# Hiroyuki Takeshima

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#### Areas of expertise

Agricultural and rural transformation Public and private investment Innovation policy Economic geography Agriculture-nutrition linkage Sub-Saharan Africa, South Asia, Central Asia

## **Employment**

Senior Research Fellow, International Food Policy Research Institute (IFPRI)	2018.10-
Research Fellow, IFPRI	2012.4 - 2018.10
Post-Doctoral Fellow, IFPRI	2012. 1 - 2012.4
Post-Doctoral Fellow, IFPRI, Nigeria Office	2009. 1 – 2011.12

#### **Education**

Ph.D.	Agricultural & Consumer Economics, University of Illinois at Urbana-Champaign, USA	2008
M.S.	Agricultural Economics, University of Tennessee, USA	2004
B.A.	Economics, University of Tokyo, Japan	2002

#### **Journal publications**

- 40. Takeshima H, F Yamauchi, HO Edeh & M Hernandez. (2023). <u>Solar-Powered Cold-Storage and Agrifood</u> <u>Market Modernization in Nigeria</u>. *Agricultural Economics* 54(2), 234-255.
- Takeshima H, I Masias, MT Win & PP Zone. (2023). <u>Effects of COVID-19 restrictions on mechanization</u> service providers and mechanization equipment retailers: Insights from phone surveys in Myanmar. *Review of Development Economics* 27(1), 323–351.
- Takeshima H, B Balana, J Smart, HO Edeh, MA Oyeyemi & KS Andam. (2022). <u>Subnational public</u> <u>expenditures, short-term household-level welfare and economic flexibility: Evidence from Nigeria.</u> *Agricultural Economics*, 53(5): 739–755.
- Takeshima H. (2022). <u>Agrifood Market Participation and Household Livelihood Diversification: Evidence</u> from Vietnam. *Journal of Developing Areas* 56(4), 217–230.
- 36. Takeshima H, K Akramov, A Park, J Ilyasov & T Ergasheva. (2022). <u>Agriculture-nutrition linkages</u>, <u>cooking-time</u>, <u>intra-household equality among women and children: Evidence from Tajikistan</u>. *European Journal of Development Research* 34(2), 940–977.
- 35. Takeshima H, F Yamauchi & M Enomoto. (2021). <u>Agricultural, Economic, and Human Development:</u> <u>Joint Research Contributions of Japan and International Food Policy Research Institute</u>. *Japanese Agricultural Research Quarterly* 55(S1), 521–531.
- Amare M, B Shiferaw, H Takeshima & G Mavrotas. (2021). <u>Variability in agricultural productivity and</u> <u>rural household consumption inequality: Evidence from Nigeria and Uganda</u>. *Agricultural Economics* 52(1), 19–36.
- 33. Boughton D, J Goeb, I Lambrecht, D Headey, H Takeshima, K Mahrt, I Masias, S Goudet, C Ragasa, MK Maredia, B Minten & X Diao. (2021). <u>Impacts of COVID-19 on agricultural production and food systems in late transforming Southeast Asia: The case of Myanmar</u>. *Agricultural Systems 188*, 103026.
- 32. **Takeshima H** & A Kumar. (2021). <u>Returns-to-scale and factor-endowments-induced specialization:</u> <u>agricultural mechanization and agricultural transformation in Nepal</u>. *Journal of Developing Areas* 55(4), 133–145.
- 31. Takeshima H & Y Liu. (2020). <u>Smallholder mechanization induced by yield-enhancing biological</u> <u>technologies: Evidence from Nepal and Ghana</u>. *Agricultural Systems 184*, 102914.

- Takeshima H, K Akramov, A Park, J Ilyasov, Y Liu & T Ergasheva. (2020). <u>Agriculture-nutrition</u> <u>linkages with heterogeneous, unobserved returns and costs: Insights from Tajikistan</u>. *Agricultural Economics* 51(4), 553–565.
- Kumar A, H Takeshima, G Thapa, N Adhikari, S Saroj, M Karkee & PK Joshi. (2020). <u>Adoption and diffusion of improved technologies and production practices in agriculture: Insights from a donor-led intervention in Nepal</u>. *Land Use Policy* 95, 104621.
- 28. Takeshima H, P Hatzenbuehler, H Edeh. (2020). Effects of agricultural mechanization on economies of scope in crop production in Nigeria. Agricultural Systems 177, 102691.
- 27. Takeshima H. (2019). Geography of plant breeding systems, agroclimatic similarity, and agricultural productivity: an insight from Northern Nigeria. *Agricultural Economics* 50(1), 67–78.
- 26. **Takeshima H**, N Houssou, X Diao. (2018). <u>Effects of tractor ownership on returns-to-scale in agriculture:</u> Evidence from maize in Ghana. *Food Policy* 77, 33–49.
- 25. Takeshima H. (2018). <u>Mechanize or exit farming? Multiple-treatment-effects model and external validity</u> of adoption impacts of mechanization among Nepalese smallholders. *Review of Development Economics* 22(4), 1620–1641.
- Kumar A, S Saroj, PK Joshi & H Takeshima. (2018). Does cooperative membership improve household welfare? Evidence from a panel data analysis of smallholder dairy farmers in India. Food Policy 75, 24–36.
- 23. Takeshima H. (2018). Distributional effects of agricultural infrastructure in developing countries: Large irrigation dams and drought mitigation in Nigeria. *Journal of Developing Areas* 52(3), 1–13.
- 22. Takeshima H. (2017). <u>Custom-hired tractor services and returns to scale in smallholder agriculture: A production function approach</u>. *Agricultural Economics* 48(3), 363–372.
- Xie H, L You & H Takeshima. (2017). <u>Invest in small-scale irrigated agriculture: A national assessment</u> on potential to expand small-scale irrigation in Nigeria. *Agricultural Water Management 193*, 251– 264.
- 20. Takeshima H, R Adhikari, BD Kaphle, S Shivakoti & A Kumar. (2017). <u>Heterogeneous Returns to</u> <u>Chemical Fertilizer at the Intensive Margins: Insights from Nepal</u>. *Food Policy* 69, 97–109.
- 19. Takeshima H. (2016). <u>Understanding irrigation system diversity in Nigeria: A modified cluster-analysis</u> approach. *Irrigation and Drainage* 65(5), 601–612.
- Takeshima H & LS Liverpool-Tasie. (2015). <u>Fertilizer subsidy</u>, political influence and local food prices in <u>sub-Saharan Africa: Evidence from Nigeria</u>. *Food Policy* 54, 11–24.
- 17. Takeshima H, E Edeh, A Lawal & M Ishiaka. (2015). <u>Characteristics of private-sector tractor service</u> provisions: Insights from Nigeria. *Developing Economies* 53(3), 188–217.
- 16. Takeshima H. (2015). Onset risks and draft animal investment in Nigeria. Journal of International Agricultural Trade and Development 9(2), 137–163.
- 15. Takeshima H & L Nagarajan. (2015). Farmer preferences on seed purchase timing: some evidence from Nigeria. *Journal of Crop Improvement 29*(1), 131–158. Taylor & Francis Group, LLC.
- 14. **Takeshima H** & E Nkonya. (2014). <u>Government fertilizer subsidy and commercial sector fertilizer demand:</u> Evidence from the Federal Market Stabilization Program (FMSP) in Nigeria. *Food Policy* 47, 1–12.
- 13. Liverpool-Tasie LS & **H Takeshima**. (2013). <u>Input promotion within a complex subsector: fertilizer in</u> <u>Nigeria</u>. *Agricultural Economics* 44(6, Special Issue), 581–594.
- 12. **Takeshima H**, A Nin Pratt & X Diao. (2013). <u>Mechanization and agricultural technology evolution</u>, <u>agricultural intensification in sub-Saharan Africa: typology of agricultural mechanization in Nigeria</u>. *American Journal of Agricultural Economics 95*(5, ASSA Proceeding Issue), 1230–1236.
- Takeshima H & L Nagarajan. (2012). <u>Minor millets in Tamil Nadu, India: Local market participation, on-farm diversity and farmer welfare</u>. *Environment and Development Economics* 17(5, Special Issue), 603–632.
- 10. **Takeshima H** & A Winter-Nelson. (2012). <u>Sales location among semi-subsistence cassava farmers in</u> <u>Benin: a heteroskedastic double selection model</u>. *Agricultural Economics* 43(6), 655–670.
- Gruère G & H Takeshima. (2012). <u>Will they stay or will they go? The political influence of GM averse</u> <u>importing companies on biosafety decision makers in Africa</u>. *American Journal of Agricultural Economics 94*(3), 736–749.
- 8. Takeshima H & F Yamauchi. (2012). <u>Risks and farmers' investment in productive assets in Nigeria</u>. *Agricultural Economics* 43(2), 143–153.

