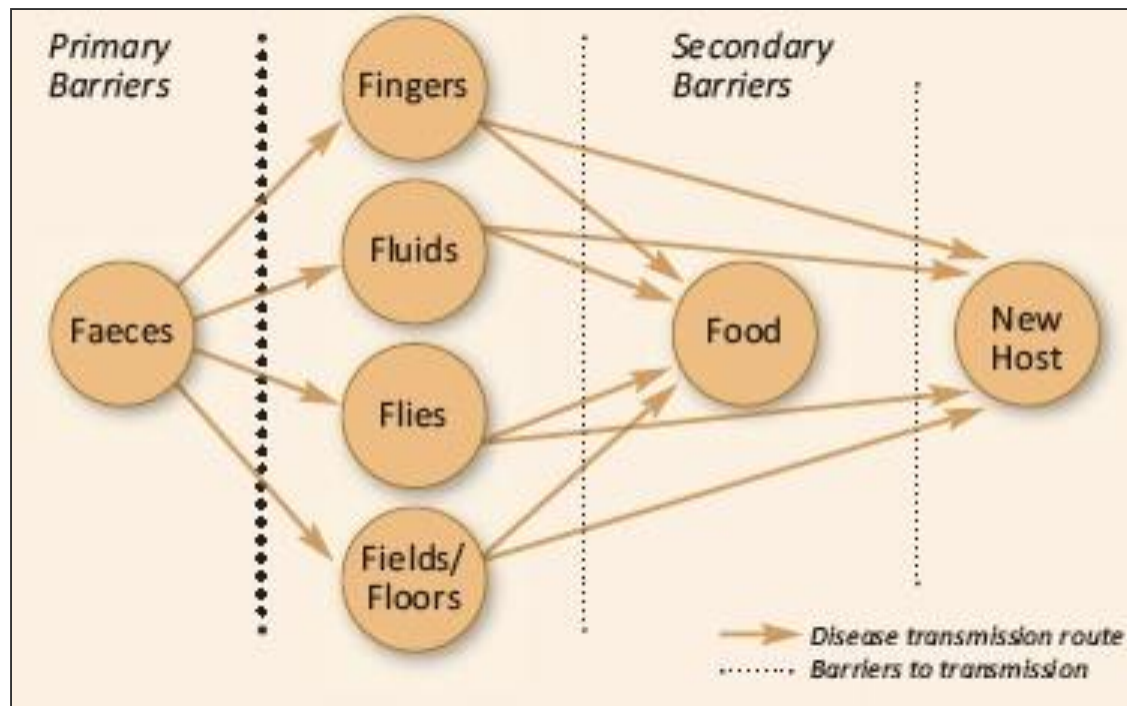
# Prevalence of HWWS

**Table III.** *HWWS and water by mother or caregiver on key occasions*

| Country | n | HWWS after toilet (%) | HWWS after cleaning child (%) | HWWS after cleaning up child stools (%) | HWWS before feeding index child (%) | HWWS before handling food (%) | HW with water only after toilet (%) |
|---|---|---|---|---|---|---|---|
| Ghana | 500 | 3 | 2 | — | 1 | — | 39 |
| Kerala, India | 350 | 42 | — | 25 | — | — | — |
| Madagascar | 40 | 4 | — | — | 12 | — | 10 |
| Kyrgyzstan | 65 | 18 | 0 | — | — | — | 49 |
| Senegal | 450 | 23 | 18 | — | — | 18 | — |
| Peru | 500 | 14 | — | — | 6 | — | — |
| Sichuan, China | 78 | 13 | — | 16 | 6 | — | 87 |
| Shaanxi, China | 64 | 12 | — | — | 16 | — | 14 |
| Tanzania | 30 | 13 | 13[a] | 13[a] | 4 | — | 33 |
| Uganda | 500 | 14 | 19 | 11 | 6 | 8 | 44 |
| Vietnam | 720 | — | 14 | 23 | 5 | — | 51 |
| Kenya[b] | 802 | 29 | 35 | 38 | 13 | 15 | 57 |
| Average | | 17 | 13 | 19 | 5 | 13 | 45 |

Source: Curtis V, Danquah L, Aunger R. (2009)

*HWWS in Schools (Study IRC 2008 Kenya)* **Only 5 out of 100 schools had soap available for children. Less than 2% (only 21 out of 951 of the children) were observed to wash their hands with soap.**

# What about ash?

- Ash has shown to be as effective as soap
- "it is the effectiveness of the scrubbing action rather than a specific agent which removes the bacteria from the Hands". (see Hoque et al 1995)
- When using ashes to wash hands is already a custom, it may be easier to just focus on Good Ash Handwashing Practices (the scrubbing action and the critical moments)
- To "sell" the use of ashes to new users can be hard, or even appear to be counter-intuitive (*this stuff makes my hands dirty!*). It's easier to find motivators for the adoption of soap products
- http://www.ifh-homehygiene.org/

# 2. Hand Washing Promotion:

# A Shift in Approach

# Traditionally (from)…

- Messages that "educated" the audience on a very wide range of health related subjects rather than changing behavior

- Messages often didactic, negative and focused strictly on the avoidance of illness as a motivator;

- Standardized messages, not based on any in-depth knowledge of the local situation;

- Health education efforts tended to be one shot efforts; sequenced and implemented ineffectively;

- Programs were implemented largely at the community and household level (not at scale).

