#### "Sanitation Intervention in Puri district of Orissa, India"

A Project Proposal for Randomized Controlled Trial study with the London School of Hygiene & Tropical Medicine

# 1. Background:

The London School of Hygiene and Tropical Medicine (LSHTM) is conducting a cluster-randomized, controlled field trial in Orissa - one of the states in eastern India, where the Additional Liaison Office for (East) of WaterAid is located. The primary objective of the study is to provide rigorous evidence on the effectiveness of the construction and use of latrines in rural settings to prevent diarrhoeal disease and helminth infection, important contributors to the disease burden in low-income countries.

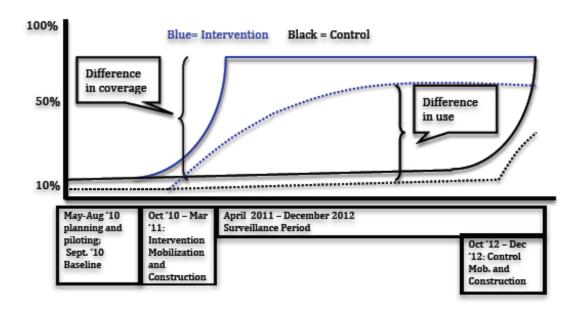
The study will also generate information on how the intervention actually impacts exposure to human excreta along principal transmission pathways, and explore the extent to which different levels of acquisition and use of on-site sanitation among householders impact disease throughout the community. In addition, it will also report on the cost and cost-effectiveness of the intervention and its impact of lost days at school and work and expenditures on related health care. The study will provide essential information that governments, policy makers, donors, lenders and implementing organizations can use to develop and optimize sanitation strategies worldwide that lack access to basic sanitation.

The literature review by authors of the proposal for the study (Christopher Andrews and Thomas Clasen) suggested the lack of rigorous evidence on the contribution of sanitation interventions to prevent diarrhoea in young children. The same authors independently came to the same conclusion after conducting a Cochrane review of excreta disposal interventions to prevent diarrhoea (Clasen 2010). Besides, nearly all the studies combined sanitation with water or hygiene interventions, making it impossible to determine the contribution of sanitation alone.

### 2. The study design:

Local NGO/s who are partners of WaterAid India will mobilize householders in target villages to construct and use latrines in accordance with the guidelines on Government of India's Total Sanitation Campaign (TSC). The Total Sanitation Campaign provides cash subsidies of Rs 2200 as incentive to all families estimated to be living Below the Poverty Line (BPL) to install toilets in their homes and use them. Although all participating villages/clusters will receive the intervention over the course of the study, construction of latrines will be implemented in two phases with 50 villages/clusters receiving the latrines at the outset, and the other 50 receiving latrines 18 months later. By randomly allocating villages to each study arm, those that have not yet received the intervention will serve as **controls** for those that have, providing a randomly-selected, contemporaneous control group in classic parallel study design.

United Artists Association (UAA) will be the lead Partner for WaterAid. They shall work with 5 other Local NGOs. Each of the 5 Local NGOs will work with Village Level Water and Sanitation Committees. The Roles and Responsibilities of UAA and the Local NGOs, the List of Villages, and the Operational Plan are attached as *Annexures 1, 2 and 3. (Please see MS Excel Sheet for Annexure 2)* 



Study design: Reproduced from LSHTM proposal submitted on 26 April, 2010; page 10

### Project interventions for the randomised trial:

Local NGOs contracted by WaterAid are expected to deliver the intervention by

- (i) coordinating implementation in collaboration with local government officials,
- (ii) mobilising community members using PRA/CLTS methods and conducting IEC activities,
- assisting in the formation of Village Water and Sanitation Committees, youth groups and elders groups, (iii)
- training of village motivators, SHGs leaders, teachers etc. on hygiene practices, (iv)
- (v) training of local masons, and
- helping with the running of sanitary marts. (vi)

The government provides subsidies or 'incentives' to households below poverty line only upon construction of the toilet. Under TSC, households above the poverty line receive no subsidy, the assumption being that they would start building latrines as a result of exposure to IEC campaign.

