U.S. Universities and International Water, Sanitation, and Hygiene
A Proposal for a New Consortium and a Survey of Current Activities
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This preliminary report focuses on the growing response of U.S. institutions of higher education to the global need for drinking water, sanitation, and hygiene (“WASH”) internationally.

The lack of access to safe water, adequate sanitation, and hygiene education presents a profound challenge for human health, economic development, and environmental sustainability in developing countries. Nearly 1 billion people lack access to safe water, and 2.5 billion people lack access to adequate sanitation.

This preliminary report presents results of a recent survey designed to determine which universities in the United States are working in the various types of WASH activities abroad. Not intended to be comprehensive, this survey provides only an initial glimpse of the scale of the activity. (Those unaware of the survey or who have not yet responded are urged to take the survey at http://studentvoice.com/csu/WaSHactpubunivFA09.)

CONSORTIUM PROPOSAL

Looking ahead, individuals associated with the March 3 Capitol Hill briefing are exploring the possibility of creating a consortium of U.S. universities involved in international WASH programs. One initial purpose of the consortium would be to promote the expansion and greater coordination of WASH activities in higher education, as well as to strengthen universities’ WASH linkages with the U.S. government, nongovernmental organizations (NGOs), and academic institutions and governments abroad.

Many U.S. universities and colleges are already engaged in addressing global WASH concerns, or are seeking to expand WASH initiatives, in ways that include the following activities:

- Implementing practical, on-the-ground, WASH projects involving faculty and students;
- Partnering with colleges and universities in developing countries on training programs and other approaches to increase in-country capacity;
- Training the next generation of WASH professionals with an emphasis on experiential learning;
- Initiating and evaluating WASH-related technologies;
- Assisting the U.S. Agency for International Development (USAID) and U.S. Department of State, including individual USAID Missions, as well as other U.S. government agencies working internationally, in researching and developing evidence-based WASH strategies and in analyzing and evaluating outcomes;
- Promoting awareness beyond public health and engineering programs of the economic, gender equity, national security, social, and environmental benefits of advancing activities to address the global WASH crisis;
- Developing public-private partnerships with corporations, civil society, foundations, and faith-based organizations.

A consortium would allow universities and colleges engaged in WASH activities abroad not only to work together in a more coordinated fashion, but also to encourage additional technological innovation, strengthen academic, philanthropic and governmental support, and increase momentum for the global WASH sector generally. A consortium would also facilitate a clearinghouse of information and best practices, which could easily be shared with counterparts outside of academia. As demands grow for effective foreign assistance in the WASH sector, U.S. college and university faculty, staff, and students can respond with technical expertise, knowledge, and personnel in host countries to achieve the goals of sustainable WASH-related development programs.

The eventual purposes of such a consortium will be determined by those choosing to participate in coming years.

The Center for Strategic and International Studies (CSIS) in Washington, D.C., has offered to help facilitate the initial growth of such a consortium. The CSIS Global Water Futures Project, involved with water and sanitation issues for years, has examined in depth the many dimensions of the global challenge. CSIS can provide a neutral venue for U.S. academic institutions and offer a convening for NGOs, the private sector, and the U.S. government.

CSIS is developing a Web site to include the following: a listing of universities and colleges that are engaged in WASH activities abroad; reports noting potential areas where additional research and scholarship are needed; and alerts to the WASH community regarding relevant developments in WASH policy. For further information on CSIS’s role in facilitating such a consortium, please contact Katherine Bliss (kbliss@csis.org) or Katryn Bowe (kbowe@csis.org).

The prospective consortium is not designed to exclude, but rather to draw together all interested representatives from all universities and colleges in the United States engaged in sustainable WASH activities internationally. Your involvement in this upcoming effort is greatly appreciated.
SURVEY OF GLOBAL WASH ACTIVITIES BY U.S. UNIVERSITIES AND COLLEGES

This survey is the product of an informal, growing collaborative effort among university professors, students, administrators, and researchers who are concerned with access to water, sanitation, and hygiene (WASH) in low-income countries around the world.

In late 2009 and early 2010, a short, Web-based survey was circulated to individuals at American public and private universities. (See Appendix A.)

