



Caitlin Grady

Caitlin is currently serving as a legislative fellow in the United States Congress for the Office of Representative Betty McCollum (Minnesota District 04). In this capacity she is managing a portfolio of issues including trade, international education, civil rights, STEM education, and global food security issues. Caitlin completed her master's degree in the Department of Agricultural and Biological Engineering at Purdue in 2011 and her bachelor's degree from Virginia Tech prior to Purdue. Both during and before to graduate school, Caitlin has performed development-related research on water and food security programs in over 11 different countries.



International water and food
security development:
Performance evaluation and
assessment of research needs at
multiple scales

March 27th, 2015

2:30 PM

Hampton Hall G212

Abstract

Water and food security remain the top development challenges of the decade, and perhaps the century. Since the Millennium Development Goals were established in 2000, billions of people have obtained access to more food, better nutrition, improved water, and basic sanitation facilities worldwide. This progress has been accomplished through the dedication of international organizations, non-governmental organizations, country-level governments, private corporations, and individuals at international, regional, and local scales. Despite this progress, due in part to a growing population and a changing climate, the current efforts to provide basic human needs including water and food provisioning are not sufficient to end the widespread water related deaths and chronic hunger issues.

The research presented herein focuses on understanding previously implemented water and sanitation programs, as well as current research for development efforts relating to water and food security. Overall, this work begins with an analysis of limitations to previously implemented projects, then moves to an analysis of a subset of organizations that are implementing water and food development interventions, and finally concludes with a regional example of how future climate change may alter the management and implementation of water and food programs. Specifically, this work addresses: (1) the quality of improved drinking water sources in western Kenya and southern Vietnam; (2) the factors that influence access to water and sanitation facilities in southern Vietnam; (3) stakeholder perceptions and research needs of water and food development programs in the Mekong Basin; and (4) how project selection tools can leverage social networks to prioritize grant distribution. These findings suggest that careful attention should be paid to how organizations define and monitor development interventions. This work also recommends priorities for the next generation of development goals.