Sanitation and Hygiene Sector Trends

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- Sector trends focusing on Community Led Total Sanitation and Sanitation Marketing
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Proportion of global population with at least basic sanitation facilities in 2015

SANITATION AND HYGIENE SECTOR TRENDS

Watershed & Simavi, 2018; JMP 2019
Proportion of global population with handwashing facilities including soap and water at home in 2015
WASH and Climate Change

Photo: Women washing clothes and children playing in a canal in Haiti before Hurricane Matthew, 2016 (Mosello, B., & Matoso, M., 2017)
WASH and Climate Change

- Climate change induces extreme weather events that lead to droughts and floods
- These events affect sanitation systems and infrastructure
- Health impacts of poor sanitation expected to increase in future due to increased risk resulting from increased environmental pollution, and the limited access to sanitation facilities as systems are destroyed or damaged
- Adaptation measures will include promoting resilient technologies, adapting technical norms and regulations and enhancing management of services
- Potential of waste to energy to mitigate climate change

Stunting rates and open defecation in Vietnam

Chase, C., & Ngure, F., 2016
WASH and Nutrition

• Child undernutrition and poor conditions of WASH coexist in many low- and middle-income countries

• Undernutrition is attributed to stunting, wasting and underweight. Long term consequences include poor cognitive development and limited human capital attainment

• Effective nutrition oriented programs in high burden countries would only reduce stunting by 20% globally: WASH as complement

• Environmental enteric dysfunction (EED) explains why truly nutrition oriented programs have failed to reduce stunting in many contexts over the long term: Co-location of WASH activities in nutrition vulnerable areas

• **Evidence**: Basic WASH has no impact of child growth and diarrhea: Would safely manages WASH be the solution

Chase, C., & Ngure, F., 2016; Cumming et.al., 2019; Bery et al., 2019; Pickering et al. 2015
WASH, Gender and Social Inclusion

- Evolution of perspectives of women and gender over time. 1970s, women in development; the 1980s to 1990s, inequalities; the 2000s, gender mainstreaming in WASH; and since the 2010s, equity and inclusion

Fischer et. al., 2017
WASH, Gender and Social Inclusion - 1

- Holistic programs that address social norms alongside technical water and sanitation infrastructure and service provision. WASH in Schools programs provide avenues to improve menstrual hygiene management
- WASH in health-care facilities is critical to maternal and neo-natal health: 10.7% of maternal deaths were related to sepsis (WHO)
- Need to identify the disadvantaged groups, the locations where they stay, current levels of service and their link to health and nutrition, and the binding barriers to access of services: Integration of data into monitoring and planning
- Empowerment in WASH index used to access empowerment issues so that stakeholders can act

Fischer et. al., 2017; Mosello, B., & Matoso, M., 2017; Sahin, 2015; Rajagopal & Mathur, 2017; Sweetman & Medland, 2017; Watershed & Simavi, 2018; SEI, 2019; Say et al., 2014
Overview of approaches to scale sanitation

**State of demand**
- Little/no demand

**Customer state of mind**
- "Open defecation is acceptable in my community and there is no benefit to using a toilet"
- "I see some value in getting a toilet and am thinking about how to build one"
- "I've decided to buy a toilet and have/am ordering one"
- "I have a toilet in my home"

**Demand generation**
- Activities carried out to drive awareness of and interest in hygienic sanitation behaviors and improved sanitation products and services (e.g., CLTS triggering events)

**Demand activation**
- Activities carried out to persuade customers to convert their intent to purchase into a decision to purchase (e.g., door-to-door promotion and referral to suppliers, social marketing)

**Demand fulfillment**
- Activities related to the delivery of sanitation goods and services to a customer once they have made the decision to purchase a toilet (e.g., purchase of components from retailer, construction by mason)

**Objective**
- Raise awareness of the problem
- Promote a solution(s) benefiting entrepreneurs

**CATS / CLTS**

**MBS**

USAID, 2018b
Community Led Total Sanitation – Effectiveness (1)

Problem Solving

• Effective at attaining dramatic short-term-midterm open defecation (OD) reduction
• Common indicator for OD status is latrine coverage, but OD can persist with full sanitation coverage
• Mixed evidence with regards to sustained cessation of OD

Common slippage rates

• Slippage ranges between 10% and 90%
• Follow-up to ensure sustainability of ODF
• Latrine quality for improvements along sanitation ladder
Community Led Total Sanitation – Effectiveness (2)

