Appendix 4

External Partner Presentations

a) World Bank Water and Sanitation Program

b) UNICEF
Sanitation and Hygiene Sector Trends – Good news

• IYS has raised the political profile of sanitation and hygiene
• Increasing number of countries are developing national sanitation policies
• Improving knowledge regarding what works and what does not work
• Promising programmatic approaches
• Investments in sanitation are increasing
• Key global sector agencies are prioritizing sanitation and hygiene
Sanitation and Hygiene Sector Trends – the Bad news

- IYS ends in 6 months
- Failure to achieve MDG targets;
- Global attention starting to focus on other issues such as climate change
- Rising income inequalities and disparities in sanitation coverage between rich and poor
- Urbanization is accelerating – mega slums and small and medium towns;
- Decentralization of service provision (creates scaling up challenges)
- Still very little knowledge regarding hygiene behavior change at scale
Ideas for USAID Sanitation Strategy
“Sanitation for the Poor”

• Get high level USAID and State commitment to support a focus on improving access to hygienic sanitation of the poor
• Identify a sanitation champion within USAID
• Carry out an objective assessment of the quantity and effectiveness of existing sanitation and hygiene programs within USAID and identify constraints to doing more and better work
• Develop sanitation and hygiene expertise within USAID and its contractors and NGO grantees
• Develop tools and guidance for Missions (build on good work from WASH and EHP as well as existing tools from global partners such as UNICEF, WSSCC, WSP, etc.)
• Create incentives for missions to design and implement programs
• Work with global partners and promote harmonization of approaches in countries. Work with MCC?
Ideas for USAID Sanitation Strategy “Sanitation for the Poor”

• Improve DHS to get more and better data on sanitation access for the poor
• Focus on scaling up and programmatic sustainability – No more technology pilots
• Focus on institutional, policy and financial issues
Sanitation & Health

Thérèse Dooley
UNICEF
10 million children U5 die each year

Poor hygiene, lack of access to sanitation and unsafe drinking water together contribute to about 88% of diarrhoea deaths

Causes of Mortality among under-five Children
Global Snap Shot

Sanitation Coverage in 2004
In 16 of the 54 countries in Africa, sanitation coverage is less than 25 per cent
Trends in sanitation practices, 1990 - 2006

- % practicing open defecation: 32% in 1990, 25% in 2006
- % using unimproved facilities: 22% in 1990, 21% in 2006
- % using shared sanitation: 13% in 1990, 17% in 2006
- % using improved sanitation: 33% in 1990, 38% in 2006
Diarrhoea Risk Reduction

Reduction in diarrhea morbidity (%)

(a) Sanitation  (b) Water availability  (c) Water quality  (d) Hygiene promotion  (e) Hand washing

Previous reviews:


Sanitation and child health

Diarrhoea (incl. cholera)
Still among the major causes of death among children under five years of age: **1.5 million each year; 5,000 each day!**

88% of diarrhoeal deaths are from poor hygiene practices, contaminated drinking water, poor sanitation

**Diarrhoea morbidity** – a massive burden of disease (4 to 5 bouts/year/child, 4 billion cases/year) causes malnutrition and opportunistic infections

ORT can prevent death, but improved hygiene, water, sanitation is the only way to prevent the illness
Sanitation and child health

Other diseases

Helminth infections
Schistosomiasis (20 million severely affected patient, 20,000 deaths/yr)
Trachoma (6 mln blind …)
Typhoid
Guinea worm disease (11,000 cases)
Fluorosis and arsenicosis
Skin & eye infections,
Dengue
Geohelminths
SARS?
Emerging evidence of a link between hand-washing and acute respiratory infections (the other major killer of children)
## Cost effectiveness

<table>
<thead>
<tr>
<th>Interventions against diarrhoeal disease</th>
<th>Cost-effectiveness ratio (US$ per DALY averted)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cholera immunizations</td>
<td>1,658 to 8,274</td>
</tr>
<tr>
<td>Rotavirus immunizations</td>
<td>1,402 to 8,357</td>
</tr>
<tr>
<td>Measles immunization</td>
<td>257 to 4,565</td>
</tr>
<tr>
<td>Oral rehydration therapy</td>
<td>132 to 2,570</td>
</tr>
<tr>
<td>Breastfeeding promotion programs</td>
<td>527 to 2,001</td>
</tr>
<tr>
<td>Latrine construction and promotion</td>
<td>≤270.00</td>
</tr>
<tr>
<td>House connection water supply</td>
<td>223</td>
</tr>
<tr>
<td>Hand pump or stand post</td>
<td>94</td>
</tr>
<tr>
<td>Water sector regulation and advocacy</td>
<td>47</td>
</tr>
<tr>
<td>Latrine promotion</td>
<td>11.15</td>
</tr>
<tr>
<td>Hygiene promotion (including hand washing)</td>
<td>3.35</td>
</tr>
</tbody>
</table>

**Source:** Disease Control Priorities in Developing Countries, 2nd edition 2006 ([www.dcp2.org](http://www.dcp2.org)) – Chapter 41
Cost/Benefit

Annual economic benefit estimates for achieving the Sanitation MDG in the “off-track countries” $35 billion

Annual cost estimates for achieving the Sanitation MDG for the “off-track countries” $3.8 billion

Return on $1 investment in improving sanitation in the MDG “off-track countries” $9.1

Source: Hutton et al. 2007. Economic and health effects of increasing coverage of low cost household drinking-water supply and sanitation interventions to countries off-track to meet MDG target 10
Evidence Base – Quick Wins

**Hand Washing** – Correct hand washing at critical times can reduce diarrhoea by 44%+, New studies suggest that it can also reduce respiratory diseases by over 30%

Evidence base + costing = High Impact/Low Cost Interventions

Quick wins for Children
Note. $\beta_e$ = between-household transmission; $\beta_s$ = within-household transmission; $\phi$ = contamination of water; $\beta_{dw}$ = exposure from contaminated water; $\beta_o$ = other sources.