- Takeshima H & G Gruère. (2011). <u>Pressure Group Competition and GMO Regulations in Sub-Saharan</u> <u>Africa - Insights from the Becker Model</u>. *Journal of Agricultural & Food Industrial Organization* 9(1), Article 7.
- 6. **Takeshima H**. (2011). <u>Sensitivity of welfare effects estimated by an equilibrium displacement model: a</u> productivity growth for semi-subsistence crops in a sub-Sahara African market with high market <u>margin</u>. *Journal of International Agricultural Trade and Development* 7(1), 1–22.
- Takeshima H, A Adeoti & S Salau. (2011). <u>Measuring the effect of transaction costs for investment in</u> <u>irrigation pumps: Application of unobserved stochastic threshold model to the case of Nigeria</u>. *African Journal of Agricultural and Resource Economics* 6(2), 118–143.
- Takeshima H. (2011). <u>Distribution of welfare gains from GM cassava in Uganda across different</u> population groups and market margins. *African Journal of Agricultural and Resource Economics* 6(1), 35–53.
- 3. Takeshima H. (2011). <u>Assessing input-specific knowledge gaps in characteristics of farmers' demand –</u> seed and irrigation technologies in Nigeria. *African Journal of Agricultural Research* 6(9), 2072–2077.
- 2. Takeshima H. (2010). Prospects for development of genetically modified cassava in Sub-Saharan Africa. *AgBioForum 13*(1), 63–75.
- 1. Regmi A, **H** Takeshima & L Unnevehr. (2008). <u>Convergence in global food demand and delivery</u>. *Journal of Food Distribution Research 39*(1), 116–122.

## **Books edited**

- Diao X, H Takeshima & X Zhang. (2020). <u>An Evolving Paradigm of Agricultural Mechanization Development:</u> <u>How Much Can Africa Learn from Asia?</u> Washington DC. International Food Policy Research Institute. (blog) (synopsis) (book launch)
- Gyimah-Brempong K, M Johnson & H Takeshima. (2016). <u>The Nigerian Rice Economy: Policy Options for</u> <u>Transforming Production, Marketing, and Trade</u>. Philadelphia. University of Pennsylvania Press. DOI: 10.2499/9780812248951.

# **Book chapters**

- 23. Belton B, MT Win, X Zhang, M Filipski, I Masias & H Takeshima. (2023). Agricultural mechanization in Myanmar, in Agriculture and rural development in Myanmar, B Minten, D Boughton, I Lambrecht & B Belton (eds.), in progress.
- 22. Kaumbutho P & H Takeshima. (2023). Mechanization in Agricultural Production, in Food Systems Transformation in Kenya: Lessons from the Past and Policy Options for the Future, C Breisinger, J Njuki, M Keenan & J Mbuthia (eds.), in progress.
- Takeshima H & Y Mano. (2023). <u>Chapter 7: Intensification of Rice Farming: The Role of Mechanization</u> <u>and Irrigation</u>, in Rice Green Revolution in Sub-Saharan Africa, by K Otsuka, Y Mano & K Takahashi (eds.). Natural Resource Management and Policy 56.
- Diao X, T Reardon, A Kennedy, RS DeFries, J Koo, B Minten, H Takeshima & P Thornton. (2023). <u>The</u> <u>Future of Small Farms: Innovations for Inclusive Transformation</u>, In Science and Innovations for Food Systems Transformation. J von Braun, K Afsana, LO Fresco, MHA Hassan (Eds.). pp.191-205, Springer.
- Yamauchi F & H Takeshima. (2023). <u>Chapter 24: Solar Power to Transform Food Systems and Rural</u> <u>Livelihoods: Evidence from a Solar-Powered Cold Storage Intervention in Nigeria</u>, in Agricultural Development in Asia and Africa: Essays in Honor of Keijiro Otsuka, T Sonobe, JP Estudillo & Y Kijima (eds.), Springer.
- Takeshima H, A Kumar, A Ahmed & PK Joshi. (2021). <u>Agricultural development and modernization in</u> <u>South Asia</u>. In Agricultural development: New perspectives in a changing world. K Otsuka & S Fan (Eds.). Chapter 4, p. 111-152. Washington, DC: International Food Policy Research Institute (IFPRI).
- 17. Takeshima H, X Diao & P Aboagye. (2020). <u>Policies for competitive and sustainable agricultural</u> <u>production systems: A case study of Ghana's recent mechanization interventions</u>. In <u>Annual trends and</u> <u>outlook report: Sustaining Africa's agrifood system transformation: The role of public policies</u>, D Resnick, X Diao & G Tadesse (eds.). Washington DC: IFPRI. (blog)
- 16. Takeshima H. (2020). Agriculture in South Asia: Trends and Prospects. In <u>Transforming Agriculture in</u> <u>South Asia: The Role of Value Chains and Contract Farming</u>, A Mishra, A Kumar & PK Joshi (eds.), Routledge Studies in Agricultural Economics.

