Maxwell Mkondiwa

Contact International Maize and Wheat Improvement Center +91 7428669054

Information (CIMMYT)

New Delhi, India m.mkondiwa@cgiar.org

Personal Date of Birth: October 22, 1989

Nationality: Malawi Gender: Male

Personal website: Maxwell Mkondiwa Official website: Maxwell Mkondiwa Github: EiA Exante and Repositories

Google scholar: Here

RESEARCH Interests Economics of agricultural research, Agricultural policy analysis, Poverty measurement, Land policy, Cultural economics, Spatiotemporal modeling and GIS, Bayesian econometrics, Mathematical optimization

EDUCATION

University of Minnesota, Minneapolis, MN

Ph.D., Applied Economics, June 2019

- Thesis Topic: Economics of Scaling Agricultural Research Recommendations to Up-Scale Adoption and Impact
- Advisors: Philip G. Pardey, Ph.D and Terry Hurley, Ph.D

M.S., Applied Economics, Oct 2015

- Thesis Topic: Whither Broad or Spatially Specific Fertilizer Recommendations?
- Awards: Best MS Dissertation, Department of Applied Economics
- Advisors: Philip G. Pardey, Ph.D and Terry Hurley, Ph.D

Jomo Kenyatta University of Agriculture and Technology, Nairobi, Kenya

M.S., Research Methodology, June 2012

- Project Topic: An Inquiry into Research Methods Practices: Case Study of Center for Agricultural Research and Development in Malawi
- Advisors: Charles Jumbe, Ph.D and Edward Mamati, Ph.D

University of Malawi-Bunda College, Lilongwe, Malawi

B.S., Agricultural Economics, Sept 2009

• Advisor: Davies Ng'ong'ola, Ph.D

RESEARCH EXPERIENCE

Associate Scientist-Spatial Economist

Jan, 2022 to present

The International Maize and Wheat Improvement Center (CIMMYT), $\,$

Delhi, India

Adjunct Research Fellow

July, 2019 to present

Center for Agricultural Research and Development,

Lilongwe University of Agriculture and Natural Resources

Bunda College Campus

Consultant

March 2017 to June 30, 2021

World Bank Group, Washington D.C.

Development Economics-Agricultural Research (DECAR)

Tasks: Large farms survey supervision and analytical support for land policy reforms in Malawi

Supervisors: Klaus Deininger, Ph.D and Daniel Ali, Ph.D

Poverty and Global Practice Tasks: Poverty measurement

Supervisors: Habtamu Fuje, PhD and German Carusso, PhD

Graduate Research Assistant/Research Associate Aug 2013 to present

International Science and Technology Practice and Policy Center,

Department of Applied Economics

University of Minnesota

Supervisors: Philip Pardey, Ph.D and Terry Hurley, Ph.D

Adjunct Research Fellow

Nov 2010 to July 2013

Center for Agricultural Research and Development, Lilongwe University of Agriculture and Natural Resources

Bunda College Campus

Research Supervisor(selected studies)

Nov 2010 to July 2013

Impacts of Adoption of Maize Varieties and Fertilizer, Nowergian University of Life Science Supervisor: Julius Mangisoni, Ph.D and Stein Holden, Ph.D

Adoption Pathways and Drought Tolerant Maize for Africa Projects, CIMMYT Projects Supervisor:Julius Mangisoni, Ph.D

Project (funded by Government of Malawi, World Bank and IFAD),

Impact Assessment of Irrigation, Rural Livelihoods and Agricultural Development

Position:Socio-economist

REFEREED
JOURNAL
PUBLICATIONS

- Nayak, H.S., Mkondiwa, Maxwell, Patra, K., Sarkar, A., Reddy, K.S., Kumar, P., Bharadwaj, S., Singh, R., and Parihar, C.M. "Risk-return trade-offs in diversified cropping systems under conservation agriculture: Evidence from a 14-year long term field experiment in north-western India.". European Journal of Agronomy, 162: 127436.
- 2. **Mkondiwa,Maxwell**, Terrance M. Hurley, and Philip G. Pardey . "Closing the gaps in experimental and observational crop response estimates: a bayesian approach.". *Q Open*,4(2), 2024.
- 3. Mkondiwa, Maxwell and Urfels, Anton . "Risk-based evaluations of competing agronomic climate adaptation strategies: The case of rice planting strategies in the indo-Gangetic Plains.". Agricultural Systems, 218:104014, 2024.
- 4. Mkondiwa, Maxwell, Kabambe, Vernon and Ngwira, Amos. "Good fences make good neighbors? Exploring potential transformative impacts of local governance towards livestock fence-in rights in Malawi.". Outlook on Agriculture, 53:2, 2024.
- 5. Vijesh Krishna and **Mkondiwa,Maxwell**. "Economics of Crop Residue Management.". *Annual Review of Resource Economics*,15:19-39, 2023.
- 6. **Mkondiwa, Maxwell**. "Is wealth found in the soil or in the brain? Investing in farm people in Malawi.". Review of Development Economics, 27 (1):134-157, 2023.
- 7. **Mkondiwa, Maxwell** and Jeffrey Apland. "Inter-district food flows in Malawi.". *Food Security*,14:1553-1568, 2022.

