

KEY FINDINGS OF THE IMPACT EVALUATION OF RURAL SANITATION PROGRAMME IN MALI

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Introduction

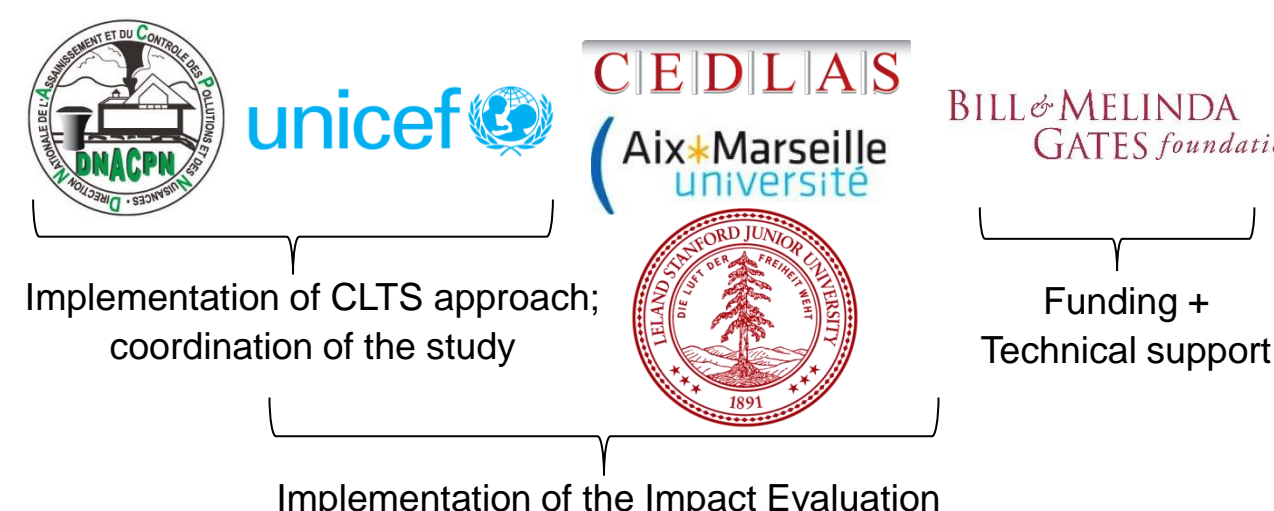
BACKGROUND

- CLTS was introduced in Mali in 2009 at a time when reaching the MDG for sanitation would require 1M people per year to gain access to improved sanitation
- CLTS started with a successful pilot in 15 villages
- The National Directorate of Sanitation included CLTS in the National Strategy for Rural Sanitation and began to scale-up throughout the country

Achieving Open Defecation Free Status means that:

- Each family has a latrine equipped with a cover that limits the proliferation of flies from the pits
- All members of the family exclusively use the latrine to defecate
- Each latrine is equipped with a handwashing device (water and soap or ash)

KEY STAKEHOLDERS

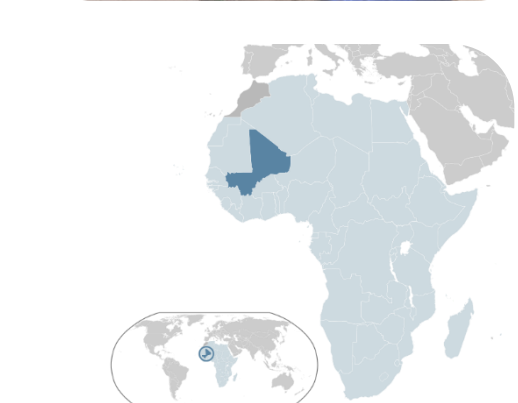


TIME FRAME

- Baseline survey: April to June 2011
- CLTS intervention: September 2011 to June 2012
- Follow-up survey: April to June 2013

