
YOHAN LEE

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Department of Agriculture, Forestry and Bioresources
College of Agriculture and Life Science
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EDUCATION

Oregon State University, Corvallis, OR 2007. 9 – 2012. 12

- Ph.D., Forest Resources with concentration in Economics (completed in Dec 2012)
PhD Dissertation Title: “Initial Attack Fire Suppression, Spatial Resource Allocation, and Fire Prevention Policy in California, U.S., and the Republic of Korea”
(funded by USDA, Forest Service)
- M.S., Applied Economics (completed in April 2012)

Seoul National University, South Korea 2004. 3 – 2006. 2

- M.S., Forest Economics (completed in Feb 2006)
MS Thesis title: “The Economic Analysis of Technical Change and Competitiveness in the Korean Sawmill Industry” (funded by Korea Forestry Research Institute)

Seoul National University, South Korea 1995. 3– 1999. 8

- B.S., Forest Resources

RELEVANT EMPLOYMENT

- Associate Professor, Seoul National University, Sept 2022 – Present
- Assistant/Associate Professor, Yeungnam University, Sept 2014 – Aug 2022
- Research Associate, Korea Rural Economic Institute, Aug 2013 – Aug 2014
- Post-doc Scholar, Oregon State University, Jan 2013 – Jul 2013
- Research Assistant, Oregon State University, 2008 - 2012
- Teaching Assistant, Oregon State University, Winter 2012
Course: Forest Economics II (FOR 331)
- Researcher, Korea Rural Economic Institute, Feb 2006 - July 2007
- Research Assistant, Korea Forest Research Institute, Feb 2005 - Jan 2006
Project: “The Prospect of Forest Product Market for Long-term Period in South Korea.”
- Research Assistant, Seoul National University, 2004- 2005
- Teaching Assistant, Seoul National University, Fall 2004
Course: Forest Economics

PUBLICATIONS

Journal Articles

- Bongasie, A., Dhakal, T., Ayalew, A., Kim, T. S., **Yohan Lee.**, & Jang, G. S. (2024). Analysis of forest cover change and its driving factors in Senan district, Amhara Region, Ethiopia. *Environmental Monitoring and Assessment*, 196(4), 339.
- Son, Y. G., **Yohan Lee**, & Jo, J. H. (2024). Residents' Willingness to Pay for Forest Ecosystem Services Based on Forest Ownership Classification in South Korea. *Forests*, 15(3), 551.
- Gwan, J.W., Lee, C.J., & **Yohan Lee**. (2023) The Effects of REDD+ on the Poverty Alleviation through Mediating Effects of Social Capital : A Case Study of Myanmar REDD+ Pilot Project. *J. Korean Soc. Int. Agric*, 35(2), 112-119.
- Lee, C. J., Lim, M. Y., & **Yohan Lee**. (2023). Machine Learning for Big Data Analytics in Development of Wildfire Prediction Models. *J. Korean Soc. Hazard Mitig*, 23(2), 29-39.
- Chang, J.B., & **Yohan Lee**. (2023). Export Effects of Export Logistics Cost Support Program for Forest Products. *Korean Journal of Forest Economics*, 30(1), 1-10.
- Ji, S., Shin, S., & **Yohan Lee**. (2022). Forest restoration policy in the North Korea based on the reforestation experience in South Korea. *International Forestry Review*, 24(4), 560-572.
- Andoh, J., Oduro, K. A., Park, J., & **Yohan Lee**. (2022). Towards REDD+ implementation: Deforestation and forest degradation drivers, REDD+ financing, and readiness activities in participant countries. *Frontiers in Forests and Global Change*, 5, 957550.
- Ji, S., Shin, S., & **Yohan Lee**. (2022). Forest restoration policy in the North Korea based on the reforestation experience in South Korea. *International Forestry Review*, 24(4), 560-572.
- Petcharat, A., Jo, J. H., & **Yohan Lee**. 2022. Comparing Local Residents' Willingness to Pay (WTP) and Willingness to Volunteer (WTV) for Water Onion (*Crinum thaianum*) Habitat Conservation. *Forests*, 13(5), 706.
- Jung, W. G., Woo, H., & **Yohan Lee**. 2022. Why Social Capital Matters for the Success of REDD+ Programs. *JPPE*, 25, 227-237.
- Ji, S., & **Yohan Lee**. 2021. Food security and agroforestry from the perspective of the SDGs: a case study of the Democratic People's Republic of Korea. *International Forestry Review*, 23(4), 437-447.
- Lee, E., Sagong, J., and **Yohan Lee**. 2020. Influence of land use change on the waterbird community of Sihwa Lake, Republic of Korea. *Avian Research*, 11(1), 1-14.
- Petcharat, A., **Yohan Lee**, and Chang, J. B. 2020. Choice Experiments for Estimating the Non-Market Value of Ecosystem Services in the Bang Kachao Green Area, Thailand. *Sustainability*, 12(18), 7637.
- Park, J., Cho, S., Jung, G., Kim, B., Woo, H., and **Yohan Lee**. 2020. Development of Forest Thinning Evaluation Factors using the Analytic Hierarchy Process. *Journal of Korean Society of Forest Science*, 109(3), 350-360.
- Lee, S. I., Seo, J. I., **Yohan Lee**, Kim, S. W., and Chun, K. W. 2019. Analysis of research trends on mountain streams in the Republic of Korea: comparison to international research trends. *Korean Journal of Environment and Ecology*, 33(2), 216-227.
- Jung, Jaeho, and **Yohan Lee**. 2019. Impacts of Open Space and Land Use Regulation on Housing Price. *Journal of the Korean Urban Management Association* 32(2), 17-31.