- 15. Takeshima H, A Lawal. (2020). <u>Evolution of agricultural mechanization in Nigeria</u>. In An Evolving Paradigm of Agricultural Mechanization Development: How Much Can Africa Learn from Asia? X Diao, H Takeshima & X Zhang (eds.), IFPRI.
- 14. **Diao X** & H Takeshima. (2020). <u>Agricultural mechanization in Ghana: Alternative supply models for</u> <u>tractor hiring services</u>. In An Evolving Paradigm of Agricultural Mechanization Development: How Much Can Africa Learn from Asia? X Diao, H Takeshima & X Zhang (eds.), IFPRI.
- Takeshima H & S Justice. (2020). <u>Evolution of agricultural mechanization in Nepal</u>. In An Evolving Paradigm of Agricultural Mechanization Development: How Much Can Africa Learn from Asia? X Diao, H Takeshima & X Zhang (eds.), IFPRI.
- 12. Ahmed M & **H Takeshima**. (2020). Evolution of agricultural mechanization in Bangladesh: The case of tractors for land preparation. In An Evolving Paradigm of Agricultural Mechanization Development: How Much Can Africa Learn from Asia? X Diao, H Takeshima & X Zhang (eds.), IFPRI.
- Takeshima H, Y Liu, CV Nguyen & I Masias. (2020). <u>Evolution of agricultural mechanization in Viet</u> <u>Nam</u>. In An Evolving Paradigm of Agricultural Mechanization Development: How Much Can Africa Learn from Asia? X Diao, H Takeshima & X Zhang (eds.), IFPRI.
- Abeyratne F & H Takeshima. (2020). <u>The evolution of agricultural mechanization in Sri Lanka</u>. In An Evolving Paradigm of Agricultural Mechanization Development: How Much Can Africa Learn from Asia? X Diao, H Takeshima & X Zhang (eds.), IFPRI.
- 9. Bhattarai M, G Singh, H Takeshima & RS Shekhawat. (2020). <u>Farm machinery use and the agricultural machinery industries in India: Status, evolution, implications, and lessons learned</u>. In An Evolving Paradigm of Agricultural Mechanization Development: How Much Can Africa Learn from Asia? X Diao, H Takeshima & X Zhang (eds.). IFPRI.
- 8. **Diao X**, J Silver, H Takeshima & X Zhang. (2020). <u>An evolving paradigm for Africa and synthesis of the</u> <u>lessons from Asia</u>. In An Evolving Paradigm of Agricultural Mechanization Development: How Much Can Africa Learn from Asia? X Diao, H Takeshima & X Zhang (eds.). IFPRI.
- Takeshima H & M Bhattarai. (2019). <u>Agricultural mechanization in Nepal- patterns, impacts and enabling</u> <u>strategies for promotion</u>, in Agricultural Transformation in Nepal: Trends, Prospects, and Policy Options, G Thapa, A Kumar & PK Joshi (eds.). Springer, Singapore. <u>https://doi.org/10.1007/978-981-32-9648-0\_10</u>.
- Takeshima H. (2019). <u>Use of Chemical Fertilizers in Nepal- issues and implications</u>, in Agricultural Transformation in Nepal: Trends, Prospects, and Policy Options, G Thapa, A Kumar & PK Joshi (eds.). Springer, Singapore. <u>https://doi.org/10.1007/978-981-32-9648-0\_9</u>.
- Gyimah-Brempong K, M Johnson & H Takeshima. (2016). <u>Chapter 9: Transforming the Rice Sector</u>. DOI: 10.2499/9780812248951\_09.
- Diao X, M Johnson & H Takeshima. (2016). <u>Chapter 8: Economywide effects and implications of alternative policies</u>. DOI: 10.2499/9780812248951\_08.
- 3. Takeshima H. (2016). *Chapter 4: Policy options for inducing a supply response*. DOI: 10.2499/9780812248951\_04.
- Takeshima H & O Bakare. (2016). <u>Chapter 3: Production systems biophysical and economic</u> <u>environment, and constraints</u>. DOI: 10.2499/9780812248951\_03.
- Gyimah-Brempong K, M Johnson & H Takeshima. (2016). <u>Chapter 1: Rice in the Nigerian Economy and Agricultural Policies</u>, in The Nigerian Rice Economy: Policy Options for Transforming Production, Marketing, and Trade, K Gyimah-Brempong, M Johnson & H Takeshima (eds.). Philadelphia. University of Pennsylvania Press. DOI: 10.2499/9780812248951\_01.

## **Other peer-reviewed publications**

Diao X, J Silver & **H Takeshima**. (2017). <u>Agricultural Mechanization in Africa: Insights from Ghana's</u> <u>Experience.</u> IFPRI Issue Brief.

# Work in progress

# Working Papers / Technical Reports

- Myanmar Agriculture Policy Support Activity (MAPSA). 2023b. Agricultural mechanization services, rice productivity, and farm/plot size: Insights from Myanmar. Myanmar SSP Working Paper 33. Washington, DC: IFPRI.
- Myanmar Agriculture Policy Support Activity (MAPSA). 2023a. <u>Conflict and agricultural productivity:</u> <u>Evidence from Myanmar.</u> Myanmar SSP Working Paper 30. Washington, DC: IFPRI.

