

CONTACT INFORMATION	Department of Agricultural and Consumer Economics (ACE) University of Illinois at Urbana-Champaign 414 Mumford Hall Urbana, IL 61801	Phone: +1(312) 804-8550 hadunka2@illinois.edu website
EDUCATION	Ph.D., Agricultural and Applied Economics, University of Illinois Urbana-Champaign M.Sc., Agricultural and Applied Economics, University of Illinois Urbana-Champaign B.Sc., Agricultural Economics, The University of Zambia, Lusaka, Main campus, Zambia	2025 2019 2015
RESEARCH AREAS	Environmental Economics Development Economics	Agricultural Economics
CURRENT POSITION	Adjunct Faculty, Illinois Wesleyan University - School of Business & Economics - To date	
PUBLICATIONS	<p>Ordenez, O., Hadunka, P., Rossi, G., & Baylis, K. (2025). “When crops fail, forests follow: Agricultural shocks and deforestation in Zambia” - Co-first author <i>Proceedings of the National Academy of Sciences (PNAS)</i> - <i>Forthcoming</i>.</p> <p>Wang, J., Konar, M., Anderson, P., Hadunka, P., & Mulenga, B.P. (2025). “Exploring the Impact of Short-Term and Long-Term Climate Shocks on Crop Diversification in Zambia: Insights from Household- and District-Level Observations” <i>Climate Risk Management</i>.</p> <p>Wang, J., Konar, M., Baylis, K., Estes, L., Hadunka, P., Caylor, K., & Xiong, S. (2023). “Potential impacts of transportation infrastructure improvements to maize and cassava supply chains in Zambia” <i>Environmental Research: Infrastructure and Sustainability</i></p> <p>Mulenga, B. P., Hadunka, P., & Richardson, R. B. (2017) .“Rural households’ participation in charcoal production in Zambia: Does agricultural productivity play a role?” <i>Journal of Forest Economics</i> 26, 56-62.</p>	
IN REVIEW	<p>Hadunka, P., Songsermsawas, T., & Mulenga, B.P. (2025) “Climate resilience in agriculture: Can Climate Smart Agriculture counteract rainfall shocks?” - <i>Global Climate Change</i>.</p> <p>Xiong, S., Hadunka, P., Estes, L., Mulenga, B. P., & Estes, L (2025) “Evaluating the Relationship Between Farm and Field Sizes in Sub-Saharan Africa: Multi-Year Insights from Zambia’s National Surveys” - Co-first author <i>Agricultural Systems</i>.</p> <p>Wang, J., Konar, M., Baylis, K., Hadunka, P., & Mulenga, B.P. (2025) “Dietary Transitions and Nutritional Dynamics in Zambia and Tanzania under Urbanization” <i>Food Policy</i>.</p> <p>Cecil, M., Estes, L., Caylor, K., Hadunka, P., Evans, T., Chilenga, A., Gitonga, J., & Wolf, A. (2025).“ Advantages and Limitations of Multiple Sensors for Smallholder Maize Land Surface Phenology Estimation” <i>Remote Sensing of Environment</i>.</p> <p>Lewin, G., Molitor, C., Cohen, J., Cognac, S., Proctor, J., Baylis, K., Hadunka, P., & Carleton, T. (2025).“Monitoring Maize Yield Variability over Space and Time with Unsupervised Satellite Imagery Features” <i>Remote Sensing</i>.</p> <p>Sullivan, J., Baylis, K., Hadunka, P., & Konar, M., (2024).“ Urban Legend: Disparities in Household Diets and Food Security Along a Rural-Urban Continuum” <i>Global Environmental Change</i>.</p>	
WORKING PAPERS AND RESEARCH IN PROGRESS	<p>Hadunka, P., Baylis, K., Green, R & Zimmer, A. (2025) “The effect of invasive pests on food security: An understudied effect of climate change” - Almost ready for submission.</p> <p>Xiong, S., Wanjing, L., Hadunka, P., Estes, L., Khallaghi. S., Abedi. R., Yao-Ting. Y., Chilenga. A., Khan. A., Potapov. P.,& Estes, L (2025) “High spatial and temporal resolution</p>	

analyses reveal the changing characteristics of African croplands”.

Hadunka, P. “The Impact of Pest Shocks on Charcoal Production and Deforestation in Zambia”.

Hadunka, P., Hardie, R & Figueiredo Walter, T. (2025) “Coping or Collapsing? How Charcoal Fuels a Poverty - Deforestation Feedback Loop”.

Hadunka, P., Baylis, K., Cardell, L., & Michelson, H. (2025) “What causes adverse outcomes in the maize markets?”.

Hadunka, P., Baylis, K., & Thornton, R. (2025) “Does the providing efficient transportation improve the price knowledge among rural households? Evidence from Malawi”.