- Lee, K. Y., Seo, J. I., Kim, K. N., **Yohan Lee**, Kweon, H., and Kim, J. 2019. Application of viewshed and spatial aesthetic analyses to forest practices for mountain scenery improvement in the Republic of Korea. *Sustainability*, 11(9), 2687.
- Andoh, J., and **Yohan Lee**. 2018. National REDD+ strategy for climate change mitigation: a review and comparison of developing countries. *Sustainability*, 10(12), 4781.
- Jewel, A., Chang, J. B., and **Yohan Lee**. 2018. Analyzing the Effect of Socio-economic Factors on Deforestation Using an Environmental Kuznets Curve Model. *KOREAN JOURNAL OF AGRICULTURAL ECONOMICS*, 59(3), 169-189.
- Nabybaccus, F., Lee, D. K., **Yohan Lee**, and Seo, J. I. 2018. Examination of Differences in Water Quality and Quantity by Reservoir Catchment with a Different Land-Use Type in the Republic of Mauritius. *Sustainability*, 10(6):2071.
- Ando Jewel and **Yohan Lee**. 2018. Forest transition through reforestation policy integration: A comparative study between Ghana and the Republic of Korea. *Forest Policy and Economics* 90: 12-21.
- **Yohan Lee** and Lee, B. 2018. Tradeoff between the number of firefighting resources and the level of fire ignition prevention efforts in the Republic of Korea. *Journal of Mountain Science*, 15(1): 144-155.
- Kiyani, P., Andoh, J., **Yohan Lee**, and Lee, D. K. 2017. Benefits and challenges of agroforestry adoption: a case of Musebeya sector, Nyamagabe District in southern province of Rwanda. *Forest Science and Technology*, 13(4), 174-180.
- **Yohan Lee**, Rianti, I. P., and Park, M. S. 2017. Measuring social capital in Indonesian community forest management. *Forest Science and Technology*, 13(3), 133-141.
- Saputra Nur Adi, Don Koo Lee, Joowon Park and **Yohan Lee**. 2016. Valuing Ecotourism in Palutugan Resort, Gunugn Ciremai National Park, Indonesia. *Journal of Forest and Environmental Science*. 32(4): 344-352.
- Thi Ha Thu Le, Don Koo Lee, Yong Shik Kim and **Yohan Lee**. 2016. Public preference for biodiversity conservation in Vietnam's Tam Dao National Park. *Forest Science and Technology*. 12(3): 144-152.
- **Yohan Lee**, Claire A. Montgomery, Jeffrey D. Kline. 2016. The influence of age-specific migration on housing growth in the rural Midwest (USA). *Landscape and Urban Planning*. 148:68-79.
- **Yohan Lee**, Jaeho Jung and KyungTack Min. 2015. Analysis on the Drivers of Growth in Forestry Sector and Growth Projection through Growth Accounting Analysis. *Journal of Korean Forest Society*. 104(4): 591-598.
- **Lee, Yohan**. 2014. Strategies for Allocating and Management the Green Fund Efficiently. Korea Rural Economic Institute (Consulting Report) with *Seok HD, Min KT, Koo JC, Kim ME, and Kwak JY*.
- **Lee, Yohan**. 2014. The Strategy of the Restoration and Conservation of Deforested and Degraded Mountainous Area in North Korea. Korea Rural Economic Institute (Policy Report) with *Seok HD, Kim, YH, Koo JC, Park, SH. Lee CH, and Yoon TS*.
- **Lee, Yohan**. 2014. A Study on Long-Term Forest Management Strategies. Korea Rural Economic Institute (Policy Report) with *Seok HD, Chang CS, Chong, HG, AHN, SJ, Park, SH. Min KT, and Kim ME*
- **Yohan Lee**, Byungdoo Lee, Kyung Ha Kim. 2014. Optimal Spatial Allocation of Initial Attack