Effectiveness in driving households up the sanitation ladder

- Almost no evidence of the ability of CLTS to drive households from basic to improved sanitation facilities
- Moving households up the sanitation ladder requires both combination of CLTS with sanitation marketing (discussed in next section) or measures intended to reduce the financial burden on households e.g. subsidies or credit
- Almost evident that the ‘last mile’/ hard to reach households and communities will need external support to move up the ladder
Community Led Total Sanitation – Effectiveness (3)

Cost effectiveness

- CLTS programs cost US$ 15-30 per household targeted in sub-Saharan Africa
- Cost increases to as high as US$ 80 per household targeted, with inclusion of other activities like training natural leaders and hygiene promotion
- Compared to: well implemented sanitation marketing and output based subsidy programs from South East Asia (US $20 to $50 per toilet delivered)
- CLTS implementation costs tremendously financed by external donors
Community Led Total Sanitation – Questions for further research

• Is it possible to achieve and sustain ODF status without sanctions? Is there evidence of CLTS achieving total access to improved sanitation facilities?

• What is the appropriate timing to introduce support mechanisms vs. the conventional CLTS process? What combination of CLTS and other programs is most efficient to booster access to improved sanitation facilities for all? Is there evidence of success of support mechanisms outside the Asian context, in particular Africa?

• What are the protective effects of improved vs. CLTS related unimproved latrines?

• What is the impact of slippage on behaviour change and health indicators?
Sanitation Marketing – Effectiveness (1)

**Sustainability and scale**

- Success in the delivery of on-site sanitation facilities in Southeast Asia and Bangladesh; difficult to replicate success in other regions, specifically sub-Saharan Africa
- Few sanitation marketing initiatives have scaled: Fewer that have scaled have been purely market based. The rest were either heavily subsidised or relied on short-term hardware supply by the government or donors which possesses a future sustainability challenge
- Majority of the interventions that scaled, spent roughly US $20 to $50 per toilet delivered; Programmatic costs were variable
- Most successful examples reached scale in 4 to 6 years: need for continued financing
- But 45 countries have costed sanitation plans, only six of these plans backed with the required financing mechanisms (WHO-GLAAS, 2019)
Sanitation Marketing – Effectiveness (2)

_Sustainability and scale_

- Three barriers to scale:
  - **Context:** e.g. social norms, economic environment, and geographical conditions
  - **Business environment:** shaped by the government policy and existence of raw materials and financial services
  - **Core sanitation market:** consists of customers, enterprises, and entrepreneurs
- To scale, well trained professionals in market development, basics of supply chain networks and some latent demand for sanitation required
Sanitation Marketing – Questions to research

• Which market rules can create a positive environment for MBS? e.g., tax reduction versus a housing policy change with respect to sanitation
• What is the optimal size and modality of subsidies for unlocking households’ investment while avoiding market distortion?
• What are the factors that influence entrepreneurs to enter and remain in the sanitation market?
• What archetypes of entrepreneurs are best suited to different types of product systems and delivery models?
Universal access to sanitation - How did the (now) rich nations did it?

President Park Chung-hee of South Korea (1917 – 1979)

South Korea Case

- Total sanitation coverage driven by high-level political leadership, as part of a wider push towards nation-building, common well-being and modernity
- Initial funding through foreign aid (mostly from the US) in the 1960s for major WASH infrastructure
- Aid was time bound hence alternative sources of funding sought for on-going capital investment
- Tariffs alone were not sufficient and were complemented with proceeds from a national liquor tax
- By 2012, South Korea had achieved 100% access to improved sanitation and 98% access to improved water.
Universal access to sanitation - How did the (now) rich nations make it?

Lessons learnt from analysis of four East Asian countries – Singapore, South Korea, Malaysia and Thailand – include, among others:

- **High-level political leadership** was crucial and did not stem from community-driven demand;
- **Some element of subsidy** was included, but alongside demand creation, and was often indirect (such as through the housing subsidy);
- **Hygiene, cleanliness and public health aims** drove sanitation improvements;
- **A well-coordinated multi-sector approach** was a necessary condition for rapid sanitation improvements;
- **Capacity building** happened alongside sanitation improvements;
- And **monitoring was continuous and standards raised** as goals were achieved.
Conclusions

- Unsafely managed sanitation remains a challenge to developing world especially the rural sectors
- The impact of poor sanitation expected to increase with population growth and climate change
- Existing approaches, CLTS and sanitation marketing need to be adopted to deal with the challenges of slippage and scale respectively
- Systems strengthening (in particular access to financing) and strong public commitment is required achieve universal access to sanitation by 2030
- Much as sanitation tops the SDG development agenda, on-site sanitation and faecal sludge removal are rarely funded