# **To improved approaches…**

- Highly participatory methods, adaptable to local context which had success in maintaining awareness.

- *But* ineffective at behavior change at scale due to high costs of preparation and implementation, high dependence on extension workers' capacity and inclusion of several behaviors and the resulting lack of clarity.

# Key Principles

- Target a small number of risk practices.

- Target specific audiences.

- Identify the motives for changed behavior.

- Hygiene messages need to be positive.

- Identify appropriate channels of communication.

- Decide on a cost-effective mix of channels.

- Hygiene promotion needs to be carefully planned, executed, monitored and evaluated.

[1] Well Fact sheet: fallacies and key principles of hygiene promotion

# Now…behavior change at scale

- *Broad partnerships of public and private sector stakeholders who have a mutual interest in increasing hand washing with soap*

- *Focus on the one behavior with largest potential health impact*

- *Consumer-centered marketing approach.*

*the main lessons from the Central America PPP in the 1990s, forming the basis of future work in the PPPHW*

# Partnerships…

- Combine the strengths of various stakeholders, i.e. ministries of health, private sector, NGOs, health centers, etc.

- Allows for leveraging various communication channels and greater knowledge of target audience motivations and aspirations.

- Facilitates working at scale toward sustained behavior change.

# Example of win-win partnership in Central America

|  | Private Sector | Public Sector |
|---|---|---|
| Benefits | • Increased soap market/sales<br><br>• Positive media attention<br><br>• New alliances with public sector<br><br>• Exposure to new methods of market research, advertising and engagement with communities for behavior change | • Increased reach/coverage to different target groups<br><br>• Reduced incidence of diarrheal disease<br><br>• Sustainable changes made in the private sector's advertising messages<br><br>• Exposure and access to greater resources in social marketing techniques<br><br>• Improved school hygiene programs |
| Contributions | •Marketing expertise in design and implementation of advertising strategy<br><br>•Sustainability of supply – appropriate pricing (donor dependency reduced) | •Access to social networks, coverage of poorest populations<br><br>•Assistance in the distribution of advertising messages/ materials (Saade et al., 2001) |

# Break/Discussion
# (5 minutes)

*Challenge question:*
*Why did diarrheal rates go down in Bolivia during*
*the H1N1 outbreak in 2009?*
*Hint: http://www.time.com/time/health/article/0,8599,1931223,00.html*