- Resources for Firefighting in the Republic of Korea Using a Scenario Optimization Model. *Journal of Mountain Science*, 11(2): 323-335. DOI: 10.1007/s11629-013-2669-6.
- **Lee, Yohan.** 2013. Economic Potential and Policy Implications of Agroforestry from US Agroforestry Cases. *Kor. J. For. Eco.*, Vol. 20. No.1.
 - **Yohan Lee**, J.S. Fried, H.J. Albers, R.G. Haight. 2013. Deploying initial attack resources for wildfire suppression: spatial coordination, budget constraints, and capacity constraints. *Canadian Journal of Forest Research*, 43: 56–65. DOI: 10.1139/cjfr-2011-0433
 - Byungdoo Lee, Myung Soo Won, **Yohan Lee**, Myung Bo Lee. 2012. Crown fuel characteristics and carbon emission from Japanese red pine stands burned by crown fire in Mt. Palgong, South Korea. *Journal of Mountain Science*, 9: 656-664. DOI: 10.1007/s11629-012-2397-3
 - **Yohan Lee**, J.H. Harrison, Cristina Eisenberg, Byungdoo Lee. 2012. Modeling Biodiversity Benefits and External Costs from a Keystone Predator Reintroduction Policy. *Journal of Mountain Science*, 9: 385 - 394. DOI: 10.1007/s11629-009-2246-1.
 - Byungdoo Lee, **Yohan Lee**, Myung Bo Lee, Heidi J. Albers. 2011. Stochastic Simulation Model of Fire Occurrence in the Republic of Korea. *Journal of Korean Forestry Society*, 100: 70 – 78.

Proceedings

- Antony, Finto, *et al.* 2012. Forest Management, Engineering, and Operations/Global Competency and Issues in Contemporary Education. *Journal of Forestry* 109(8): 584-588.
- Kyung-Taek Min, **Yohan Lee**. 2007. An Analysis of Consumer Behavior in Korean Mushroom Industry. *Korean Journal of Forest Economics*, 16: 24 - 33.
- **Yohan Lee**, Yeo-Chang Youn, Kyung-Taek Min. 2006. The Analysis of the Effect of TFP Change on the Competitiveness in the Korean Sawmill Industry. *Korean Journal of Forest Economics*, 14: 35-42.
- **Yo-Han Lee**, Yeo-Chang Youn, Kyung Taek Min. 2006. Technological Change of Sawmill Industry in the Republic of Korea. *Journal of Korean Forest Society*, 95 (3): 268 - 273.
- **Yohan Lee**, H.J. Albers, J.S. Fried, R.G. Haight. 2010. The spatial allocation of suppression resources to improve the effectiveness of initial attack on wildland fires. *The International Forestry Review*. Vol.12(5), August 2010.(IUFRO)
- Yeo-Chang Youn, **Yohan Lee**. Preconditions for transition to sustainable forestry: evidence from a comparative study of six countries. *The International Forestry Review*. Vol.7(5), August 2005.(IUFRO)

PRESENTATIONS

Oral presentation*(Invited)*

- Willingness to pay and willingness to volunteer for Water Onion (*Crinum thaianum*) habitat conservation at AAERE 2021, Seoul, South Korea, Aug 2021
- Analyzing the influence of REDD+ on social capital and poverty in Myanmar, The 2020 KFES Annual Meeting(online), Nov 2020.
- Why social capital matters for the success of REDD+ programs in Myanmar, 2020 KSCC Annual Meeting 2020, Seoul, South Korea, June 2020.
- Exploring the community level social capital for Myanmar REDD+ at International Conference on Tropical Forest Science, Kota Kinabalu, Malaysia, July 2019.
- Analyzing Trade-offs Between Fire Prevention and Suppression in the Republic of Korea at INFORMS Annual Meeting 2016, Nashville, U.S., Nov 2016.
- Valuing Ecotourism with an Application of Individual Travel Cost Method at 2016 Economics Joint Conference, Seoul, South Korea, Feb 2016.
- What is the baseline of forest carbon stock in South Korea: overestimation or underestimation? At XXIV IUFRO World Congress 2014, Utah, U.S., Aug 2014.
- Deploying Initial Attack Resources for Wildfire Suppression: Spatial Coordination, Budget Constraints, and Capacity Constraints. Computational Sustainability Seminar Series at Cornell University, U.S., March 2013.