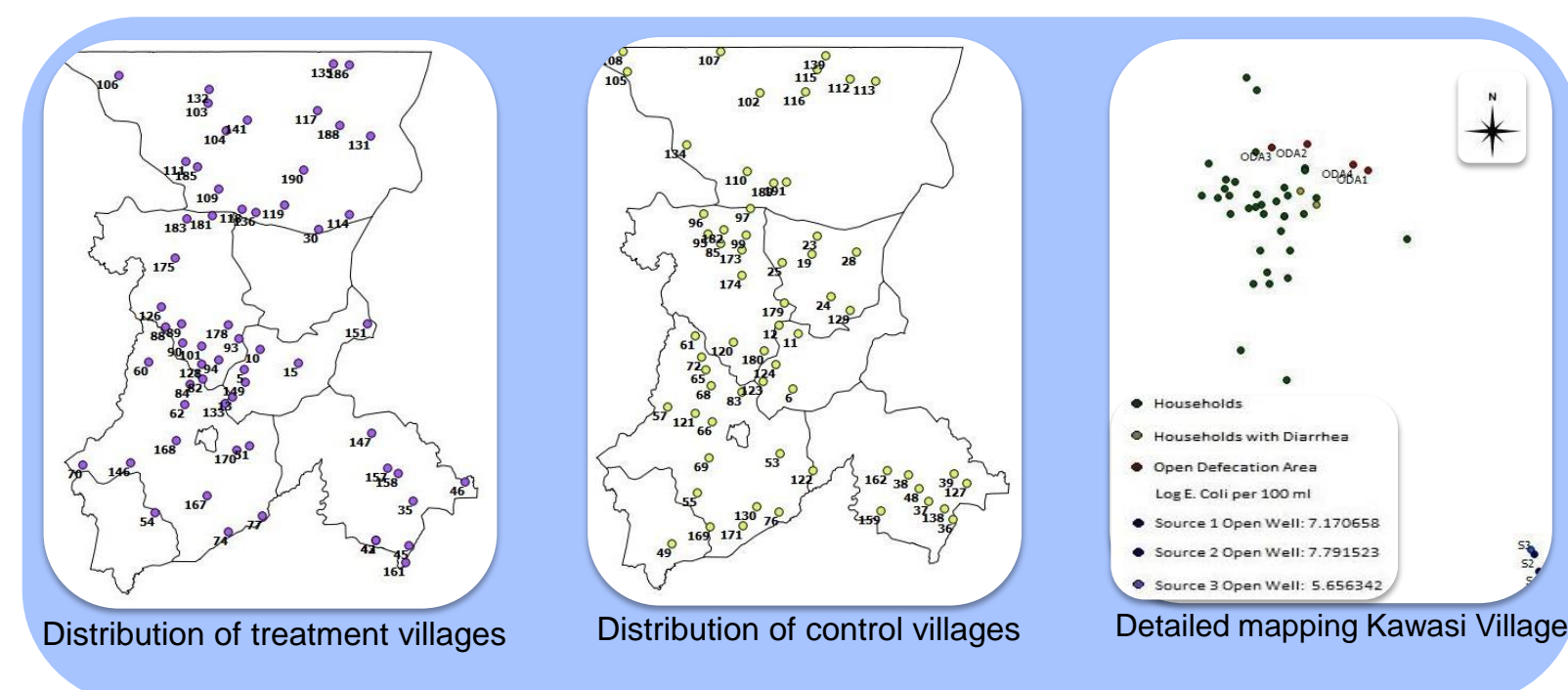
LOCATION: KOULIKORO REGION

Koulikoro was one of the regions affected by the unprecedented large-scale complex humanitarian crisis in Mali

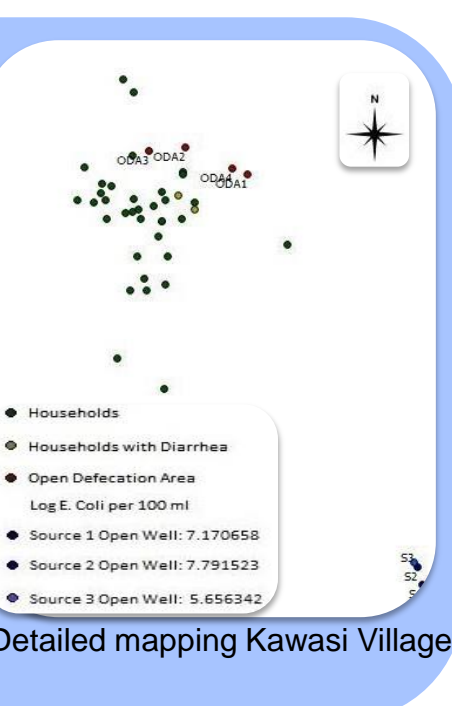


Methods

- 121 eligible communities were sampled. These were randomly selected from a census of 402 villages that met the criteria for CLTS communities: low sanitation coverage (between 30-70% households); low latrine coverage (less than 60% of households with a private latrine) and not previously enrolled in a CLTS program.
- A buffer of 10 km between each study village was set up to prevent contamination between treatment and control villages



- Baseline information was collected in all the communities prior to the intervention, covering:
 - household demographic characteristics
 - health information (including child anthropometrics)
 - hygiene and sanitation: availability of latrine and hand-washing stations, cleanliness, satisfaction, privacy, security, open defecation rates
 - drinking water microbial quality
 - educational and labor outcomes, social attitudes, capacity for collective action
- 50% of the communities randomly assigned to receive CLTS.
 - 4532 households were enrolled at baseline and 4299 were visited at follow-up (89% match at follow-up)
- Follow-up information was collected one year after the intervention finished