- Takeshima H, S Saroj & A Kumar. (2023). *Effects of weather and food market risks on household agriculturenutrition linkage: Micro-level insights from India*. IFPRI DP 02167.
- Takeshima H, K Raghunathan & K Kosec. (2022). <u>Climate change and women's voice and agency beyond the</u> <u>household: Insights from India</u>. IFPRI DP 02148.
- Takeshima H, T Abdoulaye, KS Andam, HO Edeh. A Fasoranti, B Haile, P. Lava Kumar, C Nwagboso, C Ragasa, D Spielman, T Wossen. (2022). <u>Seed certification and maize, rice and cowpea productivity in Nigeria: An insight based on nationally representative farm household data and seed company location data</u>. IFPRI DP 02147.
- Takeshima H, H Edeh & K Andam. (2022). <u>Roles of public expenditures and public investments on the</u> <u>demand and productivity of agricultural inputs/services: Some insights from Nigeria</u>. IFPRI DP 02114.
- Takeshima H & Vos R. (2022). Agricultural mechanisation and child labour in developing countries.Background study. Rome, FAO. <a href="https://doi.org/10.4060/cb8550en">https://doi.org/10.4060/cb8550en</a>.
- Vos R & H Takeshima. (2021). <u>Agricultural mechanisation and child labour in developing countries</u>. IFPRI DP 02080.
- Smart J, S Benin, P Marenya, H Takeshima & F Smart. (2021). <u>Effect of Public Investments on Maize and</u> <u>Cereal Productivity</u>. IFPRI DP 02076.
- **Takeshima H &** X Diao. (2021). <u>Agricultural mechanization and gendered labor activities across sectors:</u><u>Micro-evidence from multi-country farm household data</u>. IFPRI DP 02066.
- Takeshima H. (2021). <u>Public-sector maize research locations and spatial heterogeneity in maize productivity:</u> <u>Insights from four African countries on the roles of agroclimatic similarity</u>. IFPRI DP 02064.
- Takeshima H, J Smart & X Diao. (2021). <u>Public expenditure's role in reducing poverty and improving food</u> <u>and nutrition security: Preliminary cross-country insights based on SPEED data</u>. IFPRI DP 02051.
- Takeshima H, B Balana, J Smart, HO Edeh, MA Oyeyemi & KS Andam. (2021). <u>Subnational public</u> <u>expenditures, short-term household-level welfare, and economic resilience: Evidence from Nigeria</u>. NSSP Working Paper 68. Washington, DC: IFPRI.
- Takeshima H, F Yamauchi, D Bawa, SO Kamaldeen, H Edeh & MA Hernandez. (2021). <u>Solar-powered cold-storages and sustainable food system transformation: Evidence from horticulture markets interventions in northeast Nigeria</u>. IFPRI DP 02047.
- Takeshima H, Ian Masias, MT Win, PP Zone. (2021). <u>Effects of COVID-19-restrictions on mechanization-service providers and mechanization equipment retailers: Insights from phone surveys in Myanmar</u>. IFPRI DP 02021.
- Diao X, T Reardon, A Kennedy, RS DeFries, J Koo, B Minten, H Takeshima & P Thornton. (2021). <u>The</u> <u>Future of Small Farms: Innovations for Inclusive Transformation</u>. Food Systems Summit Brief Prepared by Research Partners of the Scientific Group for the Food Systems Summit.
- Takeshima H, B Balana, J Smart, HO Edeh, MA Oyeyemi & KS Andam. (2020). <u>Effects of public</u> <u>expenditures on agriculture at subnational levels on households' welfare and economic resilience in</u> <u>Nigeria</u>. IFPRI DP 01955.
- Takeshima H, J Smart, HO Edeh, MA Oyeyemi, B Balana & KS Andam. (2020). <u>Public Expenditures on</u> <u>Agriculture at Subnational-Levels and Household-Level Agricultural Outcomes in Nigeria</u>. IFPRI DP 01952.
- Takeshima H & A Kumar. (2020). <u>Changing Returns-to-Scale and Deepening of Factor-Endowments-Induced</u> <u>Specialization: Exploring Broader Linkage between Agricultural Mechanization and Agricultural</u> <u>Transformation in Nepal</u>. IFPRI DP 01934.
- Takeshima H, M Ajmani, D Roy, A Fadhillah & Y Liu. (2020). <u>Agrifood market participation, household</u> <u>economies of specialization and diversification: Evidence from Vietnam</u>. IFPRI DP 01922.
- Takeshima H, K Akramov, A Park, J Ilyasov & T Ergasheva. (2019). <u>Agriculture-nutrition linkages, cooking-time, intra-household equality among women and children: Evidence from Tajikistan</u>. IFPRI Discussion Paper 01882.
- Takeshima H & Y Liu. (2019). <u>Geography of smallholders' tractor adoptions and R&D–Induced land</u> <u>productivity: Evidence from household survey data in Ghana</u>. IFPRI Discussion Paper 01871. (blog: <u>http://gssp.ifpri.info/2019/09/27/5918/</u>)
- Takeshima H & PK Joshi. (2019). *Overview of the agricultural modernization in Southeast Asia*. IFPRI Discussion Paper 01819.
- Takeshima H & PK Joshi. (2019). <u>Protected agriculture, precision agriculture, and vertical farming: Brief</u> <u>reviews of issues in the literature focusing on the developing region in Asia</u>. IFPRI Discussion Paper 01814.

- Kanoktanaporn, S., Diao, X., Matsushita, S., Aoyagi, Y., Briones, M. R., Jiang, J-A., Takeshima, H., Saeed, M., Hossain., S. T., Watanabe, K. and Parth., S. (2019). <u>APO Agricultural Transformation Framework</u>. Asian Productivity Organization (APO), Tokyo, Japan.
- Kumar A, H Takeshima, N Adhikari, G Thapa, PK Joshi & M Karkee. (2018). <u>Adoption and Diffusion of</u> <u>Improved Technologies and Production Practices in Agriculture: Insights from a Donor-led Intervention in</u> <u>Nepal.</u> IFPRI Discussion Paper 01781.
- Takeshima H, K Akramov, A Park, J Ilyasov, Y Liu & T Ergasheva. (2018). <u>Agriculture–Nutrition Linkages in</u> <u>Tajikistan: Evidence from Household Survey Data</u>. IFPRI Discussion Paper 01770.
- Takeshima H, M Amare & G Mavrotas. (2018). <u>The role of agricultural productivity in non-farm activities in</u> <u>Nigeria: Effects on sector orientation and factor intensity</u>. IFPRI Discussion Paper 01761.
- Hatzenbuehler P, **H Takeshima**, H Edeh & A Lawal. (2018). <u>Cost and policy determinants of features of</u> <u>tractor markets in Nigeria</u>. IFPRI NSSP Working Paper 55.
- Takeshima H, P Hatzenbuehler, H Edeh. (2018). <u>Effects of agricultural mechanization on economies of scope</u> <u>in crop production in Nigeria</u>. IFPRI NSSP Working Paper 53.
- Takeshima H, A Lawal. (2018). <u>Overview of the Evolution of Agricultural Mechanization in Nigeria</u>. IFPRI Discussion Paper 01750.
- Diao X, J Agandin, P Fang, SE Justice, D Kufoalor & H Takeshima. (2018). <u>Agricultural Mechanization in</u> <u>Ghana: Insights from a Recent Field Study</u>. IFPRI Discussion Paper 01729.
- Takeshima H, Y Liu, CV Nguyen & I Masias. (2018). *Evolution of agricultural mechanization in Vietnam: Insights from a literature review and multiple rounds of a farm household survey.* IFPRI DP 01724.
- **Takeshima H &** Y Liu. (2018). *The Role of Plant-Breeding R&D in Tractor Adoption among Smallholders in Asia: Insights from Nepal Terai.* IFPRI Discussion Paper 01719.
- Bhattarai M, G Singh, **H Takeshima** & S Shekhawat. (2018). *Farm machinery uses and agricultural industries in India: status, evolution, implications, and lessons learned.* IFPRI Discussion Paper 01715.
- Kumar A, S Saroj, **H Takeshima** & PK Joshi. (2018). *Does cooperative membership improve household* welfare? Evidence from a panel data analysis of smallholder dairy farmers in India. IFPRI DP 01703.
- Takeshima H. (2017). <u>The roles of agroclimatic similarity and returns to scale in demand for mechanization:</u> <u>Insights from Northern Nigeria.</u> IFPRI Discussion Paper 01692 (Nils Westermarck Award paper at the 2018 ICAE Conference, Vancouver, Canada).
- Takeshima H & H Edeh. (2017). Constraints for small-scale private irrigation systems in the North Central zone of Nigeria: Insights from a typology analysis and a case study.