(General)

- Why Social capital matters for REDD+?: A case study from Myanmar Community Forestry at the 2020 KSFS Annual Meeting, Seoul, South Korea, Aug 2020
- Developing the estimating instrument of social capital for the REDD+ program of Myanmar at KSFS Annual Meeting 2019, Jinjoo, South Korea, Feb 2019
- Tracing the living condition and poverty status of rural forest households for effective and equitable institutionalization of REDD+ safeguards in Ghana in the 5th Annual Meeting of FLARE (Flare 2019), Michigan, USA, Aug23-25, 2019
- Estimating the social capital of Cambodia local communities: a case study in Tbong Khmum Province, Cambodia at NAKLGS Annual Meeting 2018, Gyeongsan, South Korea, Feb 2018.
- What drives the housing density change in Rural Midwest? Western Forest Economist 47th Annual Meeting in Newport, U.S., June 2012.
- Changing Housing Density in Rural Midwest. 2012 Western Forestry Graduate Research Symposium at Corvallis, in Oregon, U.S., April 2012.
- Models to Improve the Effectiveness of Initial Attack on Wildland Fires. Western Forest Economist 45th Annual Meeting in Portland, U.S., April 2010.
- Preconditions for Transition to Sustainable Forestry: Evidence from a Comparative Study of Six Countries. IUFRO in Australia, August 2005.
- "Is Korean Forestry Sustainable?" Symposium between Seoul National University and the University of Helsinki in the field of Forest Science in Finland, August 2004.
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Poster presentation

- Deploying Initial Attack Resources for Wildfire Suppression in California. SAF National Convention in Honolulu, Hawaii, November 2011.
- The Spatial Allocation of Suppression Resources to Improve the Effectiveness of Initial Attack on Wildland Fires. IUFRO in Seoul, South Korea, August 2010.
- The Prospect of Pulp Supply and Demand for Long-term Period in South Korea. Korean Forest Society. The 56th Annual Meeting of Korean Forest Society in Seoul, South Korea. February 2006.

COURSES TAUGHT

- Forest Resources Policy (Undergraduate Course)
- Modeling for Forest Protection & Management (Undergraduate Course)
- Principles of Forest Resources (Undergraduate Course)
- International Natural Environment Management (Undergraduate Course)
- Forest Economics (Graduate Course)
- Advanced Forest Resources Economics (Graduate Course)
- Advanced Forest Resource Policy
- Global Environmental Issues (Graduate Course)

ADVISING (PhD/MS)

- PETCHARAT AREEYAPAT (Forest Economics, PhD(2021))
Dissertation: *Valuing wetland ecosystem services in Thailand.*
- ANDOH JEWEL (Forest Economics, MS(2016)/PhD(2020))
Dissertation: *Towards an effective and equitable implementation of REDD+ for climate change mitigation: a cross-county analysis of national REDD+ strategy, safeguards, and results-based finance.*
- WOON GWAN JUNG (Forest Economics, MS(2017)/ PhD candidate(current))
- THANTOE AUNG (Forest Resources, MS(2021))
- SENA AOMJITR (Forest and Environment Policy, MS(2021))
- YE LINN AUNG (Forest and Environment Policy, MS (2021))
- BASUKALA SANDEEP (Forest and Environment Policy /MS/2020)
- SIAME SYLVESTER (Forest and Environment Policy/MS/2020)
- SU YI HNIN (Forest and Environment Policy /MS/2019)
- KHANAL SANTOSH (Forest and Environment Policy /MS/2019)
- MUREGO VIANNEY JOHN (Forest and Environment Policy /MS/2019)
- SUPRIANTO LALU (Forest and Environment Policy /MS/2018)

