This issue on WASH and nutrition integration features a recent USAID webinar and briefs from USAID and WASHplus. Also featured is an upcoming conference organized by Catholic Relief Services and links to a May 2015 seminar by Irish Aid. A chapter from a 2015 report by the International Food Policy Research Institute discusses evidence of the link between sanitation, child height, and well-being. Other reports/articles discuss environmental enteropathy findings and explore water, food security, and nutrition linkages.

USAID AND WASHPLUS RESOURCES

USAID WASH and Nutrition Webinar, 2015. [Link](#)
Elizabeth Jordan and Katherine Dennison of USAID discuss the connection between undernutrition and lack of access to water, sanitation, and hygiene (WASH) services and highlight opportunities for integrated programming to achieve better health outcomes. Other recent USAID WASH webinars include: | [Sanitation](#) | [Agricultural Water Management](#) | [Sustainability of WASH Services](#) | [Drinking Water Quality](#) |

WASH and Nutrition Implementation Brief, 2015. USAID. [Link](#)
Positive nutritional outcomes are dependent upon WASH interventions and nutrition actions. Poor WASH conditions create an additional burden of undernutrition. Opportunities for co-programming WASH in nutrition programs exist and are discussed in this brief.

Integrating WASH and Nutrition Learning Brief, 2015. WASHplus. [Link](#)
Since 2010, the USAID-funded WASHplus project has been engaged both at the global and country levels in stimulating the discussion and improving the evidence base around integrating WASH into nutrition programming, sharing experiences and approaches to integrating the two sectors. This learning brief describes WASHplus country activities in Bangladesh, Mali, and Uganda; global knowledge sharing efforts; and other WASHplus activities.

EVENTS

September 14–16, 2015 – Catholic Relief Services (CRS) Integrated Nutrition Conference, Nairobi, Kenya. [Link](#)
CRS and members of the NGO, research, and donor community will host a two-day conference focusing on integrated solutions relevant to East Africa. Global leaders in the areas of
nutrition, water and sanitation, agriculture, health, and early childhood development will come together to: bring knowledge, evidence, and experience on implementing integrated nutrition-sensitive programming; identify best practices in integrated nutrition-sensitive programs; and identify gaps that will lead to the development of a learning agenda for East Africa.

**May 2015 – Irish Aid seminar – Shit Stunts: Refocusing Priorities in Nutrition and WaSH.** [Link](#)
Integration of nutrition and WASH programs was the key topic discussed at this multi-sectoral panel seminar hosted by Irish Aid, the Irish Forum for Global Health, and the Development Studies Association of Ireland on May 19.

**NEWS**

Guatemala is suffering from a crisis of chronic malnutrition, especially in indigenous Mayan communities where seven out of 10 children are stunted. According to the World Food Program, the country has the fourth-highest rate of chronic malnutrition in the world. This article features work by USAID, CARE, UNICEF, and others to combat malnutrition in Guatemala.

**VIDEOS**

**Stunting Persists Despite Optimal Feeding: Are Toilets Part of the Solution?** 81st Nestle Nutrition Workshop, South Africa, 2015. A Pendergast. [Video](#) (Registration required to view video)
In this presentation, Prendergast explains how recurrent infections may be implicated in the aetiology of stunting. Data show that diarrhea has a significant impact on height. Children living in environments of poor sanitation and hygiene are continuously exposed to pathogenic microbes. This causes a change in intestinal structure and function. Improvements in water, sanitation, and hygiene may well address this environmental enteric dysfunction, and promote linear growth.

**REPORTS**

This chapter concludes that water, sanitation, and hygiene can have a profound effect on health and nutrition. A growing base of evidence on the link among sanitation, child height, and well-being has come at an opportune time, when the issue of sanitation and nutrition in developing countries has moved to the top of the post-2015 development agenda.

Interventions aimed at increasing water availability for livelihood and domestic activities have great potential to improve various determinants of undernutrition, such as the quantity and diversity of foods consumed within the household, income generation, and women’s empowerment. However, current evidence on the topic is diluted across many different publications. This paper aims to connect the dots and review the literature available on the linkages between irrigation and food security, improved nutrition, and health
This report is the fourth in an annual series that provides a comprehensive overview of major food policy developments and events. In this report, researchers, policy makers, and practitioners review what happened in food policy in 2014 at the global, regional, and national levels, and—supported by the latest knowledge and research—explain why.