- 8. **Mkondiwa,Maxwell**. "Mancala board games and origins of entrepreneurship in Africa.". *PLOS ONE*, 2020.
- Mkondiwa, Maxwell. "Strategic games in culture and economics research." Journal of Economic Methodology, 2020.
- 10. **Mkondiwa, Maxwell**. "Graphical Analysis of Agricultural Research Spillover Potential." *Economics of Innovation and New Technology*, 2016.
- 11. Jumbe, Charles, B.L. and **Mkondiwa**, **Maxwell**. "Comparative Analysis of Biofuels Policy Development in Sub-Saharan Africa: The Place of Private and Public Sectors." *Renewable Energy*, 50:614–620, 2013.
- 12. **Mkondiwa, Maxwell**, Jumbe, Charles, B.L., and Wiyo, Kenneth, A. "Poverty-Lack of Access to Adequate Safe Water Nexus: Evidence from Rural Malawi." *African Development Review*, 25(4):537–550, 2013.

SELECTED COMPLETED WORKING PAPERS

- 1. Mkondiwa, Maxwell, Hurley, Terry. "Whither broad or spatially specific fertilizer recommendations?" Revise and resubmit
- 2. Mkondiwa, Maxwell. "Behavioral Game Models for Real World Games.
- 3. Mkondiwa, Maxwell, Phil Pardey and Terry Hurley. "Characteristics space analysis of adoption of improved maize varieties in Malawi."
- 4. **Mkondiwa, Maxwell**. "A cautionary political economy tale of large farm land registration in Malawi".
- 5. Mkondiwa, Maxwell and Jordan Chamberlin. 2024. Spatially explicit trends in ntrogen use efficiency and partial profits in Tanzania, 2008-2020. EiA Report.
- 6. Mkondiwa, Maxwell and Ngoma, Hambulo. 2024. How much is enough? A spatial bioeconomic model for agroecology (SpBiMA) trade-off assessments. Modeling Plan.
- 7. **Mkondiwa, Maxwell**, Chamberlin, Jordan., and Oyinbo, Oyakhilomen. 2024. Workflows for spatial ex ante economic analysis of agronomy interventions: Version 0.1. EiA Manual.
- 8. Madaga, L., Chamberlin, J., Bisrat Gebrekidan., Silva, J. V., **Mkondiwa**, M. and Hijmans, R. J.2024.Predictive mapping of wholesale grain prices for rural areas in Tanzania: A replicable modeling framework for predicting agricultural prices across time and space. EIA report.
- 9. Urfels, A., McDonald, A., Ajay, A., Arenas-Calle, L., Craufurd, P., Deb, P., De Graaf, I.E.M., Halsema, G., Karki, S., Kishore, A., Kumar, V., **Mkondiwa, M.**, Rossiter, D., Seijgers, C., Nayak, H., Sherpa, S., Srivastava, A., and Laborte, A. 2024. Using agro-hydrological machine-learning to spatially target investments in sustainable groundwater irrigation. Working paper.
- 10. Mkondiwa, Maxwell and Kishore, Avinash and Chellattan Veettil, Prakashan and Sherpa, Sonam and Saxena, Satyam and Pinjarla, Bhavani and Urfels, Anton and Poonia, Shishpal and Ajay, Anurag and Craufurd, Peter and Malik, Ram K. and McDonald, Andrew J. 2024. Farmers Agronomic Management Responses to Extreme Drought and Rice Yields in Bihar, India.