- INTHIRATH BAISONE (Forest and Environment Policy /MS/2018)
- HNIN HNIN WAI (Forest and Environment Policy /MS/2018)
- KIGO NELLY WANJIRO (Forest and Environment Policy /MS/2018)
- PINAMANG ELIZABETH (Forest and Environment Policy /MS/2018)
- SILALAH JOHANSEN (Forest and Environment Policy /MS/2018)
- KANAAN AWS BASIM KANAAN (Forest and Environment Policy /MS/2018)
- HAZIMAH BINTI HAJI MOHAMMAD DIN (Forest Resources and Ecological Restoration /MS/2017)
- ALI AHMAD REZA (Forest Resources and Ecological Restoration /MS/2017)
- RAHMAN MOHAMMAD KHADEMUR (Forest Resources and Ecological Restoration /MS/2017)
- KIYANI PILOTE (Forest Resources and Ecological Restoration /MS/2017)
- ACQUAH EMMANUEL (Forest Resources and Ecological Restoration /MS/2017)
- WINT THEINGI PHWAY (Forest Resources and Ecological Restoration /MS/2017)
- HINDRAYANI WORO (Forest Resources and Ecological Restoration /MS/2016)
- NEAB KENG (Forest Resources and Ecological Restoration /MS/2016)
- VO TRUNG KIEN (Forest Resources and Ecological Restoration /MS/2016)
- HAY MARN THAUNG (Forest Resources and Ecological Restoration /MS/2016)
- NABYBACCUS FATEMA (Forest Resources and Ecological Restoration /MS/2016)
- GURMU MITIKU KETEMA (Forest Resources and Ecological Restoration /MS/2016)
- ARIYANTO AGUS (Forest Resources and Ecological Restoration /MS/2016)
- FLAH MARWA (Forest Resources and Ecological Restoration /MS/2016)
- LE THI HA THU (Forest Resources and Ecological Restoration /MS/2016)
- ARTAWAN I MADE (Forest Resources and Ecological Restoration /MS/2016)
- SAPUTRA NUR ADI (Forest Resources and Ecological Restoration /MS/2016)
- SUPARTA AKHMAD MORYSOFA (Forest Resources and Ecological Restoration /MS/2016)
- NGUYEN DUC TU (Forest Resources and Ecological Restoration /MS/2015)
- LI HONG (Forest Resources and Ecological Restoration /MS/2015)
- NDAMAGE JEAN (Forest Resources and Ecological Restoration /MS/2015)
- RISTIYANA ARIS (Forest Resources and Ecological Restoration /MS/2015)
- RIAN TI INDRI PUJI (Forest Resources and Ecological Restoration /MS/2015)

SKILLS

- Trained and Experienced in Optimization Programming (e.g., MATLAB and GAMS) and Econometric Analysis (e.g., SAS and STATA)
- Trained and Experienced in programming C and Visual Basic
- Experienced in utilizing forest-based simulation models, including California Fire Economics Simulator and other forest management simulators
- Language proficiency in English and Korean (*Native*)

AWARDS AND HONORS

- Best Paper Award in the 2020 KSFS Annual Meeting, Korean Society of Forest Science, 2020
- Excellence in Research Award, Yeungnam University, 2017
- 2013 Science Findings Award, USDA Forest Service PNW Research Station
(With Dr. Jeremy Fried, Dr. Albers Heidi, and Dr. Robert Haight)
- Dick and Doris Waring Travel Grant, Oregon State University , 2010
- D. Barton DeLoach Graduate Scholarship, Oregon State University, 2009
- Korean Alumni Award, Oregon State University, 2008
- Award for graduate thesis competition from the civil-headquarters for activating the South-North economic cooperation in Korea, 2005
Thesis title: “The Study on Economic Feasibility of Clean Development Mechanism Project under Climate Change in North Korea.”
- Outstanding Academic Standing Scholarship, Seoul National University, 2004

SERVICE ACTIVITIES AND MEMBERSHIPS

Community Activities

- Editorial Board Member for Journal of People, Plants, and Environment (SCOPUS), 2019-current
- Editorial Board Member for International Journal of Policy Science, 2015-current
- Editorial Board Member for Korean Journal of Forest Economics, 2016-current
- Evaluation Committee for Forest Carbon-offset Program, 2014 - current
- Xi Sigma Pi Honor Society

Journal Reviewer

- *Forest Science, Canadian Journal of Forest Research, Journal of Mountain Science, Forests, Sustainability, International Journal of Wildland Fire, Ecological Economics, Forest Policy and Economics, Croatian Journal of Forest Engineering, Journal of Forest Science and Technology, etc.*

Memberships

- Korean Association of People, Plants, and Environment (*Editorial board member*)
- Korean Association of Forest Science (*Editorial board member*)
- Korean Forest Economics Society (*Editorial board member*)
- Association of Korea Resource Economics
- Australian Agricultural and Resource Economics Society
- Korean Urban Management Association
- International Association of Wildland Fire
- Association of Environmental and Resource Economics