

## Witsanu Attavanich

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Personal Website: <https://sites.google.com/site/attavanichw>



## EDUCATION

Doctor of Philosophy, Texas A&M University, (Aug 2007 – Oct 2011)  
Major: Environmental and Resource Economics  
Advisor: Dr. Bruce A. McCarl, University Distinguished and Regents Professor & 2007  
Nobel Peace Prize Participant through efforts on Intergovernmental Panel on  
Climate Change  
Dissertation Topic: Essays on the Effect of Climate Change on Agriculture and  
Agricultural Transportation  
Master of Arts (English Program), Thammasat University, (Jun 2001 – May 2004)  
Major: International Economics  
Thesis Topic: The Effects of the EU's Directive on Waste from Electrical and Electrical  
Equipment (WEEE) on Thailand's Industry: A Case Study of Air-Conditioning  
Machine Industry  
Bachelor of Science (Economics), Kasetsart University, (Jun 1997 – Mar 2001)  
Summa Cum Laude

## TRAINING

Cochran Fellow, Training in the Effective Implementation of Climate-Smart Agricultural  
Technology in the United States, the Cochran Fellowship Program of the U.S.  
Department of Agriculture, (July-August 2024)  
Visiting Fellow, Harris Manchester College, University of Oxford, UK (2014; 2016; 2017; 2019;  
2023) Research Worked during the Visit: Climate Change, Food Security, and  
Food System; Program and Policy Evaluations  
Associate Research Fellow, Agricultural Policy Research Center, National Chung Hsing  
University, Chinese Taipei, (January 1, 2021 – December 31, 2022)  
Visiting Fellow, Puey Ungphakorn Institute for Economic Research (PIER), Bank of Thailand,  
(October 2017 – June 2019)  
Postdoctoral, Rutgers, the State University of New Jersey, (Nov 2011 – Oct 2012)  
Research Areas: Program and Policy Evaluations in Agriculture and Resource Economics

## CURRENT POSITION

Associate Professor, Department of Economics, Faculty of Economics, Kasetsart University  
(November 2017 – Current)  
Associate Deputy Editor, *Climatic Change*, Springer (July 2020 – Current)  
Member of Editorial Board, *Bio-based and Applied Economics*, Italian Association of  
Agricultural and Applied Economics (AIEAA), Italy (January 2022 – Current)

Associate Editor, *Kasetsart Journal of Social Science*, Kasetsart University (February 2019 – Current)

Associate Editor, *Applied Economics Journal*, Faculty of Economics, Kasetsart University (November 2012 – Current)

Member of Editorial Board, *Journal of Economics (Chiang Mai University)*, Chiang Mai University (January 2017 – Current)

Member of the Board of Directors, The National Economic and Social Development Council, The Office of National Economic and Social Development Council (NESDC) (June 2024 – Current)

Member of the Board of Directors for Monitoring and Evaluating Science, Research, and Innovation Support, Thailand Science Research, and Innovation (TSRI) (November 2024 – Current)

National Committee on Addressing the Impact of the El Niño and La Niña Situation in Thailand, Office of the Prime Minister of Thailand (September 2023 – Current)

Spokesperson and Member of the Ad-hoc Committee Considering the Draft of Clean Air Act, House of Representatives of Thailand (January 2024 – Current)

Ad-hoc Committee on Investigating Guidelines for Preventing and Solving Drought Problems due to the El Niño phenomenon, House of Representatives of Thailand (September 2023 – Current)

Member of the Board of Directors, The Foundation for Thailand Rural Reconstruction Movement under the Royal Patronage (June 2019 – Current)

National Sub-Committee on Driving Economic Development BCG Model for the Field of Biodiversity, Ministry of Higher Education, Science, Research and Innovation (Feb 2021 - Current)

National Sub-Committee on Academic for Solving Air Pollution Problems, National Environment Board (January 2020 – Current)

National Sub-Committee on Setting General Atmospheric Air Quality Standards, National Environment Board (April 2021 – Current)

Working Group to Drive Thailand's Clean Air Bill, under the National Committee of Implementing Urgent Legal Reforms (April 2023 – Current)

Expert on Economic, Social and Environmental Impact Assessment, National Science and Technology Development Agency (NSTDA) (February 2018 – Current)

Expert in the Circular Economy Division, Program Management Unit for Competitiveness (PMUC), Office of National Higher Education Science Research and Innovation Policy Council (NXPO) (October 2024 – Current)

## PAST POSITION

Member of the Board of Directors, Office of National Higher Education Science Research and Innovation Policy Council (NXPO) (December 2019 – June 2024)

Committee Advisor on Promoting & Supporting Professional Development to Increase People's Income, Prime Minister's Office (November 2019 – September 2023)

Sub-Committee on Consideration of Greenhouse Gas Reduction Projects and Activities,

- Thailand Greenhouse Gas Management Organization (Public Organization) (October 2021 – April 2024)
- Sub-Committee on Circular Economy Division, Program Management Unit for Competitiveness (PMUC), Office of National Higher Education Science Research and Innovation Policy Council (NXPO) (April 2020 – September 2024)
- Guest Editor, *Sustainability*, MDPI (November 2021 – October 2022)
- Member of Working Group for Minister of Agriculture & Cooperatives (Aug 2018 – Jul 2019)
- Advisor of Subcommittee on Finance, Banking, Financial Institutions and Capital Market under the Committee on Economic, Monetary and Public Finance, The National Legislative Assembly (August 2018 – July 2019)
- Technical Working Group to Improve Eco-Industrial Town Criteria in All Levels of the Industrial Estate Authority of Thailand, Federation of Thai Industries (April – December 2021)
- Committee on Evaluation for the Cassava Program, National Science and Technology Development Agency (NSTDA) (April – October 2019)
- Committee on Sustainable Development, NSTDA (March 2019 – February 2021)
- Committee on Biodiversity Management and Utilization, NSTDA (March 2019 – February 2021)
- Member of Editorial Board, *Atmosphere*, MDPI, Switzerland (February 2019 – December 2020)
- Guest Editor, *Atmosphere*, MDPI, Switzerland (February 2019 – December 2019)
- Member of Working Group for Driving and Monitoring the Policies of Minister, Ministry of Higher Education, Science, Research and Innovation (August 2019 – July 2020)
- Chairman of the Working Group for Developing Economic Tools and Indicators to Create Economic Value, Bangkok Mass Transit Authority (February 2017 – May 2019)
- Administrative Committee of Faculty of Economics, Kasetsart University (February 2017 – February 2019)
- Member of Editorial Board, Kasetsart Journal of Social Science, Kasetsart University (February 2017 – February 2019)
- Assistant Professor, Department of Economics, Faculty of Economics, Kasetsart University (January 2014 – October 2017)
- Committee of Drafting “Intended Nationally Determined Contributions (INDCs) of Thailand”, Office of Natural Resources and Environmental Policy and Planning (April – December 2015)
- Committee of Expert Board for Evaluation and Acceptance Program of Eco-Industrial Town, the Federation of Thai Industries (August 2016 – February 2017)
- Deputy Director of Center for Applied Economics Research, Faculty of Economics, Kasetsart University (March 2013 – October 2017)
- Secretary of the Academic Committee, KU-OAE Foresight Center (Monitoring and Forecasting Agricultural Economics), jointly cooperated by Office of Agricultural Economics & Kasetsart University (April 2013 – October 2017)
- Subcommittee for Economic Evaluation, Thai Health Promotion Foundation (February 2013 – September 2015)
- Deputy Head of Economics Department for Research, Faculty of Economics, Kasetsart University (January 2013 – May 2015 & March 2019 – February 2023)

Lecturer, Department of Economics, Faculty of Economics, Kasetsart University

(Jan 2003 – December 2013)

Assistant Dean for Student Affairs, Faculty of Economics, Kasetsart University

(April 2005–May 2007)

## INTERESTED RESEARCH AREAS

Economics related to: Environment and Resource; Climate Change; Air Pollution; Agriculture; Public Program and Policy Evaluation; Management; Food Security; Energy

## JOURNALS/ ARTICLES

Prommawin, B., Svavasu, N., Tanpraphan, S., Saengavut, V., Jithitikulchai, T., Attavanich, W., & McCarl, B. A. (2024). Impacts of climate change and agricultural diversification on agricultural production value of Thai farm households. *Climatic Change*, 177(7), 112.

