

# ERIC S. OWUSU

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## RESEARCH INTERESTS

- Productivity and efficiency impacts of farm management practices and resource use
- Adoption and impacts of digital innovations in agriculture
- Impacts of Produce Safety Rule trainings on grower compliance capacity, and farm performance

## FIELDS OF EXPERTISE

Production, Resource, and Development Economics

## EDUCATION

### University of Connecticut, Storrs, CT

Aug. 2016 - Nov. 2021

Doctor of Philosophy in *Agricultural and Resource Economics*

Master of Science in *Applied and Resource Economics (Dec. 2020)*

### University of Ghana, Legon, Accra

Aug. 2006 - Dec. 2008

Master of Philosophy in *Agricultural Economics*

### Kwame Nkrumah University of Science and Tech., Kumasi, Ghana

Aug. 2000 - May 2004

Bachelor of Science in *Agriculture (Economics major)*

## PROFESSIONAL EXPERIENCE

### Joint Institute for Food Safety and Applied Nutrition, Univ. of Maryland, College Park, MD

*Postdoctoral Associate*

Dec. 2021 - Present

*Duties and Responsibilities:*

- Evaluate the impacts of international Produce Safety Rule (PSR) trainings (i.e., train-the-trainer and grower trainings) aimed at food safety capacity building in Latin America and the Caribbean.
- Assess the impact of exposure to PSR supplemental training materials on food safety knowledge, attitudes and practices in Mexico, Chile and Costa Rica using a randomized controlled trials.
- Analyze the statistical properties of food expenditures reported in the USDA WWeiA/NHANES surveys and in comparison with expenditures reported in other databases, e.g., CE.

**University of Connecticut, Storrs, CT**

*Graduate Research Assistant*

Aug. 2016 - Aug. 2021

*Teaching Assistant*

Spring 2019, 2020 & 2021

*Duties and Responsibilities:*

- Analyze county-level irrigation water productivity in the United States (U.S.) using input-output data from USDA Census of Agriculture; climatic data from the Parameter-Elevation Regressions on Independent Slopes Model; soil and topography data from the USDA National Resource Inventory; and irrigation withdrawals data from the US Geological Survey. Supported by USDA.
- Analyze productivity and profitability of innovations in legume production systems in Malawi using a large survey data collected via Survey Solutions [the World Bank's computer-assisted personal interviewing (CAPI) tool]. Funded by the Malawi Ag Diversification through the Feed-the-Future Peanut Innovation Lab.
- Coordinate the application of CAPI in a field survey for the PIRE Water and Food Security Project in Ethiopia.

**CSIR - Food Research Institute (FRI), Accra, Ghana**

*Research Scientist*

Dec. 2010 - Jun. 2014

*Duties and Responsibilities:*

- Lead the assessment of *ex ante* and *ex post* impacts of pre- and post harvest rice technologies in a rice production hub in Southern Ghana, under the Africa Rice Center's Support to Rice Research in Africa (SRRiA) project.
- Lead the application of experimental auctions to assess consumer values for New Rice for Africa varieties, under the SRRiA project.
- Monitor and evaluate the transfer of process and product technologies on use of alternative food floors in baking in Southern Ghana, under the World Bank-sponsored West African Agricultural Productivity Program.

**International Water Management Institute (IWMI), Accra, Ghana**

*Research Officer*

Jul. 2008 - Nov. 2010

*Duties and Responsibilities:*

- Implement field survey, clean and analyze data, and report on Ghana's irrigation potential and agricultural water management solutions. Funded by the Bill and Melinda Gates Foundation (BMGF).
- Adapt the Policy Dialogue Model Simulation to land and water use in the Niger Basin.

**GRANTS AND FELLOWSHIPS**

**Fellowships**

Bishop-Carder Scholarship <i>College of Agriculture, Health and Natural Resources, University of Connecticut</i>	Spring. 2019
Predocctoral Fellowship <i>Ag. &amp; Resource Economics Department, University of Connecticut</i>	Spring. 2021
Doctoral Dissertation Fellowship <i>The Graduate School, University of Connecticut</i>	Spring. 2021

**RESEARCH**

**Journal Articles**

**Owusu, E. S.** and Bravo-Ureta, B. E. (2022). Reap when You Sow? The Productivity Impacts of Early Sowing in Malawi. *Agricultural Systems*. [doi.org/10.1016/j.agsy.2022.103412](https://doi.org/10.1016/j.agsy.2022.103412)

**Owusu, E. S.** and Bravo-Ureta, B. E. (2021). Gender and Productivity Differentials in Smallholder Groundnut Farming in Malawi: Accounting for Technology Differences. *Journal of Development Studies*. [doi.org/10.1080/00220388.2021.2008364](https://doi.org/10.1080/00220388.2021.2008364)

Britwum, K., **Owusu, E. S.** and Demont, M. (2020). Confronting genetic gains with markets: Retrospective lessons from New Rice for Africa (NERICA) in Uganda. *Outlook on Agriculture* 1-13. [doi:10.1177/0030727020948967](https://doi.org/10.1177/0030727020948967)

Namara, R. E., Hope, L., **Owusu, E. S.**, De Fraiture, C. and Owusu, D. (2014). Adoption patterns and constraints pertaining to small-scale water lifting technologies in Ghana. *Agricultural Water Management* 131: 194-203. [doi:10.1016/j.agwat.2013.08.023](https://doi.org/10.1016/j.agwat.2013.08.023).