# 3. Taking Hand Washing to Scale: Key Elements
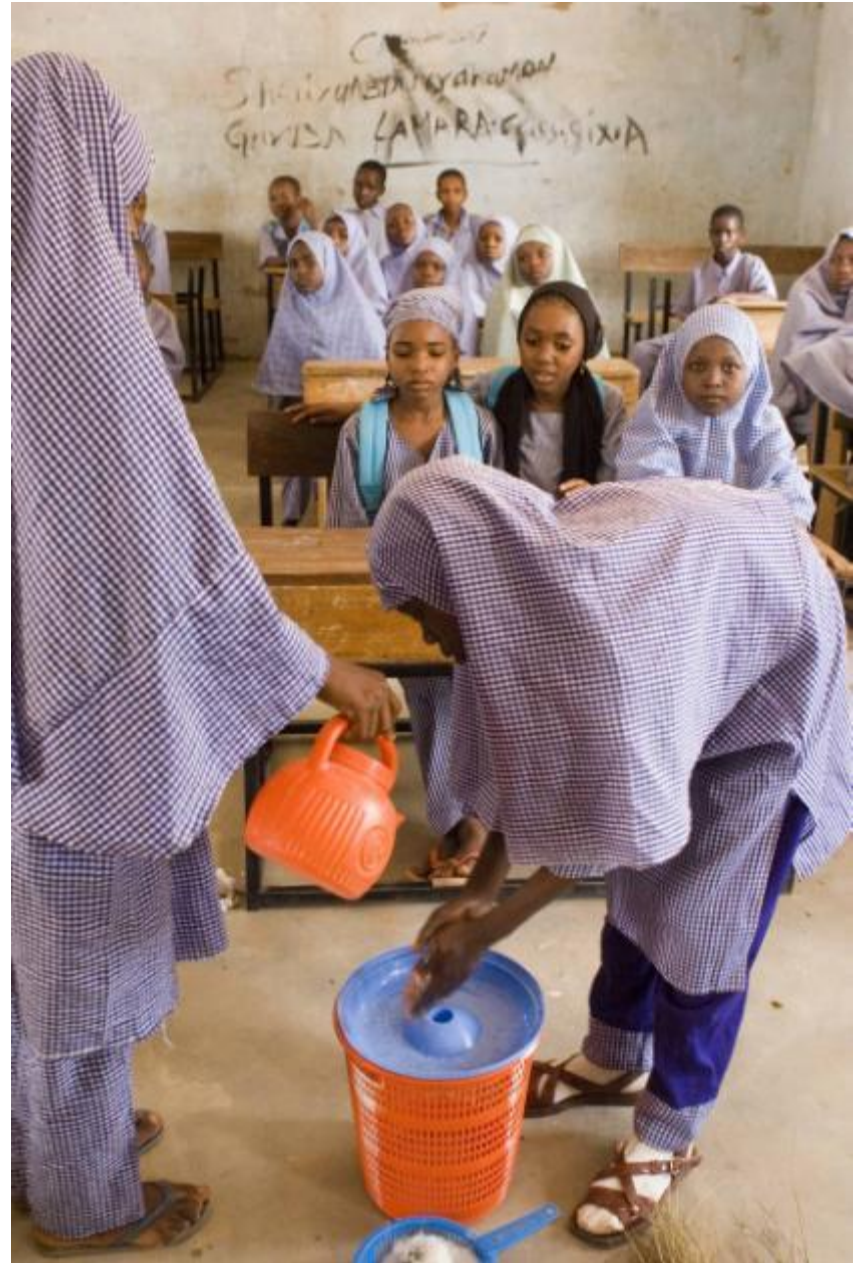
# HWWS Program Development Process