Results - 1

1. Very significant increase in access to private latrines, improved quality of latrines and reduction in OD:

- Access to a private latrine almost doubled among households in CLTS villages (35% in control villages, 65% in CLTS villages)
- Self-reported open defecation rates fell by 70% among adult women and men; by 46% among children aged 5-10; by 50% among children under-five
- Children too young to use latrines were more likely to use a potty in CLTS villages (51% compared to 15% in control villages)

2. Cleaner latrines and improved hygiene in CLTS villages:

- CLTS households were 3 times more likely to have soap present and 5 times more likely to have water present
- Latrines in CLTS households were more than twice as likely to have a cover over the hole of the pit
- 31% less likely to have flies observed inside the latrine
- But no impact on bacteriological contamination of water**

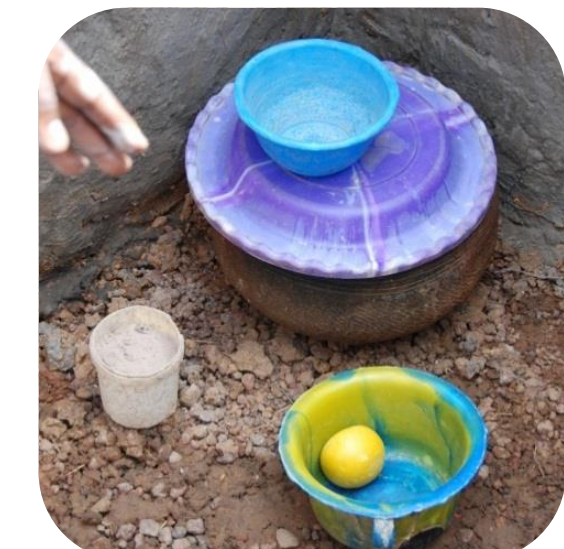
3. Positive and significant impact on growth outcomes:

- Children under-five years of age in CLTS villages were taller (+0.15 height-for-age Z-score)
- 17% reduction in stunting and 21% reduction in severe stunting for children under 2 years of age at baseline**

4. 57% reduction in diarrhea-related under-five mortality in CLTS villages

5. No statistically significant impacts on child diarrhea or respiratory illness. However, using a difference-in-difference modeling approach to account for baseline differences:

- significant reductions in loose or watery stools among children with non-exclusive breastfeeding
- significant reductions in respiratory illness, including cough, difficulty breathing, and congestion



Results - 2

6. Positive and statistically significant impact of the CLTS program on prosocial behaviors such as cooperation and community empowerment

7. Increased feelings of privacy and safety reported by women:

- Women were significantly more likely to feel as though they had privacy when defecating
- Women were significantly more likely to feel safe defecating at night

8. No evidence that the impacts of the intervention on access to sanitation declined over time

Conclusions

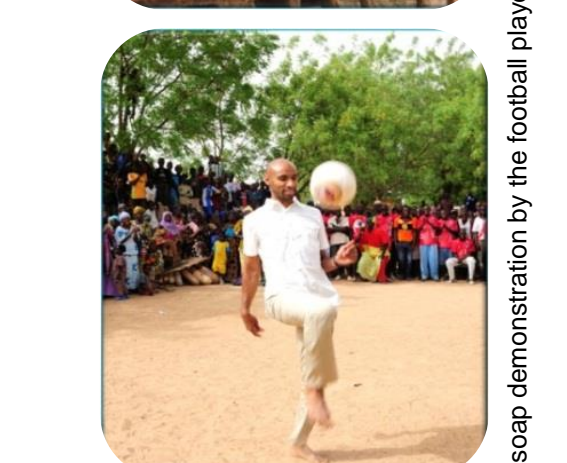
1. Sanitation programs can have a significant impact if implemented with the right approach stressing behavior and cleanliness, with:

- leadership from the government
- strong teams of national coaches and trainers
- incentives for communities and volunteers
- tight M&E including verification, certification and celebration process

2. No significant impact on diarrhea morbidity yet a strong impact on nutrition indicators

- Sanitation is a nutrition-sensitive intervention on the preventive side of nutrition issues
- CLTS contributes to the prevalence of non-diarrheal fecally transmitted pathogens⁽ⁱ⁾ (including soil-transmitted helminths, Giardia, Ascaris and hookworm); environmental enteropathy⁽ⁱⁱ⁾; and other pathogens with effects as significant as diarrhea
- More significant impact on the prevalence of diarrheal diseases may require improved adoption of hand-washing with soap practices as well as improved access to safe water

i. The nutritional and health significance of many non-diarrhoeal faecally transmitted pathogens has been masked by their diversity, their multiple presence in the same child, and their often subclinical nature, hindering the absorption of nutrients, even without the child seeming sick.
ii. Subclinical condition resulting from the ingestion of faecal bacteria, which damage the wall of the small intestine; villi are atrophied and reduced in area and thus ability to absorb nutrients.



Handwashing with soap demonstration by the football player Frédéric Oumar Kanouté