Boonarsa, N., & Attavanich, W. (2023). The impacts of aging society on the agricultural total factor productivity of Thailand. *Journal of Agri. Research & Extension*, 40(2), 236-253.

Attavanich, W. 2023. A review of the impact of climate change on food security and co-benefits of adaptation and mitigation options in Thailand. *FFTC Journal of Agricultural Policy*, 5(1).

Chavanaves, S., Fantke, P., Limpaseni, W., Attavanich, W., Panyametheekul, S., Gheewala, S.H. and Prapasongsa, T., 2021. Health impacts and costs of fine particulate matter formation from road transport in Bangkok Metropolitan Region. *Atmospheric Pollution Research*, 12(10), p.101191.

McCarl, B.A., Yu, C.H. and Attavanich, W., 2021. Climate change impacts and strategies for mitigation and adaptation in agriculture. *Atmosphere*, 12(5), p.545.

Sampaonthong, S. and Attavanich, W., 2021. Agricultural production factors and their effect on agricultural production and carbon emissions: Evidence from the Greater Mekong subregion. *The Open Agriculture Journal*, 15(1).

Thampanishvong, K., W. Attavanich., B. Limmeechokchai., A. Limsakul. 2021. Greenhouse gas emission reduction and climate change adaptation in the Thai context. *aBRIDGED* Issue 9/2021: Puey Ungphakorn Institute for Economic Research, Bank of Thailand

Pipitpukdee, S., Attavanich, W. and Bejranonda, S., 2020. Impact of climate change on land use, yield and production of cassava in Thailand. *Agriculture*, 10(9), p.402.

Pipitpukdee, S., Attavanich, W. and Bejranonda, S., 2020. Climate change impacts on sugarcane production in Thailand. *Atmosphere*, 11(4), p.408.

Pochanasomboon, A. and Kidsom, W.A., 2020. Impacts of land ownership on the economic performance and viability of rice farming in Thailand. *Land*, 9(3), p.71.

Attavanich, W. 2019. Cost of Thai society from air pollution and countermeasures. *aBRIDGED* Issue 7/2019: 1-11. Puey Ungphakorn Institute for Economic Research, Bank of Thailand

Hein, Y., Vijitsrikamol, K., Attavanich, W. and Janekarnkij, P., 2019. Do farmers perceive the trends of local climate variability accurately? An analysis of farmers' perceptions and meteorological data in Myanmar. *Climate*, 7(5), p.64.

- Hein, Y., Vijitsrikamol, K., Attavanich, W., & Janekarnkij, P. 2019. Economic assessment of climate adaptation options in Myanmar rice-based farming system. *Journal of Agricultural Science* 11(5): 35-48.
- Attavanich, W., 2018. How is climate change affecting Thailand's agriculture? A literature review with policy update. *FFTC Agricultural Policy Platform* November:1-9.
- Brown, M.E., R.C. Carr, K.L. Grace, K. Wiebe, C.C. Funk, W. Attavanich, P. Backlund, and L. Buja. 2017. Do markets and trade help or hurt the global food system adapt to climate change? *Food Policy* 68: 154-159.
- Attavanich, W., R. Mungkung, I. Mahathanaseth, S. Sanglestsawai, and A. Jirajariyav. 2017. Developing green GDP accounting for Thai agricultural sector using the economic input output - life cycle assessment to assess green growth. *Journal of Sustainable Energy & Environment* 8: 13-15.
- Attavanich, W., B.J. Schilling, and K.P. Sullivan. 2016. Measuring the effects of preservation on farm profits in a continuous treatment setting. *Applied Economics* 48(60): 5850-65.
- Attavanich, W. 2016. "Did the Thai rice-pledging program improve the economic performance and viability of rice farming?" *Applied Economics* 48(24): 2253-2265.
- Schilling, B.J., W. Attavanich, K.P. Sullivan, and L. Marxex. 2014. "Measuring the effect of farmland preservation on the profitability of farms." *Land Use Policy* 41: 84-96.
- Schilling, B.J., W. Attavanich, and Y. Jin. 2014. "Does Agritourism Enhance Farm Profitability?" *Journal of Agricultural and Resource Economics* 39(1): 69-87.
- Attavanich, W. and B.A. McCarl. 2014. "How is CO<sub>2</sub> affecting yields and technological progress? A statistical analysis." *Climatic Change* 124(4): 747-762.
- Attavanich, W., B.A. McCarl, Z. Ahmedov, S. Fuller, and D.V. Vedenov. 2013. Effects of climate change on U.S. grain transport. *Nature Climate Change* 3: 638-643.
- Attavanich, W., B. A. McCarl, and R. Hughes. 2011. Trade liberalization, climate change policies, and the environment: The growing interaction and impact: discussion. *American Journal of Agricultural Economics* 93(2): 558-559.
- Attavanich, W., B. A. McCarl, and D. Bessler. 2011. "The effect of H1N1 (swine flu) media coverage on agricultural commodity markets." *Applied Economic Perspectives and Policy* 33(2): 241-259.

## BOOK CHAPTERS

- McCarl, B.A., W. Attavanich, M. Musumba, J. Mu, and R. Aisabokhae. 2014. land use and climate change. In the *Oxford Handbook of Land Economics.*, Eds. Duke, M. Joshua, and J.J. Wu. Oxford University Press. ISBN 978-0-19-976374-0, pp 800.
- Attavanich, W., B.S. Rashford, R.M. Adams, and B.A. McCarl. 2014. Land use, climate change, and ecosystem services. In the *Oxford Handbook of Land Economics.*, Eds. Duke, M. Joshua, and J.J. Wu. Oxford University Press. ISBN 978-0-19-976374-0, pp 800.

## BOOK REVIEWS

- Attavanich, W., B.A. McCarl and Y. Zhang. 2009. Mitigating climate change through food and land use. *Worldwatch Report* 179, Worldwatch Institute.

**BOOK**

- Attavanich, W., K. Thampanichvong, , P. Srijuntrapun, P. 2022. Enhancing green MSMEs' competitiveness for a sustainable and inclusive Asia-Pacific: Food sector waste reduction in food supply chain. SOM Steering Committee on Economic and Technical Cooperation (SCE), Small and Medium Enterprises Working Group (SMEWG). APEC Publication. APEC#222-SM-01.2
- Attavanich, W., K. Sribuaiaam., S. Monsap et al. 2022. *Clean air green paper*. Thailand Clean Air Network. ISBN 978-616-393-372-0 (Role: Editor and Author)
- Attavanich, W., P. Kajitvichyanukul, W. Limsawart, S. Pongpiajun, N. Sirimongkonlertkun, P. Saetang and K. Sribuaiaam. 2020. *Clean air blue paper*, Thailand. Thailand Clean Air Network. ISBN 978-616-393-295-2 (Role: Editor and Author)
- Limsawart, W., W. Attavanich, N. Jiarakul, A. Mutchimwong, S. Pongpiajun, N. Sirimongkonlertkun and K. Sribuaiaam. 2019. *Clean air white paper*, Thailand. Thailand Clean Air Network. <https://thailandcan.org/whitebook/> (Role: Author)
- Witsanu Attavanich. 2014. *Energy economics*. Department of Economics, Faculty of Economics, Kasetsart University. ISBN 978-616-374-721-1, 276 Pages.
- Witsanu Attavanich. 2016. *Microeconomics I*. Department of Economics, Faculty of Economics, Kasetsart University. ISBN 978-616-423-554-0, 303 Pages.
- Witsanu Attavanich. 2017. *Managerial economics: Economic tools for business decision*. ISBN 978-616-440-490-8, 325 Pages.

**WORKING PAPERS**

- Pipitpukdee, S., Attavanich. Effect of Climate Change on Rice Production in Thailand (Role: Co-Author)
- Huang, Y.K., Piriyanathanasak, P., Attavanich, W., Han, D.B., Jithitikulchai, T. and McCarl, B.A.. Effects of CO<sub>2</sub> and Climate on Rice Yields over time (Role: Co-Author) [Submitted]
- Attavanich, W., Chantararat, S., Chenphuengpaw, J. Mahasuweerachai, P. and Thampanishvong, K. (2019). Farms, Farmers and Farming: A Perspective through Data and Behavioral Insights. PIER Discussion Paper No.122. Puey Ungphakorn Institute for Economic Research, Bank of Thailand (Role: Co-Author)
- Attavanich, W. Effect of Zoning Policy in Agricultural Sector on Thai Social Welfare Working Paper. Department of Economics, Kasetsart University.