**Situation assessment**

**1. Formative research**

**2. Identify Target audience**

**3. Communications Strategy: Channels and materials development**

**4. Implementation**

**5. Control (M&E)**
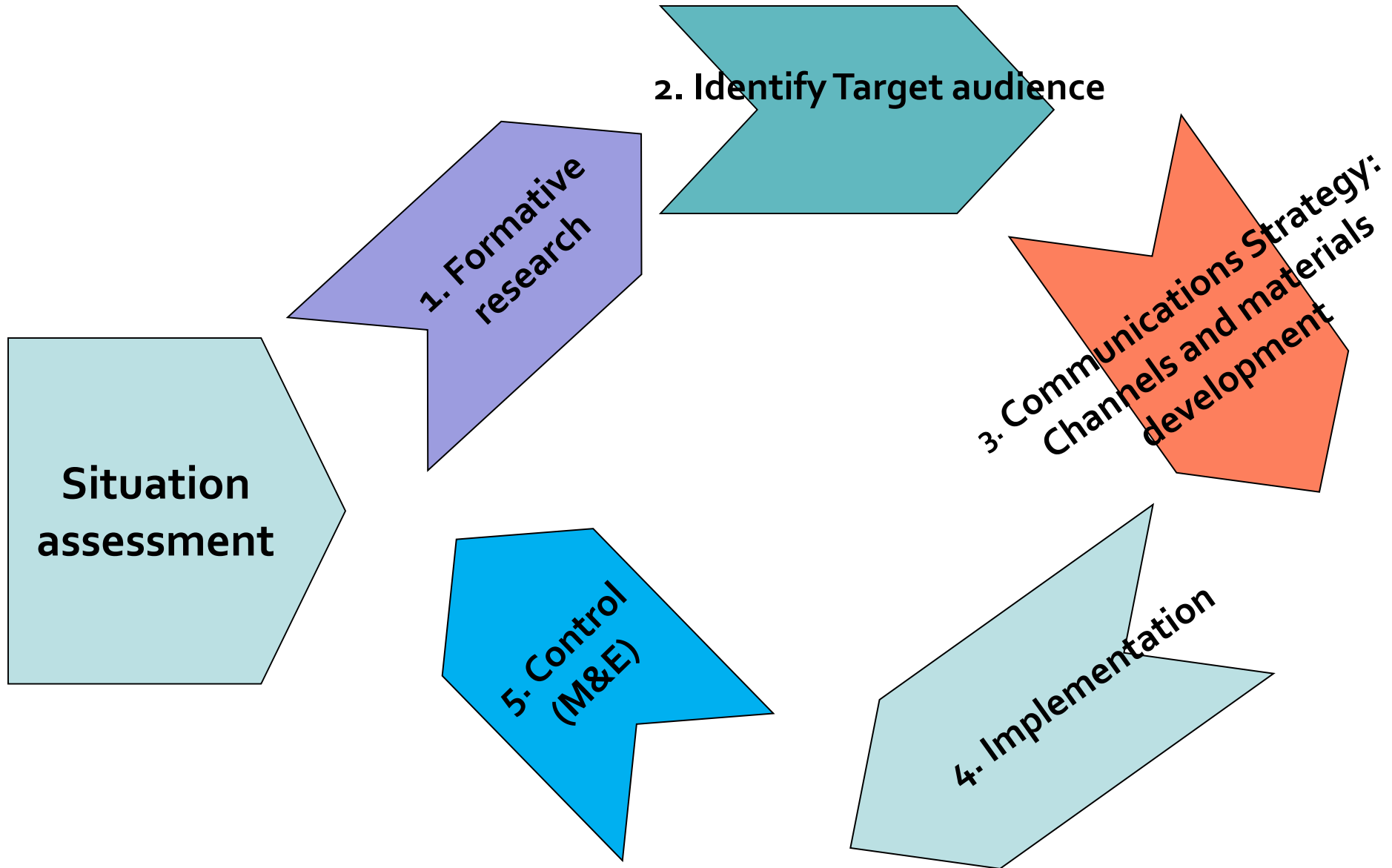
# I. Formative Research

- What are the risk practices?
- Who carries out risk practices?
- What drivers, habits, and/or environment can change behavior?
- How do people communicate?

- **Primary step** to identify motivations for HWWS behavior, identify communication channels, design messages, etc.

- Includes quantitative and qualitative research into consumer, health, and HWWS behaviors.

- We're not starting from scratch! FR available for: Ghana, India (Kerala), Madagascar, Kyrgyzstan, Senegal, Peru, China (Shaanxi and Sechuan), Tanzania, Vietnam, Uganda  and growing...

- *Insights suggest that there are global commonalities in motivators of HWWS behavior*

| Motivation | What we have leant |
|---|---|
| **Disgust** | Being aware of contaminating matter on hands does motivate an immediate need to HWWS. BUT hands may not feel contaminated after fecal contact. |
| **Fear** | Child diarrhea is not perceived as a threat. Link between HWWS and child diarrhea is tenuous. Epidemic disease such as cholera may motivate HWWS temporarily, but stops when danger is past. |
| **Comfort** | Mothers enjoy the feeling of clean, fresh-smelling hands from which dirt has been removed. The comfort motive may provide an additional benefit to mothers from HWWS, but perhaps not provide a central motive. |
| **Nurture** | A strong motivator for maternal behavior; however, it does not seem to get mothers to HWWS before feeding their child. But, mothers are strongly motivated to educate their children in good manners – HWWS as part of a set of good manners may be a possible avenue to explore. |
| **Affiliation** | Doing what everyone else is perceived to do is a strong motivator of current (lack of) HWWS. The affiliation motive could be employed through highlighting that most people believe that HWWS is the right thing to do. |
| **Status** | People care deeply about their social status and being perceived as dirty is to be avoided at all costs. However, HWWS is often a private affair, hence nobody can tell if hands have been washed or not. |
| **Attraction** | As with status, it may be difficult to tell if hands have been washed with soap or not, hence the motivation link is probably too indirect. |

| Motivation | What we have learnt | Good candidate? explain |
|---|---|---|
| Disgust | **Being aware of contaminating matter on hands does motivate an immediate need to HWWS. BUT hands may not feel contaminated after fecal contact.** **Make hand contamination feel real. (Glo-Germ)** | Yes |
| Affiliation | **Doing what everyone else is perceived to do is a strong motivator of current (lack of) HWWS. The affiliation motive could be employed through highlighting that most people believe that HWWS is the right thing to do.** **Make HW seem common, create a 'culture of handwashing'.** | Yes |
| Comfort | Mothers enjoy the feeling of clean, fresh-smelling hands from which dirt has been removed. The comfort motive may provide an additional benefit to mothers from HWWS, but perhaps not provide a central motive. | Maybe |
| Nurture | A strong motivator for maternal behavior; however, it does not seem to get mothers to HWWS before feeding their child. But, mothers are strongly motivated to educate their children in good manners – HWWS as part of a set of good manners may be a possible avenue to explore. | Maybe |
| Status | People care deeply about their social status and being perceived as dirty is to be avoided at all costs. However, HWWS is often a private affair, hence nobody can tell if hands have been washed or not. | No |
| Attraction | As with status, it may be difficult to tell if hands have been washed with soap or not, hence the motivation link is probably too indirect. | No |
| Fear | Child diarrhea is not perceived as a threat. Link between HWWS and child diarrhea is tenuous. Epidemic disease such as cholera may motivate HWWS temporarily, but stops when danger is past. | No |

# Global Insights into HWWS Behavior

Even when people know about HWWS - what to do (use soap), when to do it (before food and after the toilet) and why (to stop germs, disease & in particular childhood diarrhoea) - they typically don't do it

If hands look, smell and feel clean it's very hard to believe they are not clean

Unless you're washing something tangible off there's no sensory reward or proof that HWWS does anything water alone doesn't.