RELEVANT WORK EXPERIENCE

Co-Principal Investigator, International Growth Center - Climate change and deforestation : A think tank supervised by the University of Oxford and London School of Economics - To date

Co-Principal Investigator, International Growth Center - Technology adoption, grain storage and climate resilience : A think tank supervised by the University of Oxford and London School of Economics - To date

Principal Investigator, International Growth Center - FRA project: A think tank supervised by the University of Oxford and London School of Economics, Remote Dec 2023 - Jun 2024

Research and Teaching Assistant, University of Illinois Urbana-Champaign, IL Jul 2017 - To date

Teaching Assistant (Part-time) - Machine Learning for Applied Economists, University of Bonn, Remote Aug 2021 - Sept 2021 (20 PhD students)

Data Quality Controller, Musika Development Initiative, World Food Program, and Business Development Services Africa - SME, Zambia Oct 2016 - Nov 2019

Research Intern, Musika, Zambia Dec 2016 - May 2017

Research Intern, Indaba Agricultural Policy Research Institute (IAPRI) Sep 2016 - Dec 2016

Field Supervisor, International Maize and Wheat Improvement Center (CYMMIT) Oct 2015 - Dec 2015

TEACHING

Applied Microeconomics (90 Undergraduates), Environmental Economics (70 Undergraduates), Applied Statical methods & Data Analytics (90 Undergraduates)

University-wide “List of Teachers Ranked as Excellent” (Spring 2024), UIUC

University-wide “List of Teachers Ranked as Excellent” (Fall 2023), UIUC

University-wide “List of Teachers Ranked as Excellent” (Spring 2023), UIUC

University-wide “List of Teachers Ranked as Excellent” (Fall 2020), UIUC

POLICY REPORTS

Hadunka, P., Hardie, R., Waller, A & Figueiredo Walter, T. (2025) “[Climate shocks and charcoal production in Zambia](#)” International Growth Center, Policy brief.

Hadunka, P & Teschemacher, C. (2024) “[The effect of Zambia’s Food Reserve Agency on agricultural market outcomes](#)” International Growth Center, Project report.

Hadunka, P & Janzen, J. (2023) “[Weather Shocks and Seasonal Commodity Market Returns: Evidence from Zambia’s Maize Market](#)” University of Illinois at Urbana-Champaign, farmdoc.

Kasanda, E., **Hadunka, P.**, Lubinga, F., Mumba, K., Sakala, M., Arneson, S., Harper, T & Sichilima, T. (2017) “[A Needs Assessment of Rural Agribusinesses: The Commercial Viability of SMEs](#)” Musika Development Initiatives, Zambia.

Kasanda, E., Chanda, J, **Hadunka, P** & Sichilima, T. (2017) “[The Status of Smallholder Dairy Markets and Farmers’ Perceptions of Formal Markets in Western Province](#)” Musika Development Initiatives, Zambia.

Chela, J & **Hadunka, P.** (2017) “A Qualitative Needs Assessment of Village Chicken Producers in Southern Province” Musika Development Initiatives, Zambia.

EXTERNAL GRANTS	International Growth Center	Technology adoption, grain storage and climate resilience - RCT (Fall 2025)
	International Growth Center	Climate change and deforestation (Fall 2024)
	International Growth Center	Evaluating the Food and Reserve Agency (Spring 2024)
	National Science Foundation	University of Illinois Urbana-Champaign (Summer 2023)
	Travel Grant	Agricultural and Applied Economics Association Annual Meeting (Summer 2022)
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FELLOWSHIPS, GRANTS AND ACADEMIC AWARDS	Travel Grant	University of Illinois Urbana-Champaign (Summer 2023)
	Travel Grant	University of Illinois Urbana-Champaign (Spring 2023)
	Travel Grant	University of Illinois Urbana-Champaign (Summer 2022)
	Jean and John Due Fellowship	University of Illinois Urbana-Champaign (Spring 2020)
	University Fellowship	University of Illinois Urbana-Champaign (Fall 2019)
	Morgan Endowment	University of Illinois Urbana-Champaign (Summer 2020)
	Dunn and Linse Fellowship	University of Illinois Urbana-Champaign (Fall 2017)
	Best Undergraduate Thesis (got published after graduation), The University of Zambia (2015)	
PRESENTATIONS	2024: Led a discussion with senior officials from the Presidential Delivery Unit, Ministry of Agriculture, International Growth Center, and Food and Reserve Agency (FRA) on reforming the FRA (Lusaka, Zambia).	
	2023: Association of Environmental and Resource Economists (Portland, ME)	
	2023: Agricultural and Applied Economics Association Annual Meeting (Washington, DC)	
	2022: Agricultural and Applied Economics Association Annual Meeting (Anaheim, CA)	
	2022: Center for the Study of Africa Economies-University of Oxford (UK) (virtual)	
	2022: Midwest International Economic Development Conference (Minneapolis, MN)	
	2022: Sustainability and Development Initiative Conference (Virtual)	
SERVICE AND LEADERSHIP	2019: Agricultural and Applied Economics Association Annual Meeting (Atlanta, GA)	
	Member of the University of Illinois Urbana-Champaign Graduate Programs Committee (2018 - Present)	
	Abstract reviewer - Agricultural and Applied Economics Association (Annual meetings) - 2022, 2023	
	Guest Editor - Frontiers in Environmental Economics (special issue)	
ADDITIONAL INFORMATION	Software proficiency:	Stata, R, python, LATEX, GIS, GAMS, Microsoft Office
	Languages:	English, Tonga (native), Bemba, Lozi, Nyanja, and Shona (Basic)
PROFESSIONAL REFERENCES	Kathy Baylis, Ph.D. (Chair) Professor University of California, Santa Barbara Dept. of Geography baylis@ucsb.edu	Hope Michelson, Ph.D. Associate Professor University of Illinois Urbana-Champaign Dept. of Agriculture and Consumer Economics hopecm@illinois.edu
	Shadi Atallah, Ph.D. Associate Professor University of Illinois Urbana-Champaign Dept. of Agriculture and Consumer Economics satallah@illinois.edu	Nicholas Paulson, Ph.D. Professor University of Illinois Urbana-Champaign Dept. of Agriculture and Consumer Economics npaulson@illinois.edu