**CONFERENCE PROCEEDINGS**

- Vichiansathaporn, P., W. Attavanich. 2021. Effects of climate change on electricity demand in the administrative region of the Provincial Electricity Authority. The 14th National and 1st International Virtual Conference on Humanities and Social Sciences (NIC-HUSO 2021), "Challenges of Humanities and Social Sciences in Digitalization: Flourish or Perish?", organized by Faculty of Humanities and Social Sciences, Burapha University, on June 17-18, 2021.
- Korntongsin, C. and Attavanich, W., 2021. Evaluating Impacts of the Big Farm Program on Economic Performance and Viability of Rice Farming in Thailand. In *14th International Social Sciences and Business Research Conference* (pp.56-66). Fontys University of

- Applied Science, Venlo, The Netherlands. ISSBRC. ISBN (e-book): 978-616-8088-68-5 (Awarded for the Best Paper)
- Huang, Y.K., Piriyanthanasak, P., Attavanich, W., Han, D.B., Jithitikulchai, T. and McCarl, B.A., 2020. Effects of CO<sub>2</sub> and Climate on Rice Yields over Time (No. 304384). 2020 Agricultural & Applied Economics Association Annual Meeting. Milwaukee, Wisconsin, USA. August 8, 2020.
- Mhudchuay, T., Kasetkasem, T., Attavanich, W., Kumazawa, I. and Chanwimaluang, T., 2019, July. Rice Cultivation Planning Using A Deep Learning Neural Network. In *2019 16th International Conference on Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI-CON)* (pp. 822-825). IEEE.
- Attavanich, W., R. Mungkung, I. Mahathanaseth, S. Sanglestsawai, and A. Jirajariyav. 2016. Developing Green GDP Accounting for Thai Agricultural Sector Using the Economic Input Output - Life Cycle Assessment to Assess Green Growth. *SEE 2016 in conjunction with ICGSI 2016 and CTI 2016 On "Energy & Climate Change: Innovating for a Sustainable Future"* 28-30 November 2016, Bangkok, Thailand.
- Attavanich, W. 2013. "The Effect of Climate Change on Thailand's Agriculture." Selected Paper Presenting at the 7<sup>th</sup> International Academic Conference, Prague, Czech Republic. September 1–4.
- Attavanich, W., B. Chaivichayachat, W. Kittiampanont, and R. Thammaapiroam. 2006. "Attitudes of Entrepreneurs and Opinions of Alumni in the Bachelor of Economics Program of Kasetsart University." *Proceedings of 44th Kasetsart University Annual Conference: Agro-Industry, Economics and Business Administration*, Bangkok, Thailand. Published by Kasetsart University: 636–643 (Thai).

## REFeree FOR JOURNALS/ARTICLES

Referee for *Climatic Change; Global Environmental Change; Land Use Policy; Food Policy; Energy Journal; Energy; Energy Policy; Environment, Systems and Decisions; Ecological Economics; Journal of Agricultural and Resource Economics; American Journal of Agricultural Economics; Sustainability; Agricultural Economics; Applied Economics; Kasetsart Journal Social Science*

## SELECTED RESEARCH PROJECTS

2025

Research Project "Feasibility study of carbon Pricing for CCS activities in E&P industries." Funded by Department of Mineral Fuels (Role: Principal Investigator).

Research Project "Transforming the Thai Agricultural Sector Towards Sustainable Development Goals." Senior Research Scholarship Funded by National Research Council of Thailand (Role: Principal Investigator).

Research Project "Outcomes and impact assessment of research studies." Funded by Naresuan University (Role: Principal Investigator).

2024

Research Project "Sustainable food systems at country level." Funded by FAO Regional Office for Asia and the Pacific (Role: Principal Investigator).

Research Project “Development of Climate Action Tracking Framework for Thailand’s Agricultural Sector.” Funded by FAO & UNDP under supervision of OAE (Role: Principal Investigator).

Research Project “Selection of Climate-Smart Innovations in Thai Agriculture” Under the USDA Thailand Regional Agricultural Innovation Network (RAIN). Funded by Winrock International (Role: Principal Investigator).

Research Project “Transforming the Thai Agricultural Sector Towards Sustainable Development Goals” Senior Research Scholarship Funded by National Research Council of Thailand (Role: Principal Investigator).

Research Project “Policy Research to Increase Efficiency and Effectiveness in Driving Missions of the National Food Committee of Thailand.” Funded by The Agricultural Research Development Agency (Public Organization) (Role: Principal Investigator).

Research Project “Addressing Crop Residue Burning in Thailand - An Experiment Comparing Targeted and Group-Based Incentives.” Funded by American University of Sharjah, UAE (Role: Principal Investigator).

2023

Research Project “Review the Ministry of Agriculture and Cooperatives, Thailand, Agricultural Strategic Plan for Climate Change (ASPPC) 2017-2022 and development of the ASPPC 2023 -2027 .” Funded by FAO & UNDP under supervision of OAE. Project no. UNFA/GLO/616/UND (Role: Principal Investigator).

Research Project “Drafting the Thailand Greenhouse Gas Reduction Goals and Guidelines under the 2<sup>nd</sup> Nationally Determined Contributions of the Paris Agreement”. Funded by the Office of Natural Resources and Environmental Policy (Role: Principal Investigator).

Research Project “An Initial Survey of Potential Climate-Smart Innovations in Thai Agriculture” Under the USDA Thailand Regional Agricultural Innovation Network (RAIN). Funded by Winrock International (Role: Principal Investigator).

2022

Research Project “Digital Village Ecosystem Pilot Development in Thailand”. Funded by UN FAO Regional Office for Asia and the Pacific (FAORAP) (Role: Principal Investigator)

Research Project “Economic Valuation of Ecosystem Services in Thailand: A Meta-Analysis” Funded by Department of Economics, Kasetsart University (Role: Principal Investigator)

Research Project “Developing food systems framework for Thailand & food systems analysis and development on trade, distribution and food services”. Funded by Agricultural Research Development Agency (Public Organization) (Role: Researcher)

Research Project “Assessing net benefits from sugarcane burning reduction and designing integrated measures for sustainable solutions”. Witsanu Attavanich, Patcharee Suriya, Nopasom Sinphurmsukskul, Tanapon Chaisan, Santi Sanglestsawai, Sommai Udomwitid, Siwabhorn Pipitpukdee, and Pichlanda Sonthiwilorn. 2022.. Funded by Environmental Fund, Office of Natural Resources and Environmental Policy and Planning, Ministry of Natural Resources and Environment. Published by Center for Applied Economics Research, Faculty of Economics, Kasetsart University. ISBN: 978-616-278-726-3

2021



Research Project “Expert on Agriculture Digitalization Policy (Recommendation for Thailand in Support of COVID-19 Recovery)” Funded by UN FAO Regional Office for Asia and the Pacific (FAORAP) (Role: Principal Investigator)

Research Project “Thailand Rural Income Diagnostic (RID)” Funded by the World Bank Group. (Role: Principal Investigator)

Research Project “Developing the National Food Waste Management Roadmap” Funded by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH under supervision of Pollution Control Department (Role: Principal Investigator)

Research Project “Study to Evaluate Real Value of ESG” Funded by PTT Public Company Limited (Role: Researcher)

Research Project “The Economic Valuation of Water Management Systems Development with Technology for the Industrial, Service and Urban Sectors in the Chao Phraya Basin Area” Funded by National Research Council of Thailand (Role: Principal Investigator)

Research Project “The Economic Valuation of Water Management Systems Development with Technology for the Industrial, Service and Urban Sectors in the Eastern Economic Corridor (EEC) Area” Funded by National Research Council of Thailand (Role: Principal Investigator)

Research Project “Drafting the Manpower Planning in Thai Agricultural Sector” Funded by Agricultural Research Development Agency (Public Organization) under supervision of Ministry of Agriculture and Cooperatives (Role: Principal Investigator)

Research Project “Impact Evaluation of Multi-Public Policies on Economic Well-Being of Thai farmers” Funded by National Research Council of Thailand (Role: Principal Investigator)

Research Project “Final Review of the Roadmap on ASEAN Cooperation towards Transboundary Haze Pollution Control with Means of Implementation” Funded by The Association of Southeast Asian Nations (ASEAN) through its Secretariat (ASEC) (Role: Researcher)

2020

Research Project “COVID-19 Country Assessment of Impacts and Response Options on Food Systems, Food Security and Nutrition, and Livelihoods (National Consultant).” Funded by UN FAO Regional Office for Asia and the Pacific (FAORAP) (Role: Principal Investigator)