LSHTM submitted the funding proposal (to Bill and Melinda Gates Foundation) on 26 April 2010, which was shared with WAI, ALOE in June 2010. Following this, WaterAid, India (ALOE) wrote to Government of Orissa and organised a meeting between representatives of LSHTM and the Principal Secretary, Rural Development Department, seeking approval of the Government to the study. The LSHTM shared a concept note on the randomised trial with the Principal Secretary. In the meeting the Principal Secretary agreed to support the study, and directed the District water & Sanitation Mission (Puri) to provide necessary support, but made it clear that no official order can be issued deferring program interventions under Total Sanitation Campaign in the 50 Control villages by 18 months as per the study design. <sup>2</sup>The above referred letter from the Government was issued on 8th June 2010 and preparatory work on sampling etc started in June, 2010.

# 4. Partners in the study:

This is a partnership between the following international organisations:

<sup>&</sup>lt;sup>1</sup> Section 1.3 / Page 8 of LSHTM proposal

<sup>&</sup>lt;sup>2</sup> WaterAid has also underscored this risk to the study design in discussions with LSHTM team and recorded it in e-mail communications.

- WaterAid
- LSHTM
- SHARE (Sanitation and Health Research)

The Government of Orissa (GoO), is by implication a partner also since the interventions will be a component of the Total Sanitation Campaign being implemented by GoO in the state.

# 5. Project Activities

Subsequent to the agreement on additional funding, LSHTM team carried out a detailed inventory of 100 villages (out of a list of 385 provided by Puri District water & Sanitation Mission) through WaterAid India's (WAI) local partner NGOs. The LSHTM shared the following findings:

Details	Intervention	Control	Total
Total no. of HH	4782	4823	9605
No. of BPL HHs	3250	3261	6511
No. of HHs not			
included in the BPL list	1532	1562	3094

The villages are scattered over seven Community Development Blocks of Puri district.

WAI's interventions will be focussed on ensuring that at least 90% households in the "intervention" villages have toilets installed in their homes by 31st May, 2011. Thereafter, WAI will continue to carry out communication and social mobilisation activities to ensure that the toilets will be used by the family members. However, WAI's commitment will continue till the completion of toilet installation in the "control" villages after October 2012, following the design timeline of the LSHTM trial.

The actual activities will constitute the following:

- (i) coordinating implementation in collaboration with local government officials,
- (ii) mobilizing community members using PRA/CLTS methods and conducting IEC activities,
- (iii) assisting in the formation of Village Water and Sanitation Committees, youth groups and elders groups,
- (iv) training of village motivators, SHGs leaders, teachers etc. on hygiene practices,
- (v) training of local masons, and
- (vi) Helping with the running of Production Centers which will serve as the supply chain for home toilets, primarily for the intervention villages but not necessarily restricted to it.

### Roles and Responsibilities of Implementing Stakeholders

### United Artists Association (UAA)

- ✓ Designing site specific activities in consultation with community and NGO Partners,
- ✓ Liaison with Water Aid.
- Capacity development of partner NGOs, Animators' & other implanting bodies,
- ✓ Day to day monitoring for improving efficacy of planned activities at all level,
- ✓ Liaison and coordination with Government & oter stakeholders like PRIs etc...
- Documentation and overall reporting (both physical & financial).

# > Cluster level NGO Partners:

- ✓ Implementing designed works at cluster level,
- ✓ Providing inputs to UAA for improving efficacy of project
- ✓ Monitoring actions of cluster coordinator & animators,
- ✓ Developing capacity of village/ panchayat level stakeholders,
- ✓ Provide support to UAA for coordinating & finance leveraging from DWSM,
- ✓ Supporting community groups to manage central & satellite production centers. They will also responsible for ensuring production of required toilet components,
- ✓ Liaison with Block and GP level line persons,
- ✓ Accountable to UAA in achieving planned progress,
- ✓ Regular reporting (physical & financial) and local level documentation