Hunger and Environmental Nutrition

a dietetic practice group of the Academy of Nutrition and Dietetics

The HEN Post

In this issue:

Winter 2015

The Heat is On: Diet for a Healthier Climate in the **New Year**

Empowering Communities to Reconnect Nutrition and Agriculture: Stories from Home and Abroad

by Emily Kujawa, MPH, RD

Fracking, Unconventional Energy Extraction, and Health Risks 101

"In pre-modern times, before the dominance of markets . . . agriculture was undertaken to produce food for good nutrition, not wealth." - George Kent, University of Hawai'i

We are all farmers by heritage. Thousands of years ago, our ancestors transitioned from gathering and hunting food to raising crops and animals to feed themselves and their families. Over the millennia, as many countries have shifted to market-based agricultural models, farming's original purpose—to feed and nourish people—has

largely been pushed aside in favor of economic motivations through large-scale crop and animal production, distribution, and consumption. Meanwhile, malnutrition and dietrelated disease have become major health and economic issues worldwide. In fact, the Food and Agriculture Organization (FAO) of the **United Nations estimates** 805 million people around the world are food insecure,1 while another 1.5 billion are overweight and obese,2 and more than 2 billion are micronutrient deficient, independent of weight status.3

As efforts continue to address the underlying causes of food insecurity, under-nutrition, obesity, and chronic disease, recognition of the critical role agriculture plays in improving the health

and nutrition status of people everywhere.⁴ Agriculture and food systems that support good nutrition not only goods and services that support overall health. The importance of this connection may be obvious for HEN

members who work at the intersection of nutrition, health, and agriculture every day. But, what does it actually take to transition back to growing food to promote good nutrition and health, as well as make

Supportive public policies at the local, national, and

international levels are certainly necessary. **Empowering local** communities and individuals is also critical. Empowering individuals increases their capacity to define, analyze, and act on their own problems.5 It often involves sharing knowledge and connecting them with resources including small business loans, supplies and equipment; building social and ecological capital; and creating partnerships with others in their community. **Empowering** communities has been described as "a socialaction process that promotes participation of people, organizations and communities toward the goal of increased individual and community control, political efficacy, and improved quality

Woman farmer watering her crops in Burkina Faso (photo courtesy of Groundswell International).

there is increasing

increase access to a variety of healthy foods, but also directly create income for farmers and others involved in the food chain to purchase healthy foods and other

of life and social justice."6 With growing worldwide focus on supporting local food systems, community empowerment is becoming more and more important. This article describes how empowerment approaches are helping communities both in Burkina Faso, a landlocked

(continued on page 3)

(Empowering Communities to Reconnect Nutrition and Agriculture: continued from page 1)

country in West Africa, as well as in the United States to reconnect nutrition, agriculture, and health, and describes how RDs and RDNs in all areas of practice can make a difference.

Burkina Faso – Empowering Family Farmers to Reconnect Agriculture with Nutrition

Agriculture that is "nutrition-enhancing," "nutrition-sensitive," or "nutrition-smart" plays a key role in improving food security, building sustainable livelihoods, and supporting the health of the world's poorest people. The term "nutrition-enhancing agriculture" refers to "agriculture and food systems that effectively and explicitly incorporate nutrition objectives, concerns and considerations, improve diets and raise levels of food and nutrition security." Activities that support these models include: making nutritious food more accessible to everyone or to specific targeted groups; supporting small family farms and boosting women's incomes, ensuring clean water and sanitation, education and employment, health care, support for resilience and empowering women in a deliberate attempt to explicitly improve diets and raise levels of nutrition.7 Empowering women farmers is a key element of these models because of their critical influence on child nutrition status and contribution to household income. This influence is so important that the FAO estimates if women farmers had the same access to resources as men, the number of hungry people in the world could drop by 100-150 million.8

Communities around the world, such as in Burkina Faso, are embracing approaches that support these models and reconnect agriculture with nutrition. This region experiences high rates of child and maternal malnutrition 9 and also suffers from poor soil quality, making it hard for small family farms to grow enough food to eat, let alone sell. However, with the help of local organizations and their international partners, these communities are empowering themselves to use agriculture to address malnutrition, improve their livelihoods, and restore the health of the land.