Research Project “Drafting Clean Air Blue Paper, Thailand.” Funded by Thai Health Promotion Foundation (Role: Principal Investigator)

Research Project “Social Cost of Air Pollution from Particulate Matter 2.5 Micrometers (PM<sub>2.5</sub>) in Thailand.” Funded by Department of Economics, Kasetsart University (Role: Principal Investigator)

Research Project “Development of a Framework for Measuring Sustainable Tourism Using System of Environmental Economic Accounting (SEEA) and Tourism Satellite Accounting (TSA) in Thailand.” Funded National Science and Technology Development Agency (NSTDA) (Role: Researcher)

Research Project “Economic Valuation Project of the Development of A Prototype of Water Management Systems Based on the 3Rs of the Service Sector in the Eastern Economic Corridor (EEC) Area” (Role: Principal Investigator)

2019

Research Project “A Study of Carbon Dioxide Emissions to Value Added Indicators to Support Thailand's Sustainable Development Goals. Funded by National Science and Technology Development Agency (NSTDA) (Role: Researcher)

Research Project “Preparation of Green Gross Product Indicators (Green GDP) in the Industrial Sector for the Fiscal Year 2018”. Funded by Chiang Mai University.

Research Project “The Study of Food Loss in Thailand’s Agricultural Sector: Funded by Agricultural Research Development Agency (Public Organization) (Role: Principal Investigator)

Research Project “Evaluating the Outcomes and Impacts of the Public and Private Partnership Program for Maize Production after In-Season Rice Production.” Funded by the Office of Agricultural Economics (Role: Principal Investigator)

Research Project “The Effect of Climate Change on Natural Rubber Production.” Funded by Department of Economics, Kasetsart University (Role: Principal Investigator)

Research Project “Support the Development of Agriculture Climate Change Action Plan in Thailand.” Funded by the Thailand Development Research Institute (Role: Principal Investigator)

Research Project “Valuation of Ecosystem Services of Mangrove Forests in Thailand.” Funded by the Thailand Research Fund (Role: Principal Investigator)

Research Project “Valuing the Ecosystem Services of Chao Mai Beach’s Generated by the Project of Biodiversity Management Program” Funded National Science and Technology Development Agency (NSTDA) (Role: Advisor)

2018

Research Project “Effect of Zoning Policy in Agricultural Sector on Thai Social Welfare” Funded by Department of Economics, Kasetsart University (Role: Principal Investigator)

Research Project “Drafting Report on the Performance of the United Nations Convention on the Prevention of Desertification Year 2018” Funded by Land Development Department, Ministry of Agriculture and Cooperatives (Role: Principal Investigator)

Research Project “Monitoring and Evaluation of the Implementation of the Human Development Integrated Plan in All Ages for the Fiscal Year 2017” Funded by the Ministry of Social Development and Human Security (Role: Principal Investigator)

Research Project “Developing the Demand Driven Strategic Plan for Trading Agricultural Product for Fiscal Year 2018: Maize” Funded by Trade Policy and Strategy Office, Ministry of Commerce (Role: Principal Investigator)

Research Project “Study of Carbon Dioxide (CO<sub>2</sub>) Emissions per unit of Value-Added indicator for Sustainable Development Goals (SDGs) in Thailand” Funded by National Science and Technology Development Agency (NSTDA) (Role: Researcher)

Research Project “Evaluating Social Outcomes and Impacts of Life Cycle Database Project and Application” National Metal and Materials Technology Center (MTEC). Funded by National Science and Technology Development Agency (NSTDA) (Role: Advisor)

Research Project “Evaluating Environmental Impacts of the Study and Development of Mathematical Models to Analyze the Flow of Water in The Gulf of Thailand with the Use of Artificial Mangrove Wood to Prevent Coastal Erosion Mangrove Forest Restoration” Funded by National Science and Technology Development Agency (NSTDA) (Role: Advisor)

2017

Research Project “Developing the Master Plan for the Ministry of Social Development and Human Security year 2018-2036” with T. Prakai and S. Udomwitid. Funded by the Ministry of Social Development and Human Security (Role: Principal Investigator).

Research Project “Effects of Climate Change on Thailand’s Agriculture: New Results”. Funded by Department of Economics, Kasetsart University (Role: Principal Investigator).

Research Project “Support to the Development and Implementation of the Thai Climate Change Policy: Experts on GHG mitigation options in the Thai Agriculture sector” with P. Pengthamkeerati. Funded by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH under supervision of ONEP & OAE (Role: Principal Investigator).

Research Project “Evaluating Economic Impacts of Microorganism's Utilization Invented by National Center for Genetic Engineering and Biotechnology (Biotech)” Funded National Science and Technology Development Agency (NSTDA) (Role: Principal Investigator).

Research Project “Supporting Thailand to Integrate the Agricultural Sectors into National Adaptation Plans (NAPs)” with S. Udomwitid Funded by FAO & UNDP under supervision of OAE. Project no. UNFA/GLO/616/UND (Role: Principal Investigator).

2016

Research Project “Developing the Action Plan Following Industrial Zone Development Plan in 15 Provinces” with several researchers. Funded by Department of Industrial Works, Ministry of Industry (Role: Research).

2015

Research Project “Climate Change, Global Food Security, and the U.S. Food System.” *USDA Technical Report for the National Climate Assessment*. Brown, M.E., J.M. Antle, P. Backlund, E.G. Carr, W.E. Easterling, M.K. Walsh, C. Ammann, W. Attavanich, C.B. Barrett, M.F. Bellemare, V. Dancheck, C. Funk, K. Grace, J.S.I. Ingram, H. Jiang, H. Maletta, T. Mata, A. Murray, M. Ngugi, D. Ojima, B. O’Neill, and C. Tebaldi., The United States Department of Agriculture (USDA) and the National Center for Atmospheric Research, USA (Role: Researcher) Available online at [http://www.usda.gov/oce/climate\\_change/FoodSecurity2015Assessment/FullAssessment.pdf](http://www.usda.gov/oce/climate_change/FoodSecurity2015Assessment/FullAssessment.pdf). (Presented at COP 21 Paris, France)

Research Project “Natural Resource Use and Environmental Impacts of Food Systems: Regional Report on South-East Asia” with several researchers. United Nation Environmental Programme (UNEP) & International Resource Panel - Working Group. (Role: Researcher)

Research Project “Developing the Strategic Plans of the Ministry of Social Development, and Human Security for Fiscal Years 2017-2021” with several researchers. Ministry of Social Development, and Human Security (Role: Principal Investigator).

Research Project “Developing Master Plan for Eco-Industrial Town” with several researchers. Department of Industrial Works, Ministry of Industry (Role: Research).

Research Project “Drafting Master Plan to Conserve and Develop Green Spaces in Bangkok for Sustainability” with several researchers. Kasetsart University (Role: Main researcher of Faculty of Economics).

Research Project “Evaluating the Impact of First-Time Car Buyer Program on the Environmental Cost Generated from Air Pollution in Bangkok” Department of Economics, Kasetsart University (Role: Principal Investigator).

Research Project “Evaluating Impacts of Rice-Pledging Program on Economic Status of Thai Farmers”, Thailand Research Fund (Role: Principal Investigator).

#### *2014*

Research Project “Evaluating Impacts of Rice-Pledging Program on Economic Viability of Rice Farming in Thailand” Department of Economics, Kasetsart University (Role: Principal Investigator).

Research Project “Green Gross Domestic Product (GDP) Accounting of Thai Agricultural Sector via Economic Input Output - Life Cycle Assessment (EIO – LCA) to Assess Green Growth.” Mungkung, R., I. Mahathanaseth, S. Sanglestsawai, and A.Jirajariyavech. The National Science and Technology Development Agency, Ministry of Science and Technology (Role: Researcher).

Research Project “Risk Analysis and Management of Agri-food Products on Carbon, And Water Footprints for Value Adding, Competiveness Enhancing and Green Economy Promoting.” with Mungkung, R., S. H. Gheewala, N. Chuchird, and I. Mahathanaseth (Role: Researcher).

Research Project “Economic Evaluation of Environmental Impacts for Inland Natural Gas’s Transport System.” with P. Janekarnkit, I. Mahathanaseth, K. Pensupar, S. Sanglestsawai, and K. Vijitsrikamol. PTT Public Company Limited (Role: Researcher).