People lay down HW habits as children

When asked during research people say they wash their hands (with soap) in the right moments more than they do

When observed during research people are more likely to wash hands 'properly'

HWWS isn't like laundry as no-one knows if you've done it so you're unlikely to be judged down if you don't.

**INDIVIDUAL**

**SOCIETAL**

HW with *just* water is common & habitual

It happens more (relatively) after the toilet & *after* food than before food

Soap is most likely to be used when there's a clear sensory cue (smell, feel, look) and if something is hard to remove or hands are considered 'contaminated'.

## PHYSICAL

Most target households (around 95%) have soap and water

Soap & water are often kept separate to each other & away from latrines or other places used as a toilet

Washing hands using soap is hard without running water

However, people will HWWS – and overcome these problems – if and when it's important to them.

# Formative research in action…

- *Disgust* – <u>Ghana PSA</u>, Glo-Germ (used in Lifebuoy Swasthya Chetna program in India),
- *Dirt is Good* Campaign of Unilever built upon universal motivators, being good parents, etc.
- *Social Norm/Affiliation* – UNICEF India campaign with <u>Sacha Tendulkar</u>
- **Development of *GHD logo*** – consumer feedback

# II. Identifying Intended Audiences

- HW programs target those groups whose HW behavior can have the largest impact on disease reduction: usually the caretaker of under-fives.

- Primary caretaker is usually the mother of the young child; however, it is important to document who else participates – grandmothers, sisters, fathers in some societies, aunts, etc.

- School age children also form an intended audience as the caretakers of the future and more susceptible to the uptake of new healthy habits and as enthusiastic advocates/messengers of the behavior.

# Intended Audience Segmentation

- Process of dividing the intended audiences into groups with similar behaviors and needs - each segment will require different marketing strategies.

- Secondary target segments support and influence behavior change among the primary group. i.e. fathers of children under five years, mothers-in-law, teachers and healthcare workers.

- A third segment may be stakeholders who can assist in garnering political commitment.

# Example: Audience Segmentation

- *Target group:* women who care for infants and young children under five in developing countries in poor communities.

- *Primary behavior change audience:* Older Girls based on the rationale that acute hygiene sensitivity surfaces around childbirth, as they are laying down parenting habits that will then  not only last a lifetime but be what she hands down to her children.

- *Secondary behavior change intended audience: Mothers* defined as having at least one child and likely to be caring for other children and responsible for teaching her own children and those within her extended family.

- *Tertiary behavior change intended audience: 'Old Hands'* defined as elderly women in the household/community with responsibility for 'handing down' advice and practices for younger women.

# III. Developing a Communications Strategy

❖ Background/formative research/situation analysis

❖ Target audience

❖ Objectives of the communications program

❖ Key Messages

❖ Communication channels

❖ Monitoring/feedback system

# Objectives of the communications plan

- Align program and communications objectives

- Set realistic expectations based on insights, resources, scope of campaign

# Messaging

- Develop messages based on insights from the FR, tailored to intended audiences

# Communications Channels

| Approach | Description | Advantage | Disadvantage |
|----------|-------------|-----------|--------------|
| Mass media | Messages crafted to be transmitted through an optimized mix of radio TV, billboard, and other channels. | Low cost per capita, can be highly memorable, can raise the political profile of handwashing, easy to monitor. | Needs high saturation (6+contacts) to affect behavior change. Difficult to fund Audience cannot interact. |
| Discussions with consumers | Events organized by professional event management agencies held in schools, public places, community groups. | Good audience event interaction. high impact, memorable. | High cost per capita. Uncertainty about impact and optimal size of audience. |
| Public Channels | Using the ability of government agencies to deliver handwashing messages through schools and health centers. | Potentially highly sustainable, if promotion becomes part of curriculum, job description of health agent, promoted at ante- and post-natal contact. | Hard to control Contact with target audiences may be infrequent, resulting in low coverage Low ability to monitor activities. |