This report explores the relations between water and food security and nutrition, from household level to global level. It investigates these multiple linkages, in a context of competing demands, rising scarcities, and climate change. It explores ways to improve water management in agriculture and food systems, as well as ways to improve governance of water, for better food security and nutrition for all, now and in the future.

The State of Food Insecurity in the World, 2015. FAO. Link
About 795 million people are undernourished globally, down 167 million over the last decade, and 216 million less than in 1990–1992. The decline is more pronounced in developing regions, despite significant population growth. In recent years, progress has been hindered by slower and less inclusive economic growth as well as political instability in some developing regions, such as Central Africa and western Asia.

Using Agriculture to Improve Child Health: Promoting Orange Sweet Potatoes Reduces Diarrhea, 2015. K Jones, IFPRI. Link
Vitamin A deficiency (VAD) is prevalent throughout the developing world and causes night blindness and increases child morbidity and mortality. We studied the health benefits of biofortification in reducing VAD, using a cluster-randomized impact evaluation in 36 villages in northern Mozambique. Based on a sample of 1,321 observations of children under age 5, biofortification reduced diarrhea prevalence by 11.4 percentage points, and by 18.9 percentage points in children under age 3. Diarrhea duration was also reduced. This is promising evidence that child health can be improved through agricultural interventions such as biofortification.

JOURNAL ARTICLES

There is a growing body of literature suggesting that increased exposure to enteric pathogens is responsible for environmental enteropathy (EE), a disorder associated with impaired growth in children. Findings from this study suggest that close contact with animals and caregiver hygiene may be important risk factors for EE in young children.

There is a growing body of literature indicating an association between stunting and environmental enteropathy (EE), a disorder thought to be caused by repeated exposures to enteric pathogens. To investigate the relationship between exposure to enteric pathogen through geophagy, consumption of soil, EE, and stunting, the authors conducted a prospective cohort study of 216 children under 5 years of age in Bangladesh. Findings suggest that geophagy may be an important unrecognized risk factor for EE and stunting.
Challenges and Opportunities Associated with Neglected Tropical Disease and Water, Sanitation and Hygiene Intersectoral Integration Programs. *BMC Pub Hlth*, June 2015. E Johnston. [Link](#)

Recent research has suggested that WASH interventions, in addition to mass drug administration (MDA), are necessary for controlling and eliminating many neglected tropical diseases (NTDs). The most frequently mentioned barriers to WASH and NTD integration included: 1) differing programmatic objectives in the two sectors, including different indicators and metrics; 2) a disproportionate focus on mass drug administration; 3) differences in the scale of funding; 4) siloed funding; and 5) a lack of coordination and information sharing between the two sectors.


Environmental enteric dysfunction (EED) refers to an incompletely defined syndrome of inflammation, reduced absorptive capacity, and reduced barrier function in the small intestine. EED is established during infancy and is associated with poor sanitation, certain gut infections, and micronutrient deficiencies. Despite its potentially significant impacts, it is currently unclear exactly what causes EED and how it can be treated or prevented. Ongoing trials involve nutritional supplements, water and sanitation interventions, and immunomodulators.

**Is There an Enabling Environment for Nutrition-Sensitive Agriculture in South Asia? Stakeholder Perspectives from India, Bangladesh, and Pakistan.** *Food Nutr Bull*, June 2015. M van den Bold. [Link](#)

The Leveraging Agriculture for Nutrition in South Asia (LANSA) research consortium seeks to understand how agriculture and agrifood systems can be better designed to improve nutrition in South Asia. In 2013 and 2014, LANSA carried out interviews with stakeholders influential in, and/or knowledgeable of, agriculture–nutrition policy in India, Pakistan, and Bangladesh, to gain a better understanding of the institutional and political factors surrounding the nutrition sensitivity of agriculture in the region.

WASHplus Weeklies highlight topics such as Urban WASH, Household Air Pollution, Innovation, Household Water Treatment and Storage, Handwashing, Integration, and more. If you would like to feature your organization's materials in upcoming issues, please send them to Dan Campbell, WASHplus Knowledge Resources Specialist, at dacampbell@fhi360.org.

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**About WASHplus** - WASHplus, a multi-year project funded through USAID’s Bureau for Global Health, supports healthy households and communities by creating and delivering interventions that lead to improvements in access, practice and health outcomes related to water, sanitation, hygiene (WASH) and household air pollution (HAP). WASHplus uses at-scale, targeted as well as integrated approaches to reduce diarrheal diseases and acute respiratory infections, the two top killers of children under five years of age globally. For information, visit [www.washplus.org](http://www.washplus.org) or email: contact@washplus.org.