   IFPRI NSSP Working Paper 47.
- **Takeshima H**, J Agandin & S Kolavalli. (2017). <u>Growth of Modern Service Providers for the African</u> <u>Agricultural Sector: An Insight from a Public Irrigation Scheme in Ghana</u>. IFPRI Discussion Paper 01678.
- Bhattarai M, PK Joshi, RS Shekhawat & H Takeshima. (2017). <u>The Evolution of Tractorization in India's</u> Low-Wage Economy Key Patterns and Implications. IFPRI Discussion Paper 01675.
- Takeshima H, N Houssou, X Diao. (2017). <u>Effects of tractor ownership on agricultural returns-to-scale in</u> <u>household maize production: Evidence from Ghana</u>. IFPRI Discussion Paper 01671.
- **Takeshima H** & A Nasir. (2017). *The role of the locations of public sector varietal development activities on agricultural productivity: Evidence from northern Nigeria.* IFPRI NSSP Working Paper 42.
- **Takeshima H.** (2017). <u>Overview of the Evolution of Agricultural Mechanization in Nepal, with a Particular</u> <u>Focus on Tractors and Combine Harvesters</u>. IFPRI Discussion Paper 01662.
- Takeshima H, RB Shrestha, BD Kaphle, M Karkee, S Pokhrel, A Kumar. (2016). <u>Effects of agricultural</u> <u>mechanization on smallholders and their self-selection into farming: An insight from the Nepal Terai.</u> IFPRI Discussion Paper 01583.
- Takeshima H, S Shivakoti, B Bhattarai, M Karkee, S Pokhrel & A Kumar. (2016). <u>Farm Size and Effects of</u> <u>Chemical Fertilizer Price on Farm Households: Insights from Nepal Terai</u>. IFPRI Discussion Paper 01578.
- Takeshima H, A Adeoti & O Popoola. (2016). <u>The impact on farm household welfare of large irrigation dams</u> <u>and its distributions across hydrological basins: Insights from northern Nigeria</u>. IFPRI NSSP Working Paper 35.
- Takeshima H & A Maji. (2016). <u>Varietal development and the effectiveness of seed sector policies: The case of rice in Nigeria</u>. IFPRI NSSP Working Paper 34.
- Diao X, J Silver & H Takeshima. (2016). <u>Agricultural mechanization and agricultural transformation</u>. IFPRI Discussion Paper 01527.
- Diao X, J Silver & H Takeshima. (2016). Agricultural Mechanization and Agricultural Transformation. Background Paper for African Economic Transformation Report. African Center of Economic Transformation.

- Takeshima H, R Adhikari & A Kumar. (2016). *Is access to tractor service a binding constraint for Nepali Terai farmers?* IFPRI Discussion Paper 01508.
- Takeshima H, R Adhikari, BD Kaphle, S Shivakoti & A Kumar. (2016). <u>Determinants of Chemical Fertilizer</u> <u>Use in Nepal: Insights Based on Price Responsiveness and Income Effects.</u> IFPRI Discussion Paper 01507.
- Takeshima H, R Adhikari, MN Poudel & A Kumar. (2015). <u>Farm Household Typologies and Mechanization</u> <u>Patterns in Nepal Terai.</u> IFPRI Discussion Paper 01488.
- Takeshima H. (2015). *Drivers of growth in agricultural returns to scale: The hiring in of tractor services in the Terai of Nepal.* IFPRI Discussion Paper 01476.
- Takeshima H. (2015). <u>Market Imperfections for Tractor Service Provision in Nigeria: International</u> <u>Perspectives and Empirical Evidence</u>, IFPRI Discussion Paper 01424.
- Takeshima H & M Adesugba. (2014). <u>Irrigation Potential in Nigeria: Some Perspectives Based on Factor</u> Endowments, Tropical Nature, and Patterns in Favorable Areas. IFPRI Discussion Paper 01399.
- **Takeshima H**, H Edeh, A Lawal & M Isiaka. (2014). <u>Tractor owner operators in Nigeria: Insights from a small</u> <u>survey in Kaduna and Nasarawa states.</u> IFPRI Discussion Paper 01355.
- Takeshima H. (2014). *Importance of rice research and development in rice seed policies: Insights from Nigeria.* IFPRI Discussion Paper 01343.
- Johnson M, **H Takeshima** & K Gyimah-Brempong. (2013). <u>Assessing the potential and policy alternatives for</u> <u>achieving rice competitiveness and growth in Nigeria.</u> IFPRI Discussion Paper 01301.
- **Takeshima H**, A Nin Pratt & X Diao. (2013). <u>Agricultural mechanization patterns in Nigeria: Insights from</u> <u>farm household typology and agricultural household model simulation</u>. IFPRI Discussion Paper 01291.
- **Takeshima H**, K Jimah, S Kolavalli, X Diao & R Funk. (2013). *Dynamics of transformation: Insights from an exploratory review of rice farming in the Kpong Irrigation Project*. IFPRI Discussion Paper 01272.
- Takeshima H & H Edeh. (2013). <u>Typology of Farm Household and Irrigation Systems Some Evidence from</u> <u>Nigeria</u>. IFPRI Discussion Paper 01267.
- Takeshima H, E Nkonya & S Deb. (2012). *Impact of fertilizer subsidies on the commercial fertilizer sector in Nigeria: Evidence from previous fertilizer subsidy schemes.* NSSP Working Paper 23. IFPRI.
- Yamauchi F, **H Takeshima**, S Sumaryanto, R Dewina & A Haruna. "Climate Change, Perceptions and the Heterogeneity of Adaptation and Rice Productivity: Evidence from Indonesian Villages", *in progress*.
- Takeshima H & S Salau. "How Does Ownership of Farm Implements Affect Investment in Other Farm Implements When Farmers' Liquidity Constraint Is Relaxed?", in progress.
- "Demand Characteristics for Improved Rice, Cowpea, and Maize Seeds in Nigeria: Policy Implications and Knowledge Gaps.", with A Oyekale, S Olatokun & S Salau. IFPRI-NSSP Working Paper 0016 (2010).
- "Demand Characteristics for Small-scale Private Irrigation Technologies: Knowledge Gaps in Nigeria" with A Adeoti, S Okoli, S Salau & V Rhoe. IFPRI-NSSP Working Paper 0018 (2010).
- "Constraints and knowledge gaps for different irrigation systems in Nigeria", with S Salau & A Adeoti. IFPRI-NSSP Report 10 (2010).

#### **Briefs / Project Notes**

- Myanmar Agriculture Policy Support Activity (MAPSA). 2023. <u>Monitoring the agri-food system in Myanmar:</u> <u>Mechanization service providers – January 2023 survey round.</u> Myanmar SSP Research Note 94. Washington, DC: International Food Policy Research Institute (IFPRI).
- Diao X, PA Dorosh, M Ellis, B Deb Pal, J Smart, **H Takeshima** & J Thurlow. (2022). <u>Nepal: Impacts of the</u> <u>Ukraine and global crises on poverty and food security</u>. IFPRI Global Crisis Country Brief 13.
- Takeshima H, B Balana, J Smart, HO Edeh, MA Oyeyemi & KS Andam. (2021). <u>Synopsis: Subnational public</u> <u>expenditures, short term household level welfare, and economic resilience: Evidence from Nigeria</u>. NSSP Policy Note 54. Washington, DC: IFPRI.
- Takeshima H, PP Zone & I Masias. (2021). <u>Monitoring the impact of COVID-19 in Myanmar: Agricultural</u> <u>Equipment Retailers - January 2021 survey round.</u> IFPRI Myanmar SSP Policy Note 45.
- Takeshima H, PP Zone, MT Win & I Masias. (2021). <u>Monitoring the impact of COVID-19 in Myanmar:</u> <u>Mechanization service providers - December 2020 survey round.</u> IFPRI Myanmar SSP Policy Note 43.
- Takeshima H, PP Zone & I Masias. (2020). <u>Monitoring the impact of COVID-19 in Myanmar: Mechanization</u> <u>service providers - November 2020 survey round.</u> IFPRI Myanmar SSP Policy Note 39.
- Takeshima H, PP Zone & I Masias. (2020). <u>Monitoring the impact of COVID-19 in Myanmar: Agricultural</u> <u>equipment retailers - November 2020 survey round.</u> IFPRI Myanmar SSP Policy Note 38.
- Takeshima H, MT Win & I Masias. (2020). <u>Monitoring the impact of COVID-19 in Myanmar: Agricultural</u> <u>Equipment Retailers - July 2020 survey round.</u> IFPRI Myanmar SSP Policy Note 18. (blog)