One such organization is Groundswell International, a U.S.-based global partnership of civil society organizations, nongovernmental organizations, and individuals that aims to "strengthen rural communities to create and spread healthy food and agro-ecological¹⁰ farming systems from the bottom up."11 Recently featured in the Journal of Hunger and Environmental Nutrition (JHEN), 12 Groundswell's approach recognizes that sustainable change happens when local communities are empowered to create change, and when policies at the local and national levels support their work.

Groundswell, its Burkina-based partner organization, Association Nourrir Sans Détruire (ANSD), and other local partners promote ecological farming practices in rural communities. Fatoumata Batta, Groundswell's West Africa Regional Coordinator and founder of ANSD, has been an advocate of nutrition-enhancing/ sensitive agriculture for years. Batta reports that more needs to be done at the community and national policy levels to support and promote this approach. "[International] development practices have to be more explicit, [and] there must be collaboration between non-profit organizations and other development actors...to help family farmers grow the healthy food they need," states Batta.

ANSD's work embodies this philosophy by helping women's organizations develop market gardens to raise a variety of foods, and also by conducting farmer training on agro-ecological growing techniques to improve yields. This support has made a real difference for farmers across Burkina, including Alimatou Lankoande. She lives in Bilanga-yanga, a rural village in eastern Burkina Faso and received training from ANSD on sustainable farming techniques that



Training women on how to process moringa (photo courtesy of Groundswell International)

CALL FOR PAPERS

JOURNAL OF HUNGER & ENVIRONMENTAL NUTRITION™

Examining hunger and the interconnectedness among individual, political, and institutional factors that govern how people produce, procure and consume food and the implications on nutrition and health.

The Journal of Hunger & Environmental Nutrition is currently accepting manuscripts for consideration of publication. Articles must be original and should emphasize new knowledge and discuss potential solutions or innovative practices. Manuscript submissions are accepted on a continuous basis.

Kinds of Papers:

Original Research and Research Briefs • Reports on Successful Programs, Policies, and Practices • Reviews of Current Knowledge and Research Needs • Interdisciplinary Analyses of Hunger, Environmental Nutrition, and Related Issues • Commentary on Relevant Issues and Controversies



Information about submission requirements is available at: http://www.tandfonline.com/action/authorSubmission?journalCo de=when20&page=instructions

Questions may be directed to Marie Boyle, PhD, RD, Editor, at mboyle01@cse.edu.



Food policy councils bring together stakeholders from across local food systems (photo courtesy of Asheville-Buncombe Food Policy Council)

improve yields for crops like millet, sorghum, and vegetables. She, in turn, worked with other women in her village to form a women's farming cooperative. They have been so successful at increasing food production and generating income that other women in the village are joining the group. 13 ANSD's approach—supported by Groundswell's global partnership model—is truly empowering these local communities to take ownership of their food and farming systems.

The United States – Empowering Local Communities Through Food Policy Councils

In developed countries including the U.S., food insecurity and certain micronutrient deficiencies (such as iron) are pervasive issues alongside high rates of obesity and chronic disease. All of these conditions are significantly impacted by diet, which in turn is influenced by a host of factors including policies and environments within communities, states, and at the national level that affect food access, availability, variety, and cost.

The burgeoning locally-based, sustainable food systems movement has led many communities to organize "food policy councils" (FPC) that empower community members to collectively address food-related issues and create a food system that reflects their values. The number of FPCs has grown dramatically in recent years, and there are now more than 260 in North America, primarily in the U.S.¹⁴ FPC members are involved with every aspect of the food system and include farmers, anti-hunger advocates, public health professionals, dietitians, local or state government representatives, city planners, business owners, school representatives, nonprofit organizations, hospitals, neighborhood association representatives, and many others.

FPCs play many different roles, including: conducting food system research and assessment; informing policy discussion at the state or local level and making policy recommendations; supporting community programming and initiatives to improve healthy food access; facilitating dialogue among partners working in different parts of the food system; providing a forum to engage

with local or state decision-makers; and providing information and education to policymakers and the public about food systems, food insecurity, and food access.