#### *2013*

Research project “Contribution of Climate Change on Farmland Values in Thailand.” Department of Economics, Kasetsart University (Role: Principal Investigator).

Research project “Does Agritourism Enhance Farm Profitability?” with Schilling, B.J., and Y. Jin. The USDA National Institute of Food and Agriculture (Role: Co- Principal Investigator).

Research project “The Study of Value Creation from Services of Thailand’s High Speed Rail” with several researchers. Department of Creative Economy, Office of the Prime Minister (Role: Co- Principal Investigator).

#### *2012*

Research project “Measuring the Effect of Farmland Preservation on the Profitability of Farms.” with Schilling, B.J., K.P. Sullivan, L. Marxen. Funded by the USDA National Institute of Food and Agriculture. (Role: Researcher).

Research project “The Effect of Farmland Preservation on Farm Profitability: Does the Extent of Farm Participation Matter?” with Schilling, B.J., K.P. Sullivan, L. Marxen. Funded by the USDA National Institute of Food and Agriculture. (Role: Researcher).

#### *2011*

Research project “The Effect of Climate Change on Crop Production Patterns with Implications to Transportation Flows and Inland Waterways” with Bruce A. McCarl, Stephen W.

Fuller, and Dmitry V. Vedenov funded by the University Transportation Center for Mobility, Texas Transportation Institute. UTCM Project #10-54-51. (Role: Researcher).

2010

Research project “Quantitative Model of Iraqi Agriculture” with Siyi Feng and Bruce A. McCarl funded by Norman Borlaug Institute for International Agriculture, Texas A&M University. (Role: Researcher).

2007

Research project “A set of research projects on the efficiency and effectiveness of graduate production in the field of social science at Kasetsart University; Subproject 6: Faculty of Economics. funded by Kasetsart University Research and Development Institute and Faculty of Economics, Kasetsart University. (Role: Principal Investigator).

2006

Research project “Evaluation of the tsunami victim rehabilitation project” with Chuchee Piputsitee, Wallapak Polasub, and Santiya Eag-ark. funded by Kasetsart University Research and Development Institute. (Role: Researcher).

2005

Research project “Attitudes of entrepreneurs and opinions of alumni in the Bachelor of Economics Program of Kasetsart University” with Bundit Chaivichayachat, Rewat Thammaapiroam, and Woranun Kittiampanont. funded by Department of Economics, Faculty of Economics, Kasetsart University. Bangkok Campus, Bangkok. (Role: Researcher). Published work: [https://kukr.lib.ku.ac.th/kukr\\_es/kukr/search\\_detail/result/9942](https://kukr.lib.ku.ac.th/kukr_es/kukr/search_detail/result/9942)

Research project “Promoting sustainable tourism in the upper central region” with Valaiporn Attanandana, Sommai Udomwitid, and Somskaow Bejranonda. funded by Kasetsart University Research and Development Institute. (Role: Researcher).

## CONFERENCE PRESENTATIONS/ POSTERS

Attavanich, W., Buddhari, A., and Pipitpukdee, S. 2025. Impacts of Climate Change on Thailand’s Agriculture. FAEA 47th Annual Conference “Sustainable Transformation of ASEAN Economies Under Major Challenges: Climate Change, Geopolitical Conflicts, Digital Technology, Aging, and ASEAN Centrality” Organized and Hosted by the Economic Society of Thailand, January 22-23, 2025.

Attavanich, W. 2024. Effects of Adopting Digital Agriculture on Economic Viability of Farm Households in Thailand. Symposium on "Digital Transformation Towards Sustainable Agri-Food Systems in Asia. The 32nd International Conference of Agricultural Economists (ICAE), New Delhi, India, August 2-7, 2024.

Attavanich, W. 2022. Willingness to Pay for Air Quality in Thailand. 31st Asian Economic Symposium and Students’ Summit “Restoring and rebuilding Asian economies after a cascade of crises: Blueprints for improved food security, livelihoods and sustainable development. November, 11 2022.

Attavanich, W. 2022. Economic Valuation of Ecosystem Services in Thailand: A Meta-Analysis. The Economy & Environment Partnership for Southeast Asia (EEPSEA) Annual Conference 2022. Bangkok, Thailand, December 1-2, 2022.

Attavanich, W., Diloksumpun, S., Pengthamkeerati, P., Worachananant, P., Jarusutthirak, C., Satapanajaru, T. and Worachananant, S. 2021. Valuing Ecosystem Service of Mangrove

- Blue Carbon in Thailand: A Meta Analysis. The Economy & Environment Partnership for Southeast Asia (EEPSEA) Annual Conference 2021. Chiang Mai Province, Thailand, December 1-3, 2021.
- Korntongsin, C. and Attavanich, W., 2021. Evaluating Impacts of the Big Farm Program on Economic Performance and Viability of Rice Farming in Thailand. In *14th International Social Sciences and Business Research Conference* (pp.56-66). Fontys University of Applied Science, Venlo, The Netherlands. June 28-30, 2021.
- Attavanich, W. 2020. Social Cost of Air Pollution from Particulate Matter 2.5 Micrometers (PM<sub>2.5</sub>) in Thailand. The Economy & Environment Partnership for Southeast Asia (EEPSEA) Annual Conference 2020. Khon Kaen Province, Thailand, December 9-11, 2020.
- Huang, Y.K., Piriyanthasak, P., Attavanich, W., Han, D.B., Jithitikulchai, T. and McCarl, B.A., 2020. Effects of CO<sub>2</sub> and Climate on Rice Yields over time. Selected Paper Presenting at 2020 Agricultural & Applied Economics Association Annual Meeting, Milwaukee, Wisconsin. August 10.
- Attavanich, W. 2019. Social Cost of Air Pollution in Thailand. The 21<sup>st</sup> Thammasat-Kasetsart-Mahidol-Royal Thai Navy Academic Conference. Thammasat University, Thailand. September 6, 2019.
- Attavanich, W. 2019. Effects of the Cropland Zoning Policy on Thailand's Agricultural Sector. International Conference on "Impacts of Climate Change on Food Security, Environment and Economy" Organized by Korea University, Kangwon National University, and Korea Rural Economic Institute, Jeju, Republic of Korea May 23-27, 2019
- Attavanich, W. 2018. The Effect of Climate Change on Thailand's Agriculture: New Results. 2018 Bruce McCarl Lecture Series. Organized by Chung-Hua Institution for Economic Research (CIER), Taiwan, May 15-16.
- Attavanich, W. 2016. "The Effect of Climate Change on Global Rice Production under Shared Socioeconomic and Representative Concentration Pathways" Selected Paper Presented at the 2016 East Southeast and South Asia Taiwan Korea Japan Agricultural Economics Conference, Taipei, Taiwan, November 5-8.
- Attavanich, W., R. Mungkung, I. Mahathanaseth, S. Sanglestsawai, and A. Jirajariyav. 2016. Developing Green GDP Accounting for Thai Agricultural Sector Using the Economic Input Output - Life Cycle Assessment to Assess Green Growth. SEE 2016 in conjunction with ICGSI 2016 and CTI 2016 On "Energy & Climate Change: Innovating for a Sustainable Future" 28-30 November 2016, Bangkok, Thailand.
- Attavanich, W. 2016. "Evaluating the Impact of the Rice Price Policy on Economic Well-Being of Farm Household in Thailand" Selected Paper Presented at the 2016 Australian Agricultural and Resource Economics Society 60<sup>th</sup> Annual Conference, The Park Hyatt Hotel, Canberra, ACT, Feb 2-5.
- Brown, M.E., J.M. Antle, P. Backlund, E.G. Carr, W.E. Easterling, M.K. Walsh, C. Ammann, W. Attavanich *et al.* 2015. "Climate Change and Global Food Security: Food Access, Utilization, and the US Food System." 2015 American Geophysical Union (AGU) Fall Meeting. San Francisco, USA. December 14-18.