- Takeshima H, MT Win & I Masias. (2020). <u>Monitoring the impact of COVID-19 in Myanmar: Mechanization</u> <u>service providers - July 2020 survey round</u>. IFPRI Myanmar SSP Policy Note 17. (blog)
- Takeshima H, MT Win & I Masias. (2020). <u>Monitoring the impact of COVID-19 in Myanmar: Agricultural</u>

   <u>Equipment Retailers June 2020 survey round.</u> IFPRI Myanmar SSP Policy Note 16. (blog)
- Takeshima H, MT Win & I Masias. (2020). <u>Monitoring the impact of COVID-19 in Myanmar: Mechanization</u> <u>service providers – June 2020 survey round.</u> IFPRI Myanmar SSP Policy Note 12.
- Takeshima H, MT Win & I Masias. (2020). <u>Monitoring the impact of COVID-19 in Myanmar: Agricultural</u> <u>equipment retailers</u>. IFPRI Myanmar SSP Policy Note 09. (blog)
- Takeshima H, MT Win & I Masias. (2020). <u>Monitoring the Impact of COVID-19 in Myanmar: Mechanization</u> <u>Service Providers – May 2020.</u> IFPRI Myanmar SSP Policy Note 07. (blog)
- **Takeshima H** & A Kennedy. (2019). *Mechanization in Nigeria: What needs to be done to stimulate demand and support market growth*? Research briefs 98, International Food Policy Research Institute (IFPRI).
- **Takeshima H** & Y Liu. (2019). <u>Determinants of agricultural machinery adoption intensities in Ghana</u>. *Syngenta Foundation and IFPRI DSGD, MTID & PIM Project Note.*
- **Takeshima H**, Y Liu, CN Nguyen & I Masias. (2019). <u>Evolution of agricultural mechanization in Vietnam:</u> <u>Insights from a literature review and multiple rounds of a farm household survey</u>. *Syngenta Foundation and IFPRI DSGD, MTID & PIM Project Note*.
- **Takeshima H** & Y Liu. (2019). <u>Mechanization growth and declining farm size in South Asia: Exploring the</u> role of biological technologies in Nepal Terai. Syngenta Foundation and IFPRI DSGD, MTID & PIM Project Note.
- **Takeshima H.** (2019). The roles of agroclimatic similarity and returns on scale in the demand for mechanization: Insights from Nigeria. Syngenta Foundation and IFPRI DSGD, MTID & PIM Project Note.
- Hatzenbuehler P, H Takeshima, H Edeh & A Lawal. 2018. <u>Synopsis: Cost and policy determinants of features</u> of tractor markets in Nigeria: Case studies of tractor sellers in Kaduna state and tractor owners in Benue <u>state</u>. IFPRI NSSP Policy Note 50.
- Takeshima H, P Hatzenbuehler, H Edeh. (2018). <u>Synopsis: Effects of agricultural mechanization on economies</u> of scope in crop production in Nigeria. IFPRI NSSP Policy Note 48.
- Takeshima H & H Edeh. (2017). <u>Synopsis: Constraints for small-scale private irrigation systems in the North</u> <u>Central zone of Nigeria</u>. IFPRI NSSP Policy Note 42.
- Takeshima H & A Nasir. (2017). <u>Synopsis: The role of the locations of public sector varietal development</u> <u>activities on agricultural productivity</u>. IFPRI NSSP Policy Note 39.
- Aboagye PO, AG Abubakar, AI Adama, AO Lawal, & AA Musa (Synthesized by **H Takeshima**). (2016). <u>Agricultural mechanization and south-south knowledge exchange: What can Ghanaian and Nigerian</u> <u>policymakers learn from Bangladesh's experience?</u> GSSP Policy Note 6 and NSSP Policy Note 36, IFPRI.
- Animaw AT, JAM Nkanya, JM Nyakiba & TH Woldemariam (Synthesized by **H Takeshima**). (2016). <u>Agricultural mechanization and south-south knowledge exchange: What can Ethiopian and Kenyan</u> <u>policymakers learn from Bangladesh's experience?</u> ESSP Policy Note 47, IFPRI.
- Ragasa C, H Takeshima, A Chapoto & S Kolavalli. (2014). <u>Substituting for rice imports in Ghana.</u> GSSP Policy Note 6.
- Johnson M, H Takeshima, K Gyimah-Brempong & O Kuku-Shittu, X Diao, P Dorosh, M Malek, J Koo, A Pradesha & A Ajibola. (2013). <u>Policy options for accelerated growth and competitiveness of the domestic</u> <u>rice economy in Nigeria</u>. NSSP Policy Note 35.
- Takeshima H, K Jimah, S Kolavalli & X Diao. (2013). *Dynamics of transformation: Insights from rice farming in Kpong Irrigation System (KIS)*. Transforming Agriculture Conference Discussion Note 008. IFPRI.
- Takeshima H, E Nkonya & D Sayon. (2012). *Impact of fertilizer subsidies on the commercial fertilizer sector in Nigeria: evidence from previous fertilizer subsidy schemes.* IFPRI NSSP Policy Note 34.
- Takeshima H & HL Lee. (2012). IFPRI Mozambique Country Support Program Policy Note 1–4. <u>1. Agricultural inputs subsidy and their developmental impact: conventional wisdom.; 2. Monitoring and evaluation of agricultural subsidy programs.</u> <u>3. Instruments to target agricultural subsidies to desired beneficiaries</u>. <u>4. Exit strategies for and potential alternatives to agricultural subsidy programs</u>.
- Takeshima H & F Yamauchi. (2012). *Irrigation pumps and milling machines as insurance against rainfall and price risks in Nigeria.* IFPRI NSSP Policy Note 33.
- Takeshima H & S Salau (2010). <u>Agricultural mechanization for smallholder farmers in Nigeria</u>. IFPRI NSSP Policy Note 22.
- Takeshima H & S Salau (2010). <u>Characteristics of farmers' demand for small scale private irrigation</u> <u>technologies: Knowledge gaps in Nigeria</u>. IFPRI NSSP Policy Note 23.

- Takeshima H, L Nagarajan, S Salau & A Oyekale (2010). <u>Farmers' Preferences on Seed Purchase Timing -</u> <u>Rice, Cowpea, and Maize Growers in Nigeria.</u> IFPRI NSSP Policy Note 31.
- Takeshima H & S Salau (2009). <u>Demand characteristics for rice, cowpea and maize seeds in Nigeria policy</u> <u>implications and knowledge gaps</u>. IFPRI NSSP Policy Brief 8.
- Takeshima H, A Adeoti & S Salau. (2009). <u>Transaction Costs and Investment in Irrigation Pumps: Evidence</u> <u>from Nigeria</u>. IFPRI NSSP Policy Brief 7.

