

## Maxwell Mkondiwa

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CONTACT INFORMATION	International Maize and Wheat Improvement Center (CIMMYT) New Delhi, India	+91 7428669054 <a href="mailto:m.mkondiwa@cgiar.org">m.mkondiwa@cgiar.org</a>
PERSONAL	Date of Birth: October 22, 1989 Nationality: Malawi Gender: Male Personal website: <a href="#">Maxwell Mkondiwa</a> Official website: <a href="#">Maxwell Mkondiwa</a> Github: <a href="#">EiA Exante and Repositories</a> Google scholar: <a href="#">Here</a>	
RESEARCH INTERESTS	Economics of agricultural research, Agricultural policy analysis, Poverty measurement, Land policy, Cultural economics, Spatiotemporal modeling and GIS, Bayesian econometrics, Mathematical optimization	
EDUCATION	<b>University of Minnesota</b> , Minneapolis, MN  Ph.D., Applied Economics, June 2019 <ul style="list-style-type: none"><li>Thesis Topic: <a href="#">Economics of Scaling Agricultural Research Recommendations to Up-Scale Adoption and Impact</a></li><li>Advisors: <a href="#">Philip G. Pardey, Ph.D</a> and <a href="#">Terry Hurley, Ph.D</a></li></ul> M.S., Applied Economics, Oct 2015 <ul style="list-style-type: none"><li>Thesis Topic: <a href="#">Whither Broad or Spatially Specific Fertilizer Recommendations?</a></li><li>Awards: Best MS Dissertation, Department of Applied Economics</li><li>Advisors: <a href="#">Philip G. Pardey, Ph.D</a> and <a href="#">Terry Hurley, Ph.D</a></li></ul> <b>Jomo Kenyatta University of Agriculture and Technology</b> , Nairobi, Kenya  M.S., Research Methodology, June 2012 <ul style="list-style-type: none"><li>Project Topic: <a href="#">An Inquiry into Research Methods Practices: Case Study of Center for Agricultural Research and Development in Malawi</a></li><li>Advisors: <a href="#">Charles Jumbe, Ph.D</a> and <a href="#">Edward Mamati, Ph.D</a></li></ul> <b>University of Malawi-Bunda College</b> , Lilongwe, Malawi  B.S., Agricultural Economics, Sept 2009 <ul style="list-style-type: none"><li>Advisor: <a href="#">Davies Ng'ong'ola, Ph.D</a></li></ul>	
RESEARCH EXPERIENCE	<b>Associate Scientist-Spatial Economist</b> Jan, 2022 to present The International Maize and Wheat Improvement Center (CIMMYT), Delhi, India <b>Adjunct Research Fellow</b> July, 2019 to present Center for Agricultural Research and Development, Lilongwe University of Agriculture and Natural Resources Bunda College Campus <b>Consultant</b> 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

Impact Assessment of Irrigation, Rural Livelihoods and Agricultural Development  
Project (funded by Government of Malawi, World Bank and IFAD),

Position:Socio-economist

REFEREED  
JOURNAL  
PUBLICATIONS

1. 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.
9. **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 nitrogen 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 Veetil, 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.

11. McDonald, Andrew J. and Malik, Ram K. and Ajay, Anurag and Craufurd, Peter and Dubey, Shantanu and Gautam, Udham and Karki, Saral and Kishore, Avinash and Krupnik, Timothy J. and Kumar, Virender and **Mkondiwa, Maxwell** and Nayak, Hari S. and Parihar, Chiter M. and Paudel, Gokul and Peramaiyan, Panneer and Pundir, Ajay and Poonia, Shishpal and Samaddar, Arindam and Sherpa, Sonam and Singh, Balwinder and Singh, Sudhanshu and Urfels, Anton and Chellattan Veettil, Prakashan and Pathak, Himanshu and Singh, A. K. 2023. [Bigger Data from Landscape-Scale Crop Assessment Surveys Empowers Sustainability Transitions.](#)

#### 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 abusos 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, Oct 2019  
GDN Global Deevlopment Conference, Bonn, Germany
- Agricultural Economics Society (AES) Travel Bursary, UK, April 2019  
Paper selected for presentation at 93rd AES Conference at Universtiy 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 July 2013  
Selected as young scientist by YPARD and FARA
- 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
- African Young Scientists Initiative in Climate Change and Indigenous Knowledge Systems, Johannesburg, South Africa April 2011  
Panel speaker and presenter sponsored by NEPAD-African Union

##### 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, 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 <a href="#">here</a>	
	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: <b>\$ 46,200</b>	
	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: <b>\$55 ,000</b>	
	PI: Maxwell Mkondiwa	
	Funding agency: sub-award from University of Minnesota	
	Service: Supervising 2 MSc students	
	PhD Studentship and Research Project	2013–2019
	Amount: <b>\$ 300,000</b>	
	PIs: Philip Pardey and Terry Hurley	
	Funding agency: McKnight Foundation-CCRP	
	Impact Assessment-Irrigation, Rural Livelihoods and Development Project	2012–13
	Amount: <b>\$80,000</b>	
	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: <b>\$32,000</b>	
	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: <b>500,000 Malawi Kwacha</b>	
	Co-PI: Henry Kankwamba	
	Funding agency: World Bank	

## REFERENCES

Terry Hurley

Professor

Department of Applied Economics

University of Minnesota

Phone: +1 612 625 1238

E-mail: tmh@umn.edu

Philip G. Pardey

Professor

Department of Applied Economics

University of Minnesota

Phone: +1 612 625 2766

E-mail: ppardey@umn.edu

Thabbie Chilongo

Former Director

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

E-mail: tchilongo@luanar.ac.mw