- Brown, M.E., J.M. Antle, P. Backlund, E.G. Carr, W.E. Easterling, M.K. Walsh, C. Ammann, W. Attavanich *et al.* 2015. "USDA Town Hall on Climate Change, Global Food Security and the U.S. Food System Report." 2015 American Geophysical Union (AGU) Fall Meeting. San Francisco, USA. December 14-18.
- Brown, M.E., J.M. Antle, P. Backlund, E.G. Carr, W.E. Easterling, M.K. Walsh, C. Ammann, W. Attavanich *et al.* 2015. "Global Food Security in a Changing Climate: Considerations and Projections." 2015 American Geophysical Union (AGU) Fall Meeting. San Francisco, USA. December 14-18.
- Attavanich, W. 2014. "Evaluating Impacts of Rice-Pledging Program on Economic Viability of Rice Farming in Thailand." Selected Paper Presenting at the 14<sup>th</sup> International Convention of the East Asian Economic Association, Bangkok, Thailand. November 1–2.
- Schilling, B.J., W. Attavanich, and Y. Jin. 2013. "Does Agritourism Enhance Farm Profitability?" Selected Paper Presenting at 2013 NAREA Annual Meeting, Ithaca, NY, USA. June 22–25.
- Attavanich, W. 2013. "The Effect of Climate Change on Thailand's Agriculture." Selected Paper Presenting at the 7th International Academic Conference, Prague, Czech Republic. September 1–4.
- Attavanich, W and S. Singhapreecha. 2013. "Agricultural Sector Modeling Studies & Economy Report for Thailand" Presenting at 2013 Food Security Policy Modeling Forum, Taipei Taiwan. October 3–4.
- Attavanich, W., B.S. Rashford, R.M. Adams, and B.A. McCarl. 2012. "Land Use, Climate Change, and Ecosystem Services." Selected Paper Presenting at 2012 AAEA Annual Meeting, Seattle, WA. August 12–14 (AERE Session).
- Attavanich, W., B.J. Schilling, K.P. Sullivan, and L.J. Marxen. 2012. "Do Farmland Preservation Programs Improve the Profitability of Farming? Selected Poster Presenting at 2012 AAEA Annual Meeting, Seattle, WA. August 12–14.
- Attavanich, W., B.J. Schilling, L.J. Marxen, and K.P. Sullivan. 2012. "Measuring the Effect of Farmland Preservation Program Participation on the Economic Viability of Farms." Selected Paper Presenting at 2012 NAREA Annual Meeting, Lowell, MA. June 10–12.
- Attavanich, W. and B.A. McCarl. 2011. "The Effect of Climate Change, CO<sub>2</sub> Fertilization, and Crop Production Technology on Crop Yields and Its Economic Implications on Market Outcomes and Welfare Distribution." Selected Paper Presenting at 2011 AAEA & NAREA Joint Annual Meeting, Pittsburgh, PA. July 24–26.
- Attavanich, W., B.A. McCarl, S. Fuller, V.V. Dmitry, and A. Zafar. 2011 "The Effect of Climate Change on Transportation Flows and Inland Waterways due to Climate-Induced Shifts in Crop Production Patterns." Selected Paper Presenting at 2011 AAEA & NAREA Joint Annual Meeting, Pittsburgh, PA. July 24–26.
- Attavanich, W. and B.A. McCarl. 2011. "The Roles of Climate Change, Atmospheric CO<sub>2</sub>, and Technological Progress on Crop Yields and Their Implications on Market Outcomes and Welfare Distribution." Selected Paper Presented at 2011 CAES & WAEA Joint Annual Meeting, Banff, Alberta, Canada. June 29–July 1.

**SELECTED INVITED PRESENTATIONS**

- Climate Change and Thailand's Food Security: Navigating Impacts, Adaptation, and Mitigation. (Keynote Speaker). International Conference on Micro-Credentials & Research for Food Security and Climate Change. Theme: The Role of Micro-credentials and Research in Advancing Capacity Building for Mitigating Climate Change and Food Security. Amari Hotel, Pattaya, Chonburi, Thailand, 10 February 2025.
- Climate Change Impacts, Adaptation, and Mitigation on Sugarcane Production in Thailand. The National Sugar Summit (NSS) 2024, Jakarta, Indonesian, December 5, 2024 (Representative of Thailand).
- Impact of Physical and Transition Risks from Climate Change on Thai Agri-Food Sector. The Workshop on "Climate Finance & Risk 2024: Emerging Challenges, Policies and Financial Strategies", organized by the Institute of Statistical Mathematics, Macquarie University, University of California, Santa Barbara, University College London, and De Monfort University, November 29, 2024.
- Strengthening Thailand's Food Security: The Role of Agricultural Cooperatives. (Keynote Speaker). NEDAC-AIT International Workshop on Agricultural Cooperatives and Food Security at Novotel Bangkok Ploenchit Sukhumvit Hotel, Thailand, July 8, 2024.
- Climate Change and Climate Resilience Agriculture in Thailand. (Keynote Speaker). The ASEAN University Symposium on Sustainable Food System, Bangkok, Thailand, 18-19 April, 2024.
- Carbon Markets for Agricultural Sector. DSM Satellite Seminar. DSM Nutritional Products (Thailand) Ltd. Chatrium Hotel Riverside Bangkok March 7, 2023.
- DV Village Development from Piloting Innovation to Business Models – 10 Village Case Assessments in Thailand. Digital Village Initiatives in Asia: Country digitalization advances and lessons learned from DVI in select countries of Asia, FAO Science and Innovation Forum, Rome, Italy. October 18, 2022.
- Impact of Climate Change on Food Security and Co-Benefits of Adaptation and Mitigation in Thailand. The NARO-FFTC 2022 Symposium on "Climate Change and Food System – Synergies of adaptation and mitigation, and advanced utilization of climate information for sustainable and climate-resilient agriculture" International Congress Center, Tsukuba Ibaraki, Japan, October 17-19, 2022.
- Climate Change and Carbon Credit in Agriculture. Train-the-Trainer Program under Lancang – Mekong Cooperation to Enhance Production Capacity and People's Livelihood by Improving the Value Chain for Cassava Cultivation and Application: Clean Cassava Chips, Native Starch, Modified Starch, Ethanol and Biogas Production Pullman Bangkok King Power, December 14, 2022.
- Impediments/Challenges That MSMEs Have Faced in Global Value Chains (GVCs) in Agriculture and Food Sector – Perspective from the Government Sector: Experience from Thailand. Multi-Stakeholder Dialogue on Addressing Impediments for MSMEs' Integration into Global Value Chains in Agriculture and Food Sector, APEC Support Fund, ASF: Free Trade Area of the Asia-Pacific and Global Value Chains (FTAAP and GVCs), Multilateral Trade Policy Department, Ministry of Industry and Trade, Viet Nam. March 29, 2022.



- Transforming system and strengthening development for agricultural sustainability in Thailand. (Keynote Speaker). ISSAAS International Congress and General Meeting 2021. Kasetsart University, Thailand, November 4-5, 2021
- Recommendations of food loss & waste reduction to APEC Food Security Roadmap Beyond 2020 (Roadmap 2030). Workshop on Reducing Food Loss and Waste along the Food Value Chain in APEC during and post COVID-19 Pandemic, July 2, 2021.
- Impacts of climate change on Thailand's food security and disaster management. (Representative from Thailand). Program of NEAT Working Group Meeting on Climate Change and East Asian Sustainable Development. June 18, 2021.
- Mitigating greenhouse gas emissions and adapting to climate change in the context of Thailand. Bank of Thailand Symposium 2021. Bank of Thailand, Thailand, September 30, 2021.
- Disruptive change: Thai agriculture must be transformed. Organized by The Agricultural Economics Society of Thailand Under Royal Patronage and Office of Agricultural Economics, Ministry of Agriculture and Cooperatives. October 28, 2021.
- Climate change and food security on Greater Mekong Subregion. (Keynote Speaker). The 7<sup>th</sup> consultative meeting on cooperative research and development towards sustainable development "rice biodiversity and climate change: Conservation and value creation toward food security, nutrition and food safety (with emphasis on glutinous rice" Kasetsart University, Thailand, December 3, 2020.
- COVID-19 disruption: Alternatives and survival ways in the new normal age. Training course: Enhance the potential of senior management of Ministry of Agriculture and Cooperatives. Organized by the Office of the Permanent Secretary for Ministry of Agriculture and Cooperatives. 27 August 2020.
- Covidization and agricultural transformation. Organized by Ministry of Agriculture and Cooperatives, Bangkok. 7 August 2020.
- COVID-19 assessment of impacts and response options on food systems, food security and nutrition, and livelihoods of Thai people. Organized by Ministry of Agriculture and Cooperatives, Bangkok. 20 July 2020.
- The impact of air pollution on Thai economy and society. Meeting for consideration of "Economic Damage from PM<sub>2.5</sub>" Organized by the Economic Development Commission House of Representatives at the Parliament Building. 19 February 2020.
- The impact of air pollution on Thai economy and society. Public dialogue "Resolve the PM<sub>2.5</sub> crisis with research and innovation" organized by the National Strategy Development Committee on creating a quality of life that is environmentally friendly. National Research Office, Office of Bio-Economic Development (Public Organization), Royal Institute of Thailand, and Khon Kaen University at Chamchuri 10 Building, Chulalongkorn University. 14 February 2020.
- The effects of drought and mitigation measures: An economic perspective. In Academic Seminar on "Drought 2020 and Management Measures for Future Prevention. Organized by National Research Office and Chulalongkorn University. Bangkok. February 13, 2020.
- Climate change and Thailand's agriculture. Program for smart agriculture technologies and policies for the adaptation of climate change, Ministry of Agriculture, The People's