FPCs across the country are making real impact in their communities and states. The Cleveland-Cuyahoga Food Policy Coalition (CCCFPC), an FPC in Northeast Ohio, is just one of many success stories. Formed in 2007, the CCCFPC has more than 100

member organizations that work collectively to identify and address the most pressing food and agriculture-related issues in the community. Within the first three years of its existence, the CCCFPC helped develop new zoning regulations that allowed urban beekeeping and animal husbandry and created an Urban Garden District zoning designation. The CCCFPC also helped farmers' markets in Cuyahoga County establish Electronic Benefits Transfer (EBT) programs to accept SNAP (food stamp) benefits. In addition, the CCCFPC produced a local food guide, developed a Community Conversations Toolkit to assess food gaps in urban neighborhoods, and hosted a variety of community events including a Community Food Skill Share.15 The CCCFPC has served as a public forum and catalyst for community members to come together around common goals and help shape the direction of their local food system.

What Can RDs and RDNs Do?

Regardless of your area of practice, there are things you can do to empower your community—and communities around the world—to reconnect nutrition and agriculture:

Focus your professional development – Several tools are available to help you identify ways you can learn about, and build professional skills in, this topic. For example, the new "Standards of Professional Performance for RDNs in Sustainable, Resilient, and Healthy Food and Water Systems"—developed by HEN members—provides a useful framework for assessment and planning.

Get involved with an FPC – As a nutrition professional with a strong background in nutrition science, research, program planning, management, and policy analysis (depending on your area of practice), there is a role for you on your FPC! For example, you can help conduct community health assessments, identify research to inform policy discussion, connect dietetics students and interns to FPC initiatives, build awareness through social media, support evaluation activities, and much, much more. 16 Use the link in the resources section to find a local or state FPC near you.

Get the word out – RDs and RDNs are ideal experts to communicate about this issue. Regardless of your area of practice, you can share information and success stories with clients, partners, and the public to raise awareness and promote evidence-based best practices. For example, Fatoumata Batta (of Groundswell) says RDs and RDNs working abroad, in particular, can communicate and support raising foods indigenous to their region with more favorable nutrient profiles.

As RDs and RDNs working at the nexus of nutrition, health, and agriculture, HEN members are perfectly positioned to support work that uses agriculture as a catalyst to improve the health and nutrition status of people everywhere. What will YOU do?

Resources

Groundswell International -

www.groundswellinternational.org. Learn more about the work Groundswell International, ANSD, and other partner organizations worldwide are doing to reconnect nutrition and agriculture.

Gardens for Health – www.gardensforhealth.org. *A non-profit organization that focuses on integrating agriculture and health education into efforts to address malnutrition in Rwanda*.

Position of the Academy of Nutrition and Dietetics: Nutrition Security in Developing Nations: Sustainable Food, Water, and Health (Academy of Nutrition and Dietetics) – www.eatright.orgAboutContent.aspxid=8358. Provides an overview of key issues, solutions, and resources for improving food security, particularly in developing regions.

Standards of Professional Performance for RDNs in Sustainable, Resilient, and Healthy Food and Water Systems (Journal of the Academy of Nutrition and Dietetics) – www.andjrnl. org/article/S2212-2672%2813%2901682-1/fulltext. A tool for RDs and RDNs working in sustainable, resilient, and healthy food and water systems to assess their current skill levels and identify areas for further professional development in this emerging practice area.

Everyone Plays a Part! Exploring the New SOPP in Sustainable, Resilient, and Healthy Food and Water Systems (HEN DPG webinar, July 2014) – www.hendpg.org/page/webinararchives. Provides an overview of the SOPP, how RDs and RDNs in different areas of practice are applying the SOPP to their work, and resources available to supporting applying the SOPP to your practice.

Nutrition Sensitive Agriculture (FAO) – www.fao.org/food/nutrition-sensitive-agriculture-and-food-based-approaches/en/. *Provides information about nutrition-sensitive/enhancing agriculture approaches to address health and food security, and links to key FAO resources on the topic.*

"Improving Nutrition through Agriculture" Technical Brief Series: Understanding and Applying Primary Pathways and Principles (USAID) – www.spring-nutrition.org/publications/briefs/understanding-and-applying-primary-pathways-and-principles. This brief outlines the framework used by USAID's Feed the Future program to strengthen agriculture and nutrition linkages across and within countries.