Katic, P. G., Namara, R. E., Hope, L., **Owusu, E.** and Fujii, H. (2013). Rice and irrigation in West Africa: Achieving food security with agricultural water management strategies. *Water Resources and*

*Economics* 1:75-92. doi: [10.1016/j.wre.2013.03.001](https://doi.org/10.1016/j.wre.2013.03.001).

Kamwamba-Mtethiwa, J., Namara, E. R., De Fraiture, C., Mangisoni, J. and **Owusu, E. S.** (2012). Treadle pump irrigation in Malawi: Adoption, gender and benefits. *Irrigation and Drainage* 61(5):583-595. doi: [10.1002/ird.1665](https://doi.org/10.1002/ird.1665).

### **Research Reports**

Narro, C. and **Owusu, E. S.** (2023). Pilot controlled experiment to validate supplemental training materials on the Produce Safety Rule. Submitted to the Inter-American Institute for Cooperation on Agriculture.

**Owusu, E. S.** and Bravo-Ureta, B. E. (2020). Gender gap in groundnut and soybean farm productivity: Evidence from central Malawi. Submitted to the USAID-funded Malawi Agricultural Diversification (AgDiv) and Feed-the-Future Peanut Innovation Lab.

**Owusu, E. S.** and Bravo-Ureta, B. E. (2019). Benefits and costs of groundnut and soybean production: A farm level analysis for Malawi. Submitted to the USAID-funded Malawi Agricultural Diversification (AgDiv) and Feed-the-Future Peanut Innovation Lab.

Bravo-Ureta, B. E. and **Owusu, E. S.** (2019). Baseline descriptive analysis of farm and household data collected in three Districts in Malawi during 2017-2018. Submitted to the USAID-funded Malawi Agricultural Diversification (AgDiv) and Feed-the-Future Peanut Innovation Lab.

Namara R. E., Awuni, J., Barry, B., Giordano, M., Hope, L., **Owusu, E. S.**, Forkuor, G. (2011). Smallholder shallow groundwater irrigation development in the Upper East Region of Ghana. Colombo, Sri Lanka: International Water Management Institute. 35p. IWMI Research Report 143. (doi: [10.5337/2011.214](https://doi.org/10.5337/2011.214)).

Namara, R.E.; Barry, B.; **Owusu, E. S.**; Ogilvie, A. (2011). An overview of the development challenges and constraints of the Niger Basin and possible intervention strategies. Colombo, Sri Lanka: International Water Management Institute. 34p. IWMI Working Paper 144. (doi: [10.5337/2011.206](https://doi.org/10.5337/2011.206)).

### **Conference Papers/Presentations**

**Owusu, E. S.**, Arouna, A., Narrod, C., and Bravo-Ureta, B. E. Digital Extension and Productivity Impacts in Rice Farming: Evidence from a Field Experiment in Nigeria (Presented at the 2023 North American Productivity Workshop, June 12-15, Miami Herbert Business School, Miami, FL)

**Owusu, E. S.** and Narrod, C. International Produce Safety Rule Trainings and Food Safety Capacity Impacts in Latin America and the Caribbean (Presented at the 2023 AAEE Annual Meeting, July 23-25, Washington D.C.)

**Owusu, E. S.**, Arouna, A. and Narrod, C. Is Personalized Better: Digital Advisory and Productivity Differentials in Rice Farming in Nigeria (Presented at the 2023 AAEE Annual Meeting, July 23-25, Washington D.C.)

**Owusu, E. S.** and Narrod, C. Monitoring and Evaluation of International Produce Safety Rule Trainings and Planned Behavioral Experiments (Presented at the 2022 AAEA Annual Meeting, August 1-3, Anaheim, CA)

**Owusu, E. S.** and Bravo-Ureta, B. E. Farm-level Innovation and Productivity: Evidence from Groundnut Farming in Malawi. (Presented at the 2020 AAEA Annual Meeting, virtual, August 10-11)

**Owusu, E. S.** and Bravo-Ureta, B. E. Gender and productivity differentials: An analysis of groundnut farmers in Malawi. (Presented at the 2020 North American Productivity Workshop, virtual, June 8-12.

## **WORKSHOPS, PROFESSIONAL AFFILIATIONS AND SERVICES**

### **Workshops and Trainings Attended**

Quantitative Risk Assessment course offered by the JIFSAN, University of Maryland, College Park, June 27- July 1, 2022.

Qualitative Risk Assessment course offered by the JIFSAN, University of Maryland, College Park, June 8-10, 2022.

Êstimate: The Reduced Form Difference-in-differences webinar by the Department of Economics, Michigan State University, December 14-15, 2021.

Êstimate econometrics course by the Department of Economics, Michigan State University, June 4-7, 2021.

Training on Computer-Assisted Personal Interviewing tools for survey administration, World Bank, Washington D.C., USA, June 2017.

Workshop on experimental auctions data management and analysis organized by the Africa Rice Center (AfricaRice), St. Louis, Senegal, November 25 - December 1, 2012

Training on Experimental Auctions organized by the Africa Rice Center, Kampala, Uganda, December 2-9, 2011.

Training on Value Chain Analysis organized by the Catholic Relief Services (Baltimore, USA) and Africa Rice Center, Tamale, Ghana, October 26 - November 1, 2011.

### **Professional Memberships**

International Society for Efficiency and Productivity Analysis

Agricultural and Applied Economics Association

North-Eastern Agricultural and Resource Economics Association

American Economic Association

International Association of Agricultural Economists

African Association of Agricultural Economics

**Journals Reviewed For**

*Journal of Productivity Analysis*

*Agricultural Economics*

*Agribusiness: an International Journal*

*Agricultural Water Management*

*International Journal of Productivity and Performance Management*

*PLOS One*