- Republic of Bangladesh organized by King Mongkut's University of Technology North Bangkok, Kasetsart University, Bangkok, Thailand February 13, 2020.
- Economic costs of Thai society from air pollution. Seminar In the seminar on "PM<sub>2.5</sub> and love" Kasetsart University Alumni Association under The King's Patronage. Kasetsart University, Bangkok. 11 February 2020.
- Structural transformation in Thai agriculture: Challenges and solutions for sustainability. (Keynote Speaker). 16<sup>th</sup> RSEP International Multidisciplinary Conference. The Review of Socio-Economic Perspectives (RSEP), Thailand February 4-6, 2020.
- Look at the development of Thai agriculture with a large database. Kasikorn Research Center. Kasikorn Bank (KBANK) Public Company Limited. January 31, 2020.
- Accelerating climate change adaptation with digital solutions in Thailand's agriculture. International Conference on "Digital Solutions to Accelerate Adaptation to Climate Change in Agriculture" Divecha Centre for Climate Change, Indian Institute of Science CGIAR and CCAFS Bengaluru, India. Jan 13-14, 2020.
- Particulate matter 2.5 micrometers (PM<sub>2.5</sub>) and Thai social cost. (Invited Speaker). National Conference on Air Quality in Thailand: PM<sub>2.5</sub>. Pathumwan Princess Hotel, Bangkok, Thailand. December 12, 2019.
- Agriculture and food industry in Thai context: Issues, challenges, and sustainability. (Keynote Speaker). In EC-Asia Research Network on Integration of Global and Local Agri-Food Supply Chains Towards Sustainable Food Security hosted by Regional Centre for Manufacturing Systems Engineering (RCMSE) Chulalongkorn University, The Tawana Bangkok, Bangkok, Thailand. December 10, 2019.
- Air pollution costs of Thai society: An economic perspective. (Keynote Speaker). The 21<sup>st</sup> Thammasat-Kasetsart-Mahidol-Royal Thai Navy Academic Conference. Thammasat University, Thailand. September 6, 2019.
- Changes in the structure of the Thai agricultural sector: implications for the Bank for Agriculture and Agricultural Cooperatives (BAAC). Organized by BAAC, Bangkok, September 12, 2019.
- Economic project evaluation for land degradation management. Land Development Department. Ministry of Agriculture and Cooperatives. Nakhon Nayok province. August 28-30, 2019.
- Roundtable on the impact of globalization on agriculture and the changing role of private sector forecasting. Australian Embassy, Bangkok. June 27, 2019.
- Thai agriculture in a world of climate change. The 13<sup>th</sup> National Economist Conference (Econ Never Die). Songkhla. June 23, 2019. (Keynote Speaker)
- Climate change, public policy and the structure of the Thai agricultural sector: New knowledge in the Thai agricultural sector. Thailand Development Research Institute (TDRI). June 10, 2019.
- Climate change effects on agriculture and food production in Thailand. Kasikorn Research Center. Kasikorn Bank (KBANK) Public Company Limited. May 30, 2019.
- Cost of Thai society from air pollution and solutions. Invited Panel Discussion on Driving the National Strategy and Systemic Reform of the Air Pollution Management PM<sub>2.5</sub>. Organized by: The National Strategic Committee for Creating Green Growth on a Quality of Life;

- The National Reform Council on Natural Resources and Environment; National Research Council of Thailand; and Royal Institute. Tawana Surawong Hotel, April 26, 2019.
- Social cost of air pollution in Thailand and solutions. Panel Discussion on the topic “Is “Dirty Air” the New Normal for Once Tourist-Friendly Thailand?”. The Foreign Correspondents' Club of Thailand (FCCT). Bangkok. April 10, 2019.
- Air pollution in Bangkok: Status, causes & economic effects. PIER Economic Seminar. Bank of Thailand, Bangkok. February, 11 2019.
- Global rice trade with social network analysis. with Song Soo Lim (Korea University). Brown Bag Seminar. Department of Economics, Kasetsart University. Bangkok Thailand. February 8, 2019.
- Air pollution in Bangkok: Status, causes & economic effects. (Invited Speaker) The European Union Consular Meeting. Delegation of the European Union, Bangkok. February 6, 2019.
- How does climate change affect thailand's food security? (Keynote Speaker) Puey Ungphakorn Award Ceremony for the 2019 Outstanding Thai Young Economists. Bank of Thailand. March 9, 2019.
- Climate change and agriculture in Thailand. (Keynote Speaker). 10<sup>th</sup> RSEP International Multidisciplinary Conference. The Review of Socio-Economic Perspectives (RSEP), Thailand Jan 15-17, 2019.
- Climate change impacts and mitigation potentials in Thailand's agriculture with policy update. International Symposium on Frontier of Science, Technology and Engineering 2018 (FOSTE 2018) Northern Science Park, Chiang Mai, Thailand. November 19-22, 2018
- Mitigation potentials of greenhouse gases emission reduction in Thailand's agriculture sector. Workshop Meeting under the Project of Studying Mitigation Potentials of Greenhouse Gases Emission Reduction in Thailand's Agriculture Sector. Organized by Office of Natural Resources and Environmental Policy and Planning (ONEP), Office of Agricultural Economics, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, Bangkok, Thailand, June 13, 2018.
- Thailand's climate change policy update. Organized by Council of Agriculture and Chung-Hua Institution for Economic Research (CIER), Taiwan, May 17-18, 2018.
- Effects of climate change on Thailand's agriculture. Organized by National Committee on Natural Resources and Environment, National Legislature and National Research Council of Thailand, Thai Parliament, Bangkok, January 30, 2018.
- Global warming...How to manage the data? Organized by National Committee on Natural Resources and Environment, National Legislature and National Research Council of Thailand, Bangkok, December 20, 2017.
- Climate change and seed industry. 2017. Pre-Congress Workshop in 2017 Asian Seed Congress organized by the Asia and Pacific Seed Association (APSA), Bangkok, November 13, 2017.
- Impact of the first-time car buyer program on the environmental cost of air pollution in Bangkok. 2017. Kuala Lumpur Seminar Series hosted by the World Bank's Development Research Group. Kuala Lumpur, Malaysia, April 20, 2017.

- The impacts of global climate change on Thai economy and industries. Deloitte Economic Update 2/2017 and Headline Topic 1/2017, Deloitte Touche Tohmatsu Jaiyos Co., Ltd., Bangkok, Thailand. May 12, 2017.
- Non-market valuation techniques in economics used for social and economic impact evaluation. Organized by National Science and Technology Development Agency (NSTDA), Bangkok, Thailand. February 9, 2017.
- Existing international efforts in data collection, impact assessment, and reduction of food loss and waste in APEC region. 2016 APEC Expert Consultation on Food Loss and Waste at Retail and Consumer Levels. Taipei, Taiwan, 18-19 July, 2016.
- Did the Thai rice-pledging program improve the economic performance and viability of rice farming? Mini-Conference on Development Economics at Puey Ungphakorn Institute for Economic Research, The Bank of Thailand, December 14, 2015.
- Effects of climate change on global rice production. 2015 Global System Risk in Food, Energy and Finance, Hosted by Department of Food and Resource Economics Korea University, Seoul, Republic of Korea, October 29 – Nov 1, 2015.
- Natural resource use and environmental impacts related to the food system in Thailand. International Resource Panel - Working Group on Food Second Regional Workshop: “Natural Resource Use and Environmental Impacts of Food Systems in Southeast Asia” Jakarta, Indonesia, April 30 – May 1, 2014.
- How to publish in a good academic journal? Brown Bag Seminar. Faculty of Economics, Kasetsart University, Bangkok, Thailand, September 13, 2013.
- Tools in economics for analyzing impacts in agriculture. Office of Agricultural Economics, Ministry of Agriculture and Cooperatives. Nakhon Nayok, Thailand, December 2, 2013.
- Climate change, agriculture, and transportation. systemic impacts of climate on transportation workshop. U.S. Department of Transportation. Arlington, VA, October 11-12, 2012. (Panel Discussion).
- The effect of farmland preservation on farm profitability: Does the extent of farm participation matter? Department of Agricultural, Food and Resource Economics, Rutgers, the State University of New Jersey, New Brunswick, NJ, October 17, 2012.
- Transportation alternatives to inland waterways for U.S. agriculture. U.S. Army Corps of Engineers Water Resources Science, Engineering, and Planning, the National Academies, Washington D.C., December 12, 2011. with S. Fuller.

