Youngjin Ko

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C.: +43 650-357-5329; +82-10-6682-1061

Sex, Male | Date of birth **04/10/1987** | Republic of Korea

WORK EXPERIENCE

Environmental GIS / RS (Remote Sensing) Laboratory at Korea University

Seoul, Republic of Korea

• Full-time graduate researcher (Integrated Master's level)

- Research of Forest Growth
- Sustainable Development Goals research
- Establishment of Forest Spatial Information
- Policy Study on Sustainable Forest Management
- Research for Forest carbon storage and sink
- Research for Harvested Wood Products (HWP)
- Research for forest management planning for regional level

Consultant at the at the Climate Change Consulting Company

Seoul, Republic of Korea

- Consulting for Policy maker of Climate Change Adaptation
- Consulting for Carbon Footprint, Life Cycle Assessment teams
- Consulting for Emission Trading

Overseas (Indonesia) Forest Internship, Korea Forest Service (KFS)

Republic of Korea and Indonesia

• Researcher

- Plywood Production Plan
- Manager for production management

EXTRA-CURRICULAR ACTIVITIES

YSSP Fellow, International Institute for Applied Systems Analysis (IIASA), Austria, Summer 2024. Conducted research on Development of the Harvested Wood Product Model to Support the New Bauhaus Concept in South Korea.

Scholarship Student funded by BK21Plus Eco-leader Education Center for Wise Adaptation to Climate Change (BK21Plus ELEC), Korea University

• Research

- A full scholarship Master's course student funded by BK21Plus ELEC.

Professional Training Course of Greenhouse Gas Management -

- At Korea Environment Corporation from 01/06/2016 up to 31/08/2016

EDUCATION

Korea University

Seoul, Republic of Korea

• Integrated PhD Student at Department of Environmental Science and Ecological Engineering
• Major in Environmental Planning and Landscape Architecture
• Environmental GIS/RS Lab

Sep.2018 – Aug. 2025

Chonnam National University

Gwangju, Republic of Korea

• Bachelor of Wood Science – Department of Forestry
• Principal Subjects/occupational skill covered:
Wood Physics & Lab., Wood Mechanics, Unit Operation in Forest Products,
Wood Drying, Wood Industry Machinery

Mar.2010 – Feb.2017

SKILLS

• Mother tongue(s): Korean Language

• Other language(s):

- English

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
B1/2	B1/2	B1/2	B1/2	B1/2

Levels: A1/2: Basic user – B1/2: Independent user – C1/2 Proficient user

- Computer and statistics skills

Excellent communication of Computer Literate, MS Word, Excel, Power Point;

Excellent performance in R-Software;

Excellent performance in Python;

Excellent performance in ArcGIS, QGIS & ERDAS

Excellent performance in Lidar 360

List of the most relevant technical/research projects

• Developing Earth Observation Data Based Sharing System of Monitoring, Vulnerability Assessment, Adaptive Pathway of Food-Water-Ecosystem Nexus

• Development of Quantification and Verification Technique of LULUCF Matrix National Level for Post Climate Regime

• Development of Forest Carbonation MRV System in Developing Countries

• Analyzing the Nexus among the Forest-related SDGs Targets and Indicators

• Improvement of National Forest Greenhouse Gas Inventory Assessment and Carbon Accounting System for Post 2020 Regime

• Development of integrated model for climate change impact and vulnerability assessment: forest, agriculture (5^{th} year)

• A study on the management Policy for Settlements against Climate Change

• A study on the construction of land use change matrix using satellite images (1^{st} year)

• The 6th Regional Forest Plan of Gyeongsangnam-do (1^{st} year)

• The 6th Regional Forest Plan of Seoul (1^{st} year)

• Establishment of efficiency and improvement plan of forest spatial information (1^{st} year)

• Study for developing forest management model based on climate risk for post climate regime

• Development of smart forest management system for maximizing the utilization of forest resources (3^{rd} year)

• Monitoring of afforestation for carbon credit in Goseong

ARTICLES IN JOURNALS

• Hong, M., Song, C., Kim, M., Kraxner, F., Ko, Y., Son, J., & Lee, W. K. (2025). Realizing climate resilient development pathways in forestry: A focus on carbon management in Republic of Korea. Environmental Impact Assessment Review, 110, 107665.

•Hong, M., Song, C., Kim, M., Kraxner, F., Ko, Y., Son, J., & Lee, W. K. (2025). Realizing climate resilient development pathways in forestry: A focus on carbon management in Republic of Korea. Environmental Impact Assessment Review, 110, 107665.

• Ko, Y., Song, C., Fellows, M., Kim, M., Hong, M., Kurz, W. A., ... & Lee, W. K. (2024). Generic Carbon B udget Model for Assessing National Carbon Dynamics toward Carbon Neutrality: A Case Study of Republic of Korea. Forests, 15(5), 877.

• Ko, Y., Song, C., Jeong, Y., Hong, M., Kim, J., & Lee, W.-G. (2024). Development of Village-Level Forest Carbon Sink Maps for Spatially-Based Carbon Sink Management by Local Governments. Journal of Climate Change Research, 15(6), 989–1000. (In Korean)

• Hong, M., Song, C., Kim, M., Kim, J., Roh, M., Ko, Y., ... & Lee, W. K. (2023). Modeling-based risks assessment and management of climate change in South Korean forests. Forests, 14(4), 745.

• Kim, J., Ko, Y., Kim, W., Kim, G., Lee, J., Eyman, O. T. G., ... & Lee, W. K. (2023). Understanding the Im pact of the COVID-19 Pandemic on the Perception and Use of Urban Green Spaces in Korea. International Jou

rnal of Environmental Research and Public Health, 20(4), 3018.

• Hong, M., Song, C., Kim, M., Kim, J., Roh, M., Ko, Y., ... & Lee, W. K. (2023). Modeling-Based Risks Ass essment and Management of Climate Change in South Korean Forests. Forests, 14(4), 745.

• Ko, Y., Song, C., Heo, M., Noh, M., Hong, M., Park, H., & Lee, W.K. (2022). Current Status and Future Tasks of the A/R CDM Project in Goseong-gun, Gangwon-do for Transition to SDM. Journal of Climate Change Research, 13(5), 545–555. (In Korean)

• Kim, G. S., Lee, S. G., Lee, J., Park, E., Song, C., Hong, M., ... & Lee, W. K. (2022). Effects of Forest and Agriculture Land Covers on Organic Carbon Flux Mediated through Precipitation. Water, 14(4), 623.

• Kim, G., Kim, J., Ko, Y., Eyman, O. T. G., Chowdhury, S., Adiwal, J., ... & Son, Y. (2021). How do nature-based solutions improve environmental and socio-economic resilience to achieve the sustainable development goa ls? Reforestation and afforestation cases from the republic of korea. Sustainability, 13(21), 12171.

• Ko, Y., Hong, M., Kim, J., Song, C., Park, S., Kim, R., ... & Lee, W. K. (2020). Analysis of Linkages between Major Forest Policies/Plans and National Sustainable Development Goals. Journal of Climate Change Research, 11(6-1), 583–596. (In Korean)

• Jo, H. W., Lee, S., Park, E., Lim, C. H., Song, C., Lee, H., Ko, Y., ... & Lee, W. K. (2020). Deep Learning Applications on Multitemporal SAR (Sentinel-1) Image Classification Using Confined Labeled Data: The Case of Detecting Rice Paddy in South Korea. IEEE Transactions on Geoscience and