Nana Yaw Adutwum

University of Connecticut
Department of Agricultural and Resource Economics
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EDUCATION

Ph.D., Agricultural and Resource Economics, University of Connecticut, CT, May 2026 (expected)
Dissertation Title: Energy Systems and Environmental Policy: Regional Impacts, Sectoral
Linkages, and Household Energy Access
Dissertation Committee: Kimberly Rollins, Charles Towe, Jackson Somers

M.S., Applied and Resource Economics, University of Connecticut, Connecticut, 2024

M.S., Economics and Business, University of Hull, Hull, 2017

B.Sc., Agricultural Economics, University of Ghana, Ghana, 2012

FIELDS OF INTEREST

Energy Economics, Environmental Economics, Development Economics, Applied Econometrics

PUBLICATIONS

Beyai, P.L., Aboagye, P.K., **Adutwum, N**., Salifu, M., and Sedegah, K. (2013), "Implementation of MDG Acceleration Framework (MAF) as a Strategy to Overcome Inequalities in Access to Maternal Health Services in Ghana", 2013 *Global MDG Conference, UNDP Working Paper. No. 2, UNDP Publishing*

SELECTED REPORTS

West African Monetary Zone Report. Ministry of Finance, Ghana Economic Environment in Ghana and Public Sector Investment. Ministry of Finance, Ghana Impact of Petroleum Price Increases on Sub-Saharan Africa. UNDP Post-2015 Sustainable Development Goals RoadMap. UNDP & NDPC Working Group

WORKING PAPERS

The Economic Impacts of Electricity Generation Facilities in the Northeast US (Job Market Paper)

Impact of Treatment of Externalities Jointly on Interacting Sectors (with Kimberly Rollins, Analysis Stage)

Housing Characteristics and the effect on Energy Poverty in developing countries: Ghana as a Case Study (Data Analysis Stage)

WORK IN PROGRESS

"Housing Characteristics and the Neighborhood Effects on Self-Reported Quality of Health"

"Remittances and their Interaction with Socioeconomic Changes to Predict Important Life Outcomes"

"Feeding Programs and School Attendance"

"Socioeconomic Characteristics and Choice of Household

TEACHING EXPERIENCE

Instructor, Writing in Environmental Policy, Department of Agricultural and Resource Economics, University of Connecticut, Spring 2025, Fall 2023, Spring 2023

Instructor, Writing in Food Policy, Department of Agricultural and Resource Economics, University of Connecticut, Spring 2024, Fall 2022

Teaching Assistant, Sustainability Policy and Management, Department of Agricultural and Resource Economics, University of Connecticut, Fall 2024

Teaching Assistant, Business Management, Department of Agricultural and Resource Economics, University of Connecticut, Spring 2021

Teaching Assistant, Principles of Agricultural and Resource Economics, Department of Agricultural and Resource Economics, University of Connecticut, Spring 2021

Teaching Assistant, Essentials of Accounting and Business, Department of Agricultural and Resource Economics, University of Connecticut, Fall 2020

Teaching Assistant, International Commodities Trading, Department of Agricultural and Resource Economics, University of Connecticut, Fall 2020

WORK EXPERIENCE

Graduate Research Assistant | University of Connecticut | August 2020 – May 2025

- Conducted energy, environmental and climate policy research, evaluating effects on businesses, local economies, employment, clean energy transition and property values
- Developed structural econometric models to assess policy interventions in energy markets and environmental regulation, statewide and regionally
- Applied machine learning algorithms and causal inference techniques to large-scale datasets for predictive analytics and impact evaluation
- Analyzed energy poverty and housing conditions in developing countries, quantifying economic development impacts
- Presented research findings to academic and policy audiences, translating technical results into policy recommendations
- Secured competitive research funding through grant proposal development and management **Key Achievement:** Led research project estimating economic impact of renewable energy facilities, informing state-level policy decisions

Principal Research Assistant | Institute of Statistical, Social and Economic Research, Ghana | October 2017 – August 2020

- Synthesized large datasets and constructed econometric models to analyze market performance and market efficiency across diverse sectors, delivering empirical insights that informed policy recommendations and strategic decision-making.
- Utilized SQL queries and statistical modeling to evaluate market efficiency indicators and wholesale electricity market outcomes, generating actionable insights for stakeholders through interactive Power BI dashboards.
- Led multiple national-level impact evaluation projects with combined budgets exceeding \$1.5 million, including Ghana Socioeconomic Panel Survey
- Managed full project lifecycle from research design through stakeholder presentation,

- coordinating teams of more than 10 researchers and 150 field staff
- Generated \$40,000 annually by developing and delivering training programs in project management and quantitative methods
- Built econometric models using panel data and quasi-experimental methods to measure impacts and ROI

Key Achievements:

- Delivered actionable recommendations that influenced over \$20M in government program spending
- Reduced project delivery time by 20% through improved team coordination and workflow optimization
- Trained over 100 field enumerators, ensuring 95% data quality scores across all projects

Research Assistant | Institute of Statistical, Social and Economic Research, Ghana | June 2015 - October 2016

- Conducted economic and statistical analysis supporting research projects for government and international organizations
- Developed study methodologies and survey instruments in collaboration with senior economists
- Prepared technical reports and policy briefs for government ministries and international agencies
- Supported grant proposal development through data compilation, literature reviews, and budget preparation

FELLOWSHIPS AND AWARDS

National Fellowship Incentive, UCONN, 2024 Irving & Justine Fellows Scholarship, UCONN, 2024

CONFERENCES AND PRESENTATIONS

| 2025 | Global GLO-JOPE Conference (Scheduled December) |
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| 2025 | Agricultural & Applied Economics Association (AAEA), Denver |
| 2025 | Northeastern Agricultural and Resource Economics Association (NAREA), Vermont |
| 2025 | UConn ARE Research Seminar |
| 2023 | UConn Carbon Reduction Working Group |
| 2019 | Ghana Studies Association (GSA), Accra |

COMPUTER SKILLS

STATA, R, Python, ArcGIS Pro, MS Office, IMPLAN, Qualtrics, SurveyCTO

REFERENCES

| Professor Kimberly Rollins | Professor Charles Towe | Professor Jackson Somers |
|-----------------------------------|-------------------------------|---------------------------------|
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