## TEACHING EXPERIENCE

### ***Kasetsart University, Thailand (Department of Economics) (2003 – Current)***

- Bachelor Level: Energy Resource Economics, Principles of Micro Economics I & II, Principles of Macro Economics I, International Economics, and Quantitative Methods in Economics
- Master Level: Advanced Environmental Economics, Advanced Managerial Economics, and Seminar in Business Economics
- Ph.D. Level: Microeconomics III and Advanced Research Methods in Economics: Section of Econometrics of Program and Policy Evaluations; Selected Topics in Environmental Economics

**Thammasat University, Thailand (Faculty of Economics)**

Invited Lecturer, Effects of Climate Change on Thailand's Agriculture and Food Security. Lecture in Development Microeconomics class, the Bachelor of Economics, International Program, Thammasat University, May 3, 2017.

Invited Lecturer, Evaluating the Impact of the Rice-Pledging Program on Economic Well-Being of Farm Households in Thailand. Seminar in Development Economics hosted by the Bachelor of Economics, International Program, Thammasat University, Feb 29, 2016.

**Texas A&M University, USA (Department of Agricultural Economics)**

Lecturer, Agribusiness Analysis and Forecasting: Mathematical Programming Section with Dr. James W. Richardson (Graduate Level: Spring 2010 and 2011)

Course covered linear programming, mixed programming, risk programming, and supply chain management in the context of agribusiness.

Invited Lecturer, Homeland Security - Economic Issues and Implications for Policy Design: A case study of 2009 H1N1 flu impacts (Graduate Level: Fall 2010)

**Kyoto University, Japan (Division of Natural Resource Economics, Graduate School of Agriculture)**

Guest Lecturer, Special Lecture on Natural Resources Economics VB (Graduate Level: Fall 2020): The course emphasizes on the linkage among climate change, food security and policies in agriculture.

Guest Lecturer, Special Lecture on Natural Resources Economics VB (Graduate Level: Fall 2021): The course emphasizes on implications of climate change, agricultural policies and COVID-19 pandemic for food security.

Guest Lecturer, Special Lecture on Natural Resources Economics VB (Graduate Level: Fall 2022): The course emphasizes on implications of climate change, agricultural policies, food waste and rural development.

Guest Lecturer, Special Lecture on Natural Resources Economics VB (Graduate Level: Fall 2023): The course emphasizes on implications of climate change, food security, environmental valuation, and rural development.

**SCHOLARSHIPS, HONORS AND AWARDS**International Level

2016 Abraham Lincoln Honor Award for Increasing Global Food Security for the Contributed USDA Technical Report on "Climate Change, Global Food Security, and the U.S. Food System" from the US Department of Agriculture, 2016.

2021 Best Paper Award. Valuating Impacts of the Big Farm Program on Economic Performance and Viability of Rice Farming in Thailand. *The 14th International Social Sciences and Business Research Conference* (pp.56-66). Fontys University of Applied Science, Venlo, The Netherlands. June 28-30, 2021. (competitive)

National Level

2024 Senior Research Scholar in the Field of Social Science Award, the National Research Council of Thailand (one award given annually)

2022 Outstanding Alumni Award of Kasetsart University (Academic Category). Kasetsart University Alumni Association under the Royal Patronage (four award given annually)

- 2021 Outstanding Award for the Academic Services in the Field of Social Science and Humanities, Kasetsart University (one award given annually)
- 2019 Puey Ungphakorn Award for the Best Young Thai Economist who has the outstanding academic performance awarded by Puey Ungphakorn Institute and 7 Thai prestigious academic institutions (one award given every two years)
- 2019 Outstanding Award for the Academic Services in the Field of Social Science and Humanities, Kasetsart University (one award given annually)
- 2019 Best Paper Award. Factors Affecting the Debt Value of Agricultural Bank Customers and Agricultural Cooperatives (BAAC). The 13<sup>th</sup> National Conference of Economists (one award given annually)
- 2016 Rising Star Academic Award. The Alumni Association of Economics & Business Administration, Kasetsart University
- 2015; 2017 Outstanding Award for Researcher in the Faculty of Economics, Kasetsart University who published articles in the journal with highest impact factor (two awards given annually)
- 2013 Kasetsart University Research Star (KU Research Star) Award in the Fields of Social Science and Humanities, Kasetsart University (one award given annually)  
(The award was provided to a university researcher under 40 years old who has the highest quantities and quality of peer reviewed journals in the fields of social science and humanities.)
- 2007-2011 Royal Thai Scholarship for Ph.D. study in Energy Policy and Economics (competitive at national level)
- 2011 AAEEA Travel Grant from the Agricultural and Applied Economics Association (AAEEA) (only 3 students in a university are given annually)
- 2011 Graduate Student Research and Presentation Grant funded by the Association of Former Students and the Office of Graduate Studies, Texas A&M University (competitive)
- 2010 Graduate Student Travel Scholarship from the Western Agricultural, Economics Association (WAEA) (only 5 scholarships given annually)
- 2010 Graduate Student Travel Scholarship from the Department of Agricultural, Economics, Texas A&M University (competitive)
- 2002-2003 Scholarship from KBANK Public Company Limited to Pursue Master Study at Thammasart University, Thailand (one award given annually)
- 1998-2000 Award for excellent academic record (highest GPA in class), Faculty of Economics, Kasetsart University, Thailand (one award given annually)
- 2000 Award for the student who assisted the various student's activities both Faculty and University level, Kasetsart University, Thailand (five awards given annually)
- 1999 Winner in the National Economic Competition (solving problems in Economics), the Economics Association of Thailand (one award given annually)
- 1999 Award for student who improved the reputation of the University to the public, Kasetsart University, Thailand

## **PROFESSIONAL DEVELOPMENT ACTIVITIES**

Puey Ungphakorn Institute for Economic Research (PIER) Research Network, Bank of Thailand, Member 2016 - present

International Organizing Committee, 2016 East, Southeast, and South Asia, Taiwan-Korea-Japan Agricultural Economics Conference, 2016

The Australian Agricultural and Resource Economics Society, Member, 2015-2016

Agricultural and Applied Economics Association, Member, 2009–2012

Association of Environmental and Resource Economists, Member, 2011–2014

Northeastern Agricultural and Resource Economics Association, Member, 2012–2013

Western Agricultural Economics Association, Member, 2010–2011

Western Economics Association International, Member, 2010–2012

Volunteer moderator in the AAEA selected paper session "Climate, Weather, and Demand" at the 2011 AAEA & NAREA Joint Annual Meeting, Pittsburgh, PA. July 24-26

Volunteer moderator in the session "How Graduate School Prepared Me for a Career in Industry" at the 2010 AAEA, CAES, & WAEA Joint Annual Meeting in Denver, CO, July 25-27

SAS Short Course, Texas A&M University, 2010

Advanced GAMS course with B.A. McCarl, GAMS Corporation, 2009

Diploma in English, Intensive English Language Institute, University of North Texas, Texas, USA, 2007

## **SOFTWARE SKILLS**

Excellent: GAMS, STATA, RATS, R, ArcGIS, Excel, Word, and PowerPoint

Good: Visual Basics, SPSS, ACCESS, SAS

## **LEADERSHIP**

President of the Texas A&M University Thai Student Association, 2009–2010

Vice President of the 4<sup>th</sup> Kasetsart University's Employee after University's Privatization, 2004–Current

Volunteer Member of Committee for the Cultural Display Division for "the International Week" Student Activity. Texas A&M University, 2010

Vice President of the 40<sup>th</sup> Economic Student Group, Department of Economics, Faculty of Economics, Kasetsart University, 1997-2001