SELECTED PAPERS IN PREPARATION

- 1. A meta-review of the conventional crop varietal use evidence for Sub-Saharan Africa, 1927-2016 (with Philip G. Pardey)
- 2. Towards a theory of spatial organization of agriculture and land rights
- 3. Incidence and productivity effects of abusus land rights: Evidence from Malawi
- 4. African farming landscape database (with Philip Pardey, Connie Chan-Kang, Ian Luby, Senait Senay, Ali Joglekar, Terry Hurley, Jason Beddow(late))
- 5. Geoengineering voting architecture under heterogeneous penalty losses (with Jay Coggins, Ian Luby, Ibrahim Keita and Sinnafikeh Germesa)
- 6. Climate geoengineering effects on global economic production (with Jay Coggins, Ben Kravitz, Ian Luby, Ibrahim Keita and Sinnafikeh Germesa)

Awards

Travel Awards

• Global Development Awards Participant, GDN Global Deevelopment Conference, Bonn, Germany Oct 2019

- Agricultural Economics Society (AES) Travel Bursary, UK, April 2019
 Paper selected for presentation at 93rd AES Conference at University of Warwick
- CGIAR Science Forum, Addis Ababa, Ethiopia April 2016 Early Career Scientist selected by ISPC of the CGIAR
- Africa Agriculture Science Week, Accra, Ghana
 Selected as young scientist by YPARD and FARA

 July 2013
- United Nations Global Youth Forum, Bali, Indonesia Dec 2012 Selected as Malawi Representative by UNFPA
- Community Based Adaptation to Climate Change, Hanoi, Vietnam April 2012 Supported by CCAFS to present a project proposal
- CGIAR Science Forum, Beijing, China Oct 2011
 Early Career Scientist selected by YPARD and ISPC of the CGIAR

Student Awards — University of Minnesota, Department of Applied Economics

• Best MS Dissertation Award

2015-16

Student Awards — University of Malawi

- Most Brilliant Male Student and Best Sportsman Awards, Bunda College May 2009
 - Nominated by fellow students in the 2009 graduating cohort and awarded during the Class of 2009 graduation dinner
- University of Malawi-National Bank of Malawi Outstanding Student Award for Faculty of Development Studies

 Dec 2008
 - I received MK 25,000 tuition support for my final year, MK 75,000 cash and a certificate
- Scholastic Achievement in First Year Courses

2006

TEACHING EXPERIENCE

Part-time lecturer

Sep 2011–Dec 2012

Topics in Agricultural Statistics and Computers Department of Agricultural and Applied Economics,

Department of Agricultural and Applied Econon.

University of Malawi-Bunda College

Junior Statistics Trainer

Nov 2010-2013

Several short courses to McKnight Foundation Collaborative Crops Research Programme grantees in Malawi, Tanzania, Kenya and Mozambique

Instructor: Richard Coe

Statistical Services Center, University of Reading, UK

Service Malawi Representative, Young Professionals for Agricultural Development 2012–2013

Several blog posts available here

Vice President, Bunda Economics Association 2008 – 09

Football (soccer) Captain, Bunda College Football Club 2007 – 2008

Reviewer: American Journal of Agricultural Economics, Agricultural Economics African Development Review,Food Security, Food Policy, Precision Agriculture, and

Economics and Philosophy.

Grants and project reviewer: Copenhagen Consensus Center, and British Museum Endangered Material Knowledge Programme.

On-going and Completed Grants Farm Parcel Delineation and Precision Agriculture for Malawi Aug 2021–Aug 2022

Amount: \$ 46,200 PI: Maxwell Mkondiwa

Award: Artificial Intelligence for Development Post-Doctoral Research Fellow Funding

agency: African Center for Technology Studies (ACTS), IDRC and SIDA,

Service: Supervising 4 MSc students

Malawi Agricultural Data Services July 2020–Dec 2021

Amount: \$55,000 PI: Maxwell Mkondiwa

Funding agency: sub-award from University of Minnesota

Service: Supervising 2 MSc students

PhD Studentship and Research Project 2013–2019

Amount: \$ 300,000

PIs: Philip Pardey and Terry Hurley

Funding agency: McKnight Foundation-CCRP

Impact Assessment-Irrigation, Rural Livelihoods and Development Project 2012–13

Amount: \$80,000

Co-PIs: Davies Ng'ong'ola, Patsani Kumambala, Mphepo

Funding agencies: World Bank, IFAD and Government of Malawi

Scoping Study for broad versus spatial specific fertilizer recommendations 2012–13

Amount: \$32,000 Co-PI: Richard Coe

Funding agency: McKnight Foundation

Dream in Color Secondary School Girls Empowerment to Join the Economics Field (for Bunda Economics Association)

2009–10

Amount: 500,000 Malawi Kwacha

Co-PI: Henry Kankwamba Funding agency: World Bank

References Terry Hurley

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Department of Applied Economics E-mail: tmh@umn.edu

University of Minnesota

Philip G. Pardey

Professor Phone:+1 612 625 2766
Department of Applied Economics E-mail: ppardey@umn.edu

University of Minnesota

Thabbie Chilongo

Former Director E-mail: tchilongo@luanar.ac.mw Center for Agricultural Research and Development Lilongwe University of Agriculture and Natural Resources