The purpose was to conduct a preliminary institutional analysis of higher educational institutions engaged in WASH-related activities internationally. Funding was provided by the Wallace Genetic Foundation to individuals at Colorado State University (CSU) and Emory University (Emory) to oversee survey development, dissemination, and analysis.

Professors and students at CSU and Emory worked on a database structure in order to verify that questions and results from various universities would match. The survey was sent to StudentVoice for appropriate edits, formatting, design, and database development.

The preliminary list of contacts began with names of university individuals known or believed to be involved with WASH activities overseas. These people were in turn asked to pass on names of additional possible contacts. The intent of this informal survey, though not designed to be a comprehensive reckoning of U.S. academic involvement in WASH abroad, was to begin to cast the information net as widely as possible.

All contact names were separated into affiliations with either public or private universities and colleges. This division was thought to better organize the information and to split the tasks between CSU (responsible for responses from the public universities) and Emory (responsible for responses from the private universities). Individuals and organizations were identified and compiled in an online-accessible Excel spreadsheet on Google Docs.

Additionally, academic affiliates of organizations that are known to work in the WASH sector were obtained through groups such as Engineers Without Borders, the Universities Council on Water Resources, the National Institutes for Water Resources, Peace Corps Masters International Programs, and the Association of the Schools of Public Health.

All survey responses are stored on the StudentVoice Web site. In addition, CSU and Emory have created a master database to document future responses.

The survey has been distributed so far to a total of 189 people, 131 of whom work at public institutions of higher education and 58 of whom work at private educational institutions of higher education.
PRELIMINARY RESPONSE RESULTS

As of February 22, 2010, 66 out of 189 people (or 35%) have responded, 38 from public universities and 28 private universities.

Responses from some key institutions are missing, due in part to time constraints and difficulty of communicating with individuals working in the field.

As noted, this survey is intended as a preliminary look at the activities of American public and private universities involved in WASH activities in developing countries. More survey responses are expected and will be included in further analyses.

Figure 1: Countries where U.S. institutions of higher education are engaged in WASH activities

Public Universities

Respondents noted WASH activities taking place in a variety of countries: Bolivia, Brazil, Burkina Faso, Cambodia, Cameroon, Chile, Egypt, El Salvador, Ethiopia, Ghana, Haiti, Jordan, Kenya, Mali, Mexico, Morocco, Nicaragua, Niger, Nigeria, Oman, Peru, Philippines, Vietnam, and Zambia. The predominance of activity is taking place in Ghana, Guatemala, and Honduras.

The primary focus of activities includes: Drinking Water (47.0%), Sanitation (29.4%), and Hygiene (21.6%). When asked to characterize their WASH activities, most listed Education (21.3%), followed by Research (20.0%), Service Delivery (20.0%), Training (17.5%), and Monitoring and Evaluation (15.0%). (See Figure 2.)
The question about funding offered the most varied responses, with 29.6% specifying “other” sources, such as corporate/private funding, fundraisers, and individual contributions, and 25.9% receiving funding from their university or college, 18.5% coming from U.S. government, 11.1% from U.S. philanthropic foundations and out-of-pocket contributions, and 3.7% from nonprofit organizations. None of the respondents indicated a funding source from a foreign government or agency. (See Figure 3.)

International collaboration was noted among public educational institutions such as: Chulalongkorn University, Thailand University, Prague University, Nanjing Forestry University, University of Dar Salaam, University of Costa Rica School of Public Health, and Universidade de Concepcion, Chile. Many respondents provided contact information for persons conducting additional WASH projects internationally.

**Private Universities**

Respondents from private institutions also noted WASH activities happening in a multitude of countries: Bangladesh, Benin, Brazil, Colombia, Dominican Republic, Ecuador, Guatemala, Haiti, India, Indonesia, Israel, Jamaica, Jordan, Kenya, Laos, Madagascar, Malaysia, Mexico, Morocco, Mozambique, Nepal, Peru, Philippines, Senegal, South Africa, Sri Lanka, Uganda, and Zambia, with the most work happening in Kenya, India, and Tanzania. (See Figure 1.)
The primary focus of WASH activities was Drinking Water (47.9%), followed by Sanitation (27.1%) and Hygiene (25.0%). When asked to characterize their WASH activities, most listed Education (20.3%) and Service Delivery (18.9%), followed by Monitoring and Evaluation (17.6%), Research (17.6%), Training (13.5), Policy (6.8%), and Other (5.4%). Responses for “Other” consisted of funding assistance, design implementation, and capacity building. (See Figure 2.)