## **Other reports**

Tilahun H, Y Habte & **H Takeshima**. (2017). <u>Proceedings of the International Conference: South-South Knowledge</u> <u>Sharing on Agricultural Mechanization, Addis Ababa, October 31 – November 1, 2017</u>. IFPRI, CIMMYT and Ethiopian Agricultural Mechanization Forum.

## **Presentations**

(Virtual) Business Models and Economics perspectives of Agricultural mechanization development" Presentation at the Global Conference on Sustainable Plant Protection, organized by the Food and Agriculture	Washington DC / Rome, Italy, 2022.11
Organization of the United Nations.	
(Virtual) <u>"The 8th Tokyo International Conference on African Development</u>	Washington DC / Japan,
(TICAD8) Side Event: How Japan's know-how can help address Africa's	2022.09
food and nutrition challenges: Interventions and impacts"	
(Virtual) "Challenges for mechanization service providers under COVID and	Washington DC / Myanmar,
COUP in Myanmar: Insights from phone surveys" at Agriculture and	2022.02
Food System Transformation: Migration and Mechanization in Myanmar	
(the second module of the Feed the Future MAPSA's eight-module	
seminar series)	
(Virtual) "Challenges for mechanization service providers under COVID and	Washington DC / Myanmar,
COUP in Myanmar: Insights from phone surveys" at LIFT (The	2021.11
Livelihoods and Food Security Fund)'s Online Learning Workshop on	
Agricultural Mechanization	
(Virtual) "Irrigation, Nutrition, Gender and COVID-19 in a Small Central	Washington DC / Delhi
Asian Country: Insights from Tajikistan" Presentation at the Organized	India, 2021.8
Symposia "Understanding Farmers' Decisions Towards Sustainable Agriculture in Irrigated Areas of Central Asia", at the 31st Triennial	
International Conference of Agricultural Economists (ICAE), Delhi,	
India.	
(Virtual) "Agricultural mechanization in Africa and Transferability of Asian	Washington DC / Tokyo,
Experience: Insights from recent selected research" (アフリカ農業機械化の	Japan – 2020.11
課題とアジア機械化経験の応用可能性 – 農業経済・開発学の視点からの学術的考察	Jupan 2020.11
-) Presentation at a joint seminar hosted by JICA-JIRCAS-CGIAR. (In	
Japanese)	
(Virtual) "Policies for Competitive and Sustainable Agricultural Production	Washington DC, 2020.11
Systems (A Case Study of Ghana's Recent Mechanization Interventions)"	
Presentation at a 2020 Regional Strategic Analysis and Knowledge	
Support System (ReSAKSS) Annual Conference "Sustaining Africa's	
Agrifood System Transformation: The Role of Public Policies".	
(Virtual) "An Evolving Paradigm of Agricultural Mechanization	Washington DC, USA –
Development: How Much Can Africa Learn from Asia?" Presentation at	2020.8
Organized Symposium, "Agricultural mechanization in Africa: Myths,	
realities and an emerging research agenda", 2020 AAEA Annual Meeting	Washington DC / Tashkant
(Virtual) "Agriculture-nutrition linkages in Tajikistan: Selected insights from recent IFPRI studies" Virtual Seminars on Applied Economics and	Washington DC / Tashkent, Uzbekistan – 2020.7
Policy Analysis in Central Asia, jointly organized by Westminster	OZOEKIStan - 2020.7
International University in Tashkent (WIUT), International Food Policy	
Research Institute (IFPRI) and Leibniz Institute of Agricultural	

Development in Transition Economies (IAMO).

(Virtual) " <u>Public Expenditure on Agriculture and Household-level Outcomes</u> in Nigeria: Insights from states and LGA-level expenditures and LSMS- ISA panel household data" Virtual Seminar hosted by USAID Feed-the-	Washington DC / Abuja, Nigeria – 2020.5
Future (FTF) Nigeria Agricultural Policy Project implemented by IFPRI. "Agricultural transformation, market integration, and smallholders in Southeast Asia: Regional overview and some micro-evidence from Vietnam" presented at the Regional Workshop cum Roundtable Discussion on ASEAN Economic Integration	Bangkok, Thailand – 2019.11
<i>"Framework for Promoting Transformation for Sustainable Productivity and Food Security"</i> and <i>"Smart Technologies in Agriculture Transformation: Basic Principles"</i> presented at the Workshop on the Formulation and Study of Spatial Development, Climate Change, and the Environment for Agricultural Transformation	Manila, Philippines – 2019.11
<ul> <li>"Recent research findings on seed varieties, irrigation, and agricultural mechanization in Nigeria" presented at various locations in Nigeria</li> <li>"Agriculture-nutrition linkage in Tajikistan: Delving deeper into the nexus" presented at the Fourth Annual International Conference on Agriculture, Food Security and Nutrition in Eurasia, Featuring IFPRI's 2018 Global Food Policy Report (Moscow, Russia) / International Conference on Agriculture, Food Security and Nutrition in Central Asia - Featuring IFPRI's 2019 Global Food Policy Report, Westminster International University, Tashkent, Uzbekistan</li> </ul>	Cross River / Ebonyi / Delta / Kebbi, Nigeria – 2019.6 Moscow, Russia / Tashkent, Uzbekistan – 2019.5
<ul> <li><i>"Recent research findings on seed varieties, irrigation, and agricultural mechanization in Nigeria"</i> presented at various locations in Nigeria</li> <li><i>"Overview of agricultural modernization in ASEAN region"</i> presented at the Policy Forum on Agricultural Transformation and Market Integration in the ASEAN Region: Responding to Food Security and Inclusiveness</li> </ul>	Abuja / Kaduna / Makurdi / Minna, Nigeria – 2019.1 Phnom Penh, Cambodia – 2018.12
Concerns (Webinar) " <u>Agricultural mechanization in Africa: Lessons learned from</u> <u>South-South knowledge exchange</u> " Webinar Series by CGIAR Research Program on Policies, Institutions, and Markets (PIM).	Washington, DC – 2018.10
"Agricultural mechanization growth in Asian developing countries: Patterns and implications" presented at the Expert Meeting for the Development of an Agricultural Transformation Framework for APO Member Countries, Asian Productivity Organization.	Tokyo, Japan – 2018.10
<i>"Agriculture-nutrition linkages in Tajikistan: Evidence from household survey data"</i> presented at the research seminar, Tajik Academy of Agricultural Sciences (TAAS)	Dushanbe, Tajikistan – 2018.9
"Effects of mechanization on economies of scope in agriculture: Evidence from LSMS-ISA data" and "The role of the locations of public sector varietal development activities on agricultural productivity: Evidence from Northern Nigeria" presented at the Second Conference of the Feed the Future Nigeria Agricultural Policy Project, as well as research seminar held at the National Agricultural Extension and Research Liaison Service, Ahmadu-Bello University	Abuja, Zaria, Nigeria – 2018.8
IAAE triennial meeting presentation "The Roles of Agroclimatic Similarity and Returns to Scale in the Demand for Mechanization: Insights from Northern Nigeria" (Nils Westermarck Award)	Vancouver, Canada – 2018.7/8
"Agriculture-nutrition linkage in Nigeria" presented at the workshop "Transforming Agriculture and Food Systems for Better Nutrition and Health: Global and Emerging Perspective"	Tokyo, Japan – 2018.6
"Agriculture-nutrition linkage in Tajikistan: Evidence from Household Survey Data" presented at the Third Annual International Conference on Agriculture, Food Security and Nutrition in Eurasia, Featuring IFPRI's	Moscow, Russia – 2018.5