# Example of 360⁰ Handwashing Message Exposure

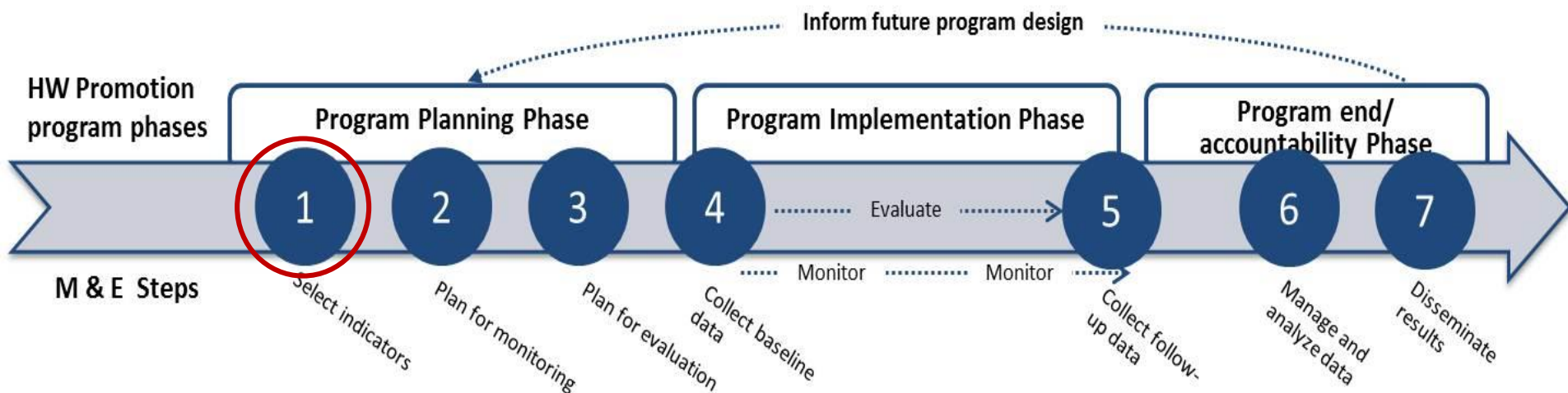Example: intended audience of mothers with young children
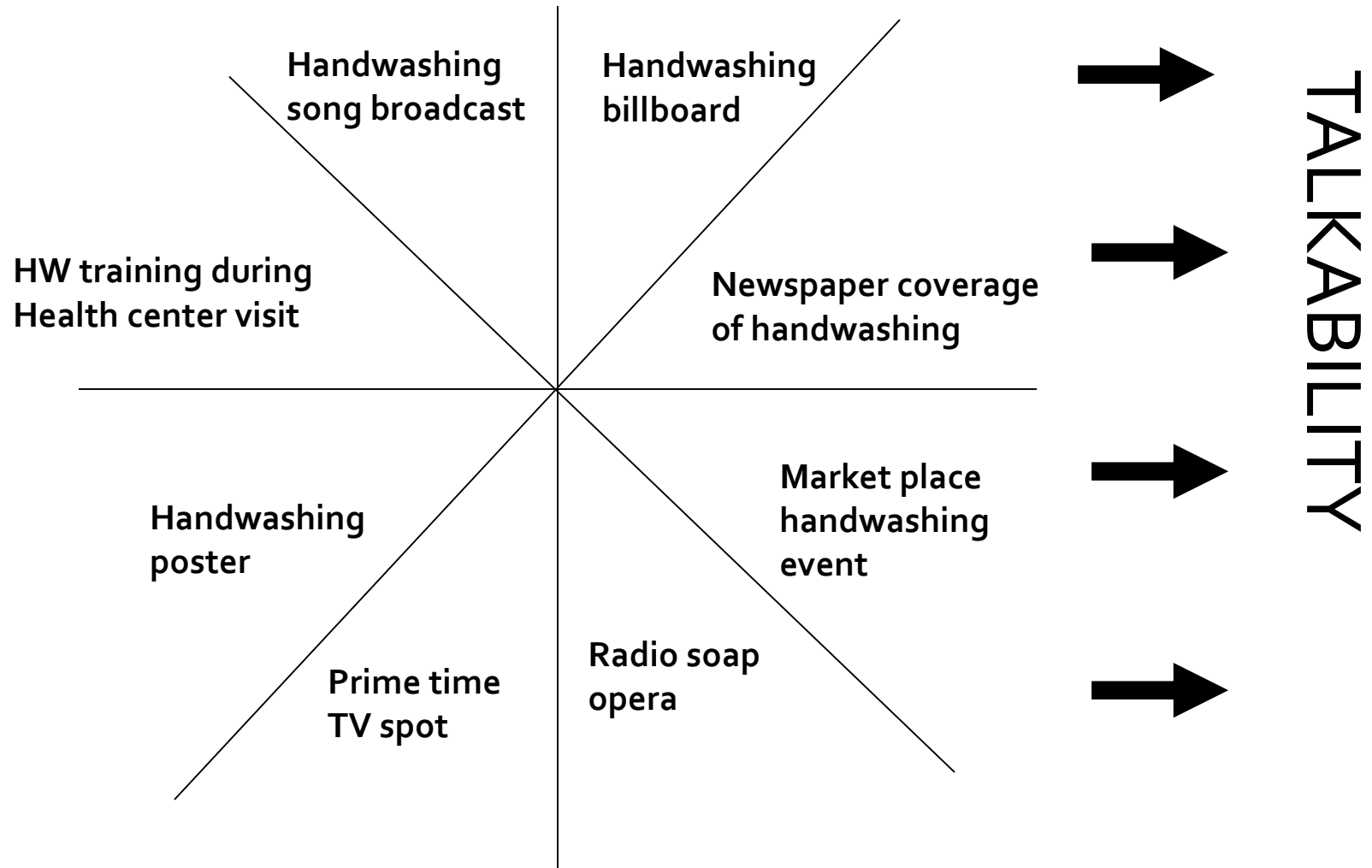
# IV. Monitoring

- To ascertain the extent and effectiveness of the program.