The majority of the funding reported was coming from “Other” sources (30.4%). This included corporate funding, group and individual fundraising, and individual contributions. Respondents also noted that 21.7% of funding came from universities and colleges, 13.0% came from the U.S. government, 13.0% came from U.S. philanthropic organizations, 13.0% came from out-of-pocket contributions, and 8.7% came from nonprofit organizations. (See Figure 3.)

Similar to public institutions, respondents from private institutions provided numerous international collaborations with higher educational institutions including: Universidad de Toribio Rodriguez de Mendoza, Peru; Vellore Institute of Technology (VIT), India; Benin Ugandan Martyrs University, Uganda; Sichuan Centers for Disease Control and Prevention, China; and University of the Philippines College of Public Health, Philippines. Contributors from private universities also provided contact information for additional persons conducting WASH activities internationally.

**Figure 3: WASH funding**

<table>
<thead>
<tr>
<th>WASH Funding Sources in U.S. Public and Private Institutions</th>
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</thead>
<tbody>
<tr>
<td>University/College</td>
</tr>
<tr>
<td>US Government</td>
</tr>
<tr>
<td>US Philanthropic Organization</td>
</tr>
<tr>
<td>Out-of-Pocket Contributions by Faculty</td>
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<tr>
<td>Non-profit Organization</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>

Note: “Other” includes corporate/private funding, fundraising, and individual contributions.
AUTHORS

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Left: Matthew Freeman. Location: Kenya.
Right: Cathy Fitzgerald. Location: Kenya. Students are from University of Nevada Reno, Student Association for International Water Issues.
APPENDIX A

U.S. UNIVERSITIES AND COLLEGES AND INTERNATIONAL WATER, SANITATION, AND HYGIENE (“WASH”) 2009 SURVEY

We are asking for your help in identifying American universities and colleges involved with WASH programs internationally. The primary purpose of this short survey is to develop a rough inventory of faculty and students at U.S. universities and colleges currently engaged in funded WASH activities in developing countries. It is not intended to collect a detailed description of the actual WASH activity.

[Note: “WASH” refers to drinking water, sanitation, and hygiene programs and projects. This is designed to be a narrow survey to identify only WASH-related activities, not programs that are focused on irrigation, aquaculture, or watershed management unrelated to drinking water.]

This initial survey could help:
—Develop networks among U.S. universities and colleges on behalf of WASH internationally;
—Inform USAID and the State Department and other agencies of potential technical and policy support on behalf of WASH from universities and colleges;
—Allow foreign universities and governments to identify academic expertise and networks to improve in-country WASH activity;
—Inform Congress of existing WASH activities by institutions of higher education.

Thank you for your time in taking the survey. This information will be compiled and available to survey respondents once we have completed the data collection phase.

Survey Questions

1) Please identify faculty and/or student groups at your university/college that are involved in current WASH activities broad:
   a. Name(s) _________________
   b. E-mail ____________________
   c. University __________________
   d. Department ________________

2) List country(s) where your university/college currently has active and funded WASH activities:
   __________________________________________________________
   a. Which WASH activity is the primary focus? (Check more than one if appropriate):
      (1) Drinking water
      (2) Sanitation
      (3) Hygiene
   b. Which of the following best characterizes the WASH activities? (Check more than one if appropriate):
      (1) Research
3) What is the primary source of funding for current WASH activity? Please specify for all that apply.
   a. University/College itself; list which department __________________
   b. U.S. government, list which agency ____________________________
   c. U.S. philanthropic foundation, list: _____________________________
   d. Foreign government or agency, list: _____________________________
   e. Nonprofit organization; list: ________________________________
   f. Out-of-pocket contributions by hardworking faculty and/or students __________
   g. Other __________________________

4) Do you have collaborative projects with foreign universities or colleges for WASH-related activities? If so, please provide their names and locations. ________________________________

5) Who else do you know that would be helpful in building this WASH network or provide additional information about WASH Activities?

For more information about the survey, please contact Faith Sternlieb at Colorado State University at faith.sternlieb@colostate.edu or Alison Kernohan at Emory University akernoh@emory.edu.