Food Policy Council Directory (Johns Hopkins University Center for a Livable Future) www.jhsph.edu/research/centers-and-institutes/ johns-hopkins-center-for-a-livable-future/ projects/FPN/directory/online/. Includes contact information for FPCs across the U.S. and Canada.

Special thanks to Cristina Hall, Christine McCullum-Gomez, Stacia Nordin, and Angie Tagtow for their guidance and review of this article.

The FAO defines Food Security as "All people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food to meet their dietary needs and food preferences for an active and healthy life. The four pillars of food security are availability, access, utilization, and stability." (Food and Agricultural Organization of the United Nations. Declaration of the World Summit on Food Security World Summit on Food Security. Rome, Italy: Food and Agricultural Organization of the United Nations; 2009.)

- World Health Organization. "Obesity and Overweight." Available at http://www.who.int/mediacentre/factsheets/fs311/en/. Accessed Feb 15, 2015.
- World Health Organization. "World health report, 2000." Geneva: World Health Organization, 2000.
- FAO. "Nutrition-Sensitive Agriculture and Food-Based Approaches." Available at http://www.fao.org/food/nutrition-sensitive-agriculture-and-food-based-approaches/ en/. Accessed Feb 15, 2015.
- Kent G, 1988. Nutrition education as an instrument of empowerment. J Nutr Educ, 20:193-195.
- Wallerstein N, 1992. Powerlessness, empowerment, and health: Implications for health promotion programs. Am J Health Promot, 6:197-205.
- FAO. "Nutrition-Sensitive Agriculture and Food-Based Approaches." Available at http://www.fao.org/food/nutrition-sensitive-agriculture-and-food-based-approaches/ en/. Accessed Feb 15, 2015.
- FAO, 2011. "Women in Agriculture: Closing the Gender Gap for Development." Available at: http://www.fao.org/ publications/sofa/2010-11/en/. Accessed Feb 15, 2015.
- Jeffreys A, 2013. "Time to prevent child malnutrition in Sahel." Available at http://www.irinnews.org/report/98941/time-to-prevent-child-malnutrition-in-sahel. Accessed Feb 15, 2015.
- Agro-ecological farming methods focus on "food production that makes the best use of nature's goods and services while not damaging these resources." It applies ecology to the design of farming systems; uses a wholesystems approach to farming and food systems; and links ecology, culture, economics and society to create

- healthy environments, food production and communities. (Source: More and Better Secretariat. "A Viable Food Future." Available at http://www.moreandbetter.org/en/ news/a-viable-food-future. Accessed 1-9-2014.)
- 11. Groundswell International. "How We Work." Available at http://www.groundswellinternational.org/how-wework/#sthash.0AIKX2ET.dpuf. Accessed Feb 15, 2015.
- McCullum-Gomez C, 2014. "Internet Resources." J Hunger Environ Nutr, 9:4, 565-566.
- Groundswell International, 2014. "World Food Day Celebrates Family Farmers Across the Globe." Available at http://www.groundswellinternational.org/sustainabledevelopment/burkina-faso/world-food-day-celebratesfamily-farmers-across-the-globe/. Accessed Feb 15, 2015.
- Johns Hopkins Center for a Livable Future. "Food Policy Networks." Available at http://www.jhsph.edu/research/ centers-and-institutes/johns-hopkins-center-for-a-livable-future/projects/FPN/directory/index.html. Accessed Feb 15, 2015.
- Center for Training and Research Translation, UNC Center for Health Promotion and Disease Prevention, 2013. "Cleveland—Cuyahoga County Food Policy Coalition." Available at http://www.centertrt. org/?p=intervention&id=1143. Accessed Feb 15, 2015.
- Tagtow A, 2013. "Putting Policy on Our Plates and Nourishing Action; Registered Dietitians & Food Policy Councils." [Presentation]. Presentation at the AND Public Policy Workshop. Washington, DC.



Women watering their crops in Burkina Faso (photo courtesy of Groundswell International)