- Serves to diagnose and help fix problems during program execution.

- Generally, involves three broad steps: a baseline survey, ongoing monitoring of program activities, and a post-intervention survey.
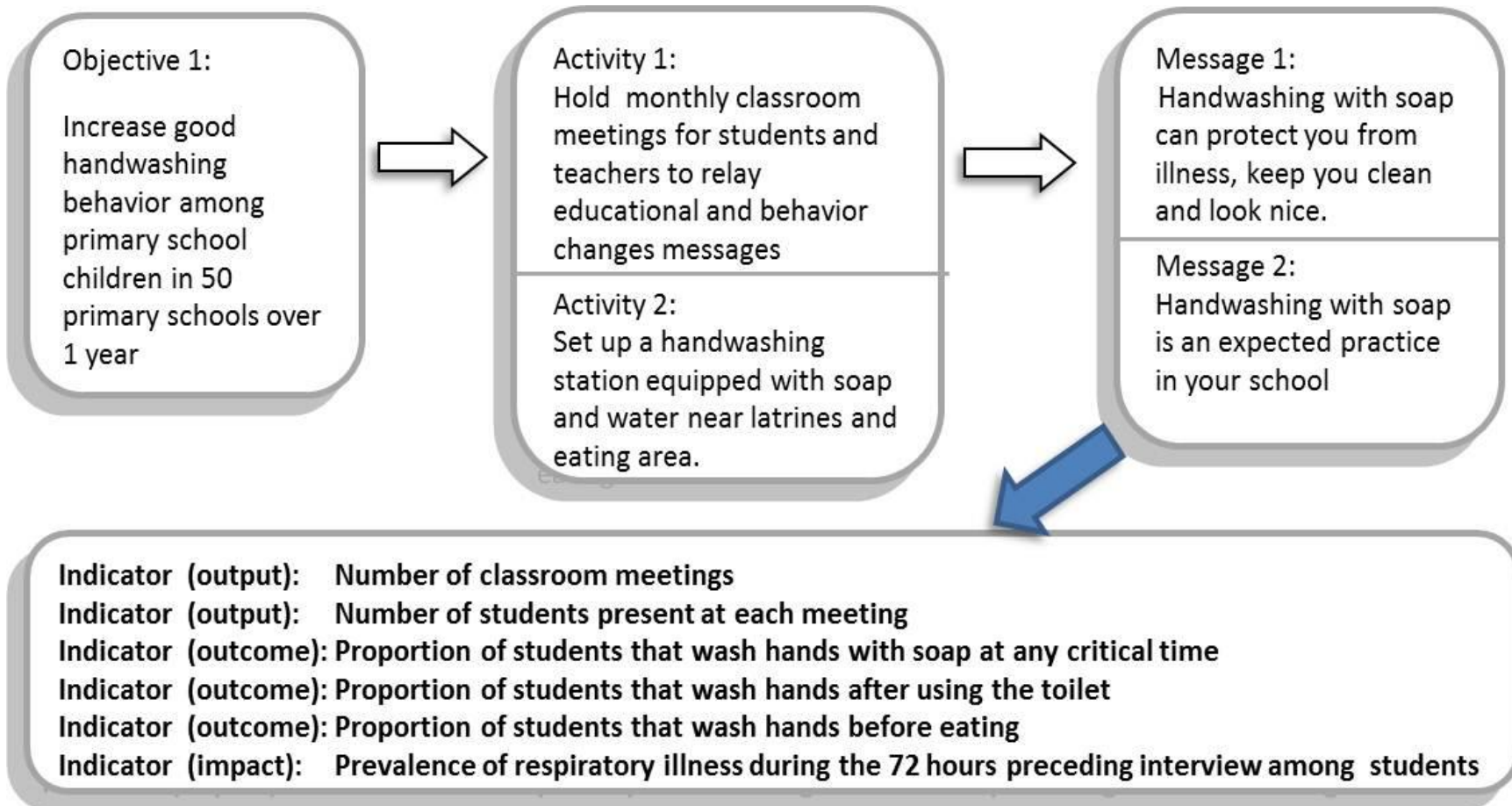
# Steps for M & E

# Step 1: Select indicators

- Align objectives, activities, and messages

Objective 1:

Increase good handwashing behavior among primary school children in 50 primary schools over 1 year

Activity 1:
Hold monthly classroom meetings for students and teachers to relay educational and behavior changes messages

Activity 2:
Set up a handwashing station equipped with soap and water near latrines and eating area.