Agriculture, Food Security and N 2018 Global Food Policy Report

"South-South Knowledge Sharing on Agricultural Mechanization"	Addis Ababa, Ethiopia –	
International Conference Organized by IFPRI, CIMMYT, and the Ethiopian Agricultural Mechanization Forum	2017.10/11	
Annual Eurasian Food Security Conference	Dushanbe, Tajikistan – 2017.10	
'Machine Reforms' for Sustainable Intensification of Agriculture in South	Delhi, India – 2017.7	
Asia: A Regional Dialogue	Denni, India – 2017.7	
Feed the Future Nigeria implementing partners' policy dialogue series: First	Abuja, Nigeria – 2017.4	
Policy Dialogue on "Bringing Balanced Fertilizers to the Nigerian	110 0Ju, 1 (1ge110 _01 / 1)	
Market: Policy and investment implications on soils and crop-specific		
fertilizer blend-based technologies"		
Keynote address at the workshop "Transforming West African agriculture	Dakar, Senegal – 2017.2	
through the development of mechanization: what public policies?"		
(organized by The Syngenta Foundation for Sustainable Agriculture		
(SFSA) and the Foundation for World Agriculture and Rurality (FARM)	)	
Policy Dialogue organized by IFPRI Ghana Strategy Support Program	Accra, Ghana – 2016.10	
Conference on "Promoting Agricultural Policy in Nigeria: Challenges and	Abuja, Nigeria – 2016.9	
Opportunities"		
Symposium "Mechanization & Postharvest Opportunities for Smallholders in	Champaign, USA – 2016.7	
Sustainable Agriculture"		
Conference on "Sustainable Agricultural Growth in Nepal: Challenges,	Kathmandu, Nepal – 2016.5	
Opportunities and Options"		
Workshop on Agricultural Mechanization in South Asia: Trends, Patterns and	d Kathmandu, Nepal – 2016.4	
Implications for Agricultural Development in Nepal		
IAAE triennial meeting Selected Oral Presentation	Milan, Italy–2015.8	
IFPRI/National School of Development Joint Conferences on Mechanization	Beijing, China – 2014.6	
and Agricultural Transformation in Asia and Africa: Sharing		
Development Experiences		
AAEA annual meeting Selected Paper	Washington, USA – 2013.8	
ASSA annual meeting	San Diego, USA – 2013.1	
International Consortium of Applied Bioeconomy Research Conference	Ravello, Italy – 2012.6	
AAEA annual meeting Selected Poster	Pittsburgh, USA – 2011.7	
AAEA annual meeting Selected Poster	Denver, USA – 2010.7	
AAEA annual meeting Selected Poster	Milwaukee, USA – 2009.7	
AAEA annual meeting Selected Poster	Orlando, USA – 2008.7	
AAEA annual meeting Selected Poster	Orlando, USA – 2008.7	
AAEA annual meeting Selected Poster	Portland, USA – 2007.7	
USDA NC-1034 Conference University of California, Berkeley – 2007.3		
Joint Annual Meeting of Association For The Study of Food And Society and		
Food and Human Values Society	Hyde Park, New York – 2004.6	

## **Blogs**

- <u>Tokyo Nutrition for Growth Summit: Leveraging Japanese knowledge to address global health and</u> <u>nutrition challenges</u> (01/14/22)
- <u>Gender and mechanization: exploring differential effects on rural men and women (12/16/21)</u>
- In search of effective support for agricultural mechanization in Africa (10/30/20)
- <u>TICAD7 Side Event: How Japan's know-how can help address Africa's food and nutrition challenges</u> (09/27/19)
- Cultivating growth in Nigerian agriculture with small-scale irrigation (01/03/18)
- <u>What's driving the growth of agricultural mechanization in Africa (12/20/17)</u>

## **Other activities**

Organized an International Conference "South-South Knowledge	Addis Ababa, Ethiopia – 2017.11
Sharing on Agricultural Mechanization"	
Organized Nigeria Strategy Support Program Workshop on irrigation	Kano, Nigeria – 2011.6
and mechanization in Nigeria	

Organized Nigeria Strategy Support Program Concept Paper WorkshopAbuja, Nigeria - 2011.2Organized Nigeria Strategy Support Program Seed Sector StakeholderAbuja, Nigeria - 2009.8WorkshopStrategy Support Program Seed Sector StakeholderAbuja, Nigeria - 2009.8

#### **Foreign Experience**

Post Doctoral Fellow based in Nigeria

- Research
- Outreach / capacity building activities
  - Policy communication including rapid assessment of fertilizer subsidy policies for the Nigerian Minister of Agriculture
  - Joint production of background papers and policy briefs for NSSP with Nigerian researchers and government officials
  - In-country research seminar, workshops, policy dialogue, training on econometrics and softwares for government officials and Nigerian researchers
  - Facilitating study tour in India for three Nigerian government officials (National Agricultural Seeds Council, National Food Reserve Agency)
- Program management
  - Serving as acting program leader of Nigeria office (2011.8 2012.8)
  - Overseeing of IFPRI Nigeria office
  - Preparation of draft workplan and proposals for USAID-Nigeria and DfiD-Nigeria
  - Support for donors in various short-term requests on food security policy issues in Nigeria

#### Research Assistant in Uganda

2006.6 - 2006.8

2009.3 - 2011.12

Reviewed the secondary data, past studies, interviewed experts in both private and public trading sectors for coffee, maize and cassava in Uganda

#### **Teaching experience**

Graduate Teaching Assistant Taught lab session for ACE261 Applied Statistical Method

Graduate Teaching Assistant Grader for ACE254 Economic Systems in Africa 2008.8–2008.12 University of Illinois, Urbana-Champaign

2008.8–2008.12 University of Illinois, Urbana-Champaign

## <u>Awards</u>

<u>Nils Westermarck Prize</u>: Triennial meeting of the International Association of Agricultural Economists (IAAE), Vancouver, Canada, 2018

## Reviewer

Agricultural Economics (8) Agricultural Research (1) Agricultural Systems (2) Agriculture (1) American Journal of Agricultural Economics (2) Applied Economic Perspectives and Policy (2) Applied Economics (1) China Economic Review (1) Cogent Food & Agriculture (1) Development in Practice (1) Food Policy (5) Global Food Security (1) Journal of Agricultural Economics (3) Journal of Developing Areas (1) Journal of Development Studies (1) Journal of International Development (2)

Land Degradation and Development (1) Land Use Policy (1) Oxford Development Studies (1) Review of Development Economics (2) Technological Forecasting and Social Change (1) Water Resources Management (1) World Development (2)

## <u>Language</u>

Japanese, English

## **Computer software skills**

Simulation - R, GAMs Econometrics - STATA, Limdep Data management - Microsoft Access, GIS (basic) Math typing software – LateX

## **References**

Available upon request.