Identification and Assessment of Water, Sanitation, and Hygiene Practices of Two Rural Communities in Greater Accra, Ghana
Reena Chudgar, Andrew Foote, Christine Khosropour, and Adam Prater

Team Members, Schools/ Disciplines
• **Reena Chudgar**, Rollins School of Public Health, Hubert Department of Global Health
• **Andrew Foote**, Emory University, Department of Anthropology, and Georgia Institute of Technology, Department of Civil and Environmental Engineering
• **Christine Khosropour**, Rollins School of Public Health, Department of Epidemiology
• **Adam Prater**, Emory School of Medicine, and Rollins School of Public Health, Department of Epidemiology

Project Partners
• Bernard Keraita, PhD, Project Supervisor
• Center for Global Safe Water at Emory University
• International Water Management Institute (IWMI), West Africa Regional Office
• Kwame Nkrumah University of Science and Technology (KNUST), Kumasi
• University of Copenhagen
• Community Water and Sanitation Agency (CWSA), Accra

Populations/Communities Served
Two Rural Communities in the Greater Accra Region:
• Dawa, Dangbe West District
• Tugakope, Dangbe East District

Project Timeframe
• **January – April 2009**: Establish project goals and develop proposal
• **May 2009**: Meet with in-country partners to discuss project implementation and logistics
• **June 2009**: Data collection in Dawa
• **July 2009**: Data collection in Tugakope. Perform preliminary data analysis, develop draft report for project partners, final meeting with in-country partners

Project Goals
Compare two project communities by:
• Creating a map of community water and sanitation facilities and participating households by obtaining GPS coordinates at each of these points
• Administering door-to-door interviews to evaluate the water, sanitation, and hygiene knowledge and practices of community members, and assess diarrheal prevalence and risk factors for diarrheal disease
• Conducting focus group discussions and key informant interviews to assess community members’ perceptions of water, sanitation, and hygiene practices
• Testing water quality of public water sources and of water stored within each household

Expected Outcomes
Evaluate differences between the communities by:
• Comparing maps of households and respective water and sanitation facilities
• Analyzing baseline data on water, sanitation and hygiene practices and diarrheal prevalence in adults and children less than 60 months of age
• Examining community members’ perceptions and values towards water, sanitation, and hygiene practices
• Determining the level of *E. coli* present in public water sources and household water storage containers

Progress to Date
• Completed 120 door-to-door interviews, 4 focus group discussions and 7 key informant interviews
• Analyzed water samples from 23 households and 7 public sources
• Provided recommendations to community members regarding water, sanitation, and hygiene practices
• Created and distributed detailed community maps and preliminary reports, which included the following:

<table>
<thead>
<tr>
<th>Measure of Interest</th>
<th>Dawa (HH)</th>
<th>Tugakope (HH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Source of Water</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Piped Water</td>
<td>90</td>
<td>3</td>
</tr>
<tr>
<td>Surface Water</td>
<td>8</td>
<td>97</td>
</tr>
<tr>
<td>Sanitation Service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bush</td>
<td>79</td>
<td>26</td>
</tr>
<tr>
<td>Other latrine types</td>
<td>21</td>
<td>74</td>
</tr>
<tr>
<td>Soap present</td>
<td>59</td>
<td>94</td>
</tr>
<tr>
<td>Diarrheal prevalence (in children under 60 months) in the last week</td>
<td>26</td>
<td>17</td>
</tr>
</tbody>
</table>

Table 1: Preliminary comparison of water, sanitation and hygiene measures of interest of households (HH) within the project communities

Next Steps
• Perform in-depth analysis of collected data
• Distribute final report to project partners
• Assist in planning of follow-up studies in the project communities focusing on hygiene practices
• Continue collaborations with in-country partners by creating the potential for other Emory students to continue work on the project