Risk of diarrhoea episode

- Water > 30 mins
- Water < 30 mins
- Improved water
- House connection

- No/inadequate san'n
- Improved sanitation

- No hyg. promotion
- Exposed to hyg. p.

Sequelae, survival/death
<table>
<thead>
<tr>
<th>Activity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Cochrane review: impact of excreta disposal on health.</td>
</tr>
<tr>
<td>B</td>
<td>Water-borne vs. -washed transmission by pathogen</td>
</tr>
<tr>
<td>C</td>
<td>Review of Ascariasis and handwashing.</td>
</tr>
<tr>
<td>D</td>
<td>Assess prevalence of safe disposal of child faeces in selected countries using DHS or MICS data</td>
</tr>
<tr>
<td>E</td>
<td>Review of the relation between child faeces disposal and child health</td>
</tr>
<tr>
<td>F</td>
<td>Review the availability of data on hygiene behaviour and exposure promotion.</td>
</tr>
<tr>
<td>G</td>
<td>Compile existing evidence of efficacy of interventions</td>
</tr>
</tbody>
</table>

Assess population needing > 30 min. for water collection
Community Based Sanitation Approaches

- Open Defecation Free Communities
- Community based process
- Demand Driven
- Technology choice secondary
- Social change – pride and dignity
- Community managed
Community Based Sanitation Approaches

Asia – Cambodia, Bangladesh, India, Indonesia…. Ramakrishna Mission, Total Sanitation Campaigns – Gram panchayat (529 Districts). The Latrine Bupati – Clean Friday movement

Africa – Ethiopia, Zambia, Sierra Leone -Kaka free villages

America’s – Bolivia

In total approximately 17 countries

SLTS – School Led Total Sanitation in Pakistan
The process

• District Council led
• Training of CLTS facilitators
• Identification of villages
• Community mapping of defecation areas
• Shit volume calculations
• Faecal-oral transmission
• Health cost calculations
• Toilet cost calculations

‘One Family, One Toilet!’
HRH Chief Macha
The process

• ‘Walk of shame’
• Community resolution
• Technical advice for toilet construction
• Formation of Sanitation Action Groups (SAGs)
• Monitoring, verification and certification
## Review after 2 months

<table>
<thead>
<tr>
<th>No.</th>
<th>Village</th>
<th>Popn.</th>
<th>No. of households</th>
<th>Number of toilets and % coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Before CLTS</td>
</tr>
<tr>
<td>1</td>
<td>Siamunyeu</td>
<td>253</td>
<td>35</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>Siatembo</td>
<td>927</td>
<td>116</td>
<td>16</td>
</tr>
<tr>
<td>3</td>
<td>Siakacheka</td>
<td>645</td>
<td>86</td>
<td>9</td>
</tr>
<tr>
<td>4</td>
<td>Siankope</td>
<td>633</td>
<td>89</td>
<td>16</td>
</tr>
<tr>
<td>5</td>
<td>Sibbilisokwe</td>
<td>186</td>
<td>27</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>Munapuutu</td>
<td>618</td>
<td>68</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>Chidakwa</td>
<td>281</td>
<td>26</td>
<td>20</td>
</tr>
<tr>
<td>8</td>
<td>Siachiwena</td>
<td>137</td>
<td>14</td>
<td>6</td>
</tr>
<tr>
<td>9</td>
<td>Chambwa</td>
<td>169</td>
<td>20</td>
<td>13</td>
</tr>
<tr>
<td>10</td>
<td>Sibajene</td>
<td>326</td>
<td>52</td>
<td>27</td>
</tr>
<tr>
<td>11</td>
<td>Macha</td>
<td>265</td>
<td>40</td>
<td>22</td>
</tr>
<tr>
<td>12</td>
<td>Dibbilizwe</td>
<td>96</td>
<td>42</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Totals</strong></td>
<td><strong>4536</strong></td>
<td><strong>615</strong></td>
<td><strong>140</strong></td>
</tr>
</tbody>
</table>
Review after 2 months

% sanitation coverage

Before After

Siamunyeu
Siatembo
Siakacheka
Siakacheka
Siankope
Sibbilisokwe
Munapuutu
Munapuutu
Chidakwa
Siachiwena
Chambwa
Sibajene
Macha
Sibajene
Dibbilizwe
Dibbilizwe
OVERALL
Review summary

- Overall sanitation coverage increased from 23% to 88% for population of 4,536.
- 68% of toilets met the NRWSSP (MDG) definition.
  - Coverage increased from 15% to 60%, therefore MDG sanitation target (58%) surpassed in just 2 months.
- 9 out of 12 villages (75%) ODF.
- 3 non-ODF villages had respective latrine coverage of 94%, 95% and 100%.
- Villages with 55% and 65% coverage were still ODF.
- Unused sanplats were applied under CLTS.
- Only 22% of toilets had hand-washing facilities.