Message 1:
Handwashing with soap can protect you from illness, keep you clean and look nice.

Message 2:
Handwashing with soap is an expected practice in your school

Indicator (output): Number of classroom meetings
Indicator (output): Number of students present at each meeting
Indicator (outcome): Proportion of students that wash hands with soap at any critical time
Indicator (outcome): Proportion of students that wash hands after using the toilet
Indicator (outcome): Proportion of students that wash hands before eating
Indicator (impact): Prevalence of respiratory illness during the 72 hours preceding interview among students

# Step 1: Select Indicators

- Select SMART indicators
  - Specific
  - Measurable
  - Achievable
  - Relevant
  - Time-bound

- Seek input from stakeholders and partners

- Incorporate indicators from MICS and DHS surveys, when possible and applicable

# Step 1: Select Indicators

| Goal | PROGRAM COMPONENT | INDICATORS | DATA COLLECTION METHOD |
|---|---|---|---|
| **Advocacy** | Outputs | Number of advertisements distributed/broadcasted | Program records/Media tracking |
| | | Number of events | |
| | | Number of participants at event | Program records/Monitoring |
| | | Number of stakeholders introduced to benefits of HWWS (MOH leadership, NGOs, potential donors | Program records/Monitoring Program records |
| | Outcomes | Proportion of individuals from target population that saw/heard of the event/advertisement | Survey |
| | | Proportion of individuals from target population that can recall the main message(s) | Survey |
| | Impact | Number of commitments (funding, sponsorship, participation) | Program records |
| | | Progress toward commitments | Program records |
| **Education** | Outputs | Number of education sessions/events | Program records |
| | Outcomes | Proportion of people that know about the benefits of soap | Survey |
| | | Proportion of people that know the critical times to wash hands with soap | Survey |
| | | Proportion of people that use soap to demonstrate handwashing | Rapid observation |
| | Impact | Behavior change, as measured by indicators listed under Outcomes of behavior change below | (see below) |
| **Behavior Change** | Outputs | Number of behavior change communication events | Program records |
| | | Number of participants at behavior change communication events | Program records |
| | Outcomes | (Proxy Indicators) | |
| | | Proportion of households/schools that have soap and water at a handwashing place | Rapid observation |
| | | Proportion of households that have soap readily available (< 1 minute of request) | Rapid observation |
| | | Proportion of people with clean-appearing hands | 3-pt. hand inspection |
| | | (Direct Observation) | |
| | | Proportion of persons that wash hands with soap at any critical time | Structured observation |
| | | Proportion of people that wash hands with soap after toileting | |
| | | Proportion of people that wash hands with soap before food preparation | |
| | | Proportion of people that wash hands with soap before eating | |
| | Impact | Prevalence of diarrhea during the 72 hours preceding interview | Morbidity survey |

# MICS HW Indicators

Two indicators selected which are currently being field-tested for MICS

*1.* Number of households with a designated place for hand washing where water and soap are present

*2.* Number of households with soap anywhere in the dwelling

"Soap" can be a range of products from a bar of handsoap, detergent, powder, to local cleansing material

"Present" doesn't demand for the product to be at the handwashing place - interviewees merely have to show it's somewhere in the household

# What we have learned

- ***The Evidence***. HWWS at critical times is the most cost-effective way to reduce diarrheal disease. While knowledge of the practice is high, practice is low.

- ***Behavior change.*** Access to water and sanitation services alone is not enough to sustain hygienic behaviors.

- ***Fewer, high impact messages.*** Campaigns that focus on a single behavior are more successful. People are not motivated by health concerns.

- ***Formative Research.*** While FR is essential, it is also equally important to build on global insights and knowledge.

- ***Scaling Up.*** It is essential to mainstream HWWS promotion and indicators into current health promotion, education and water and sanitation national programs. Only if this happens will a 'culture of HWWS' develop and will HWWS behaviors be sustained.

- ***Capacity Building and Awareness Creation.*** The challenge is to increase awareness of the importance and effectiveness of HWWS as well as continue to grow our collective capacity to implement these approaches.

For more information on developing a handwashing with soap program:

- Consult the Background Notes for this Module which contain further reading and details, examples and information on program design
- Visit [www.globalhandwashing.org](http://www.globalhandwashing.org)
- Visit [www.globalhandwashingday.org](http://www.globalhandwashingday.org)
- Contact [anthomas@unicef.org](mailto:anthomas@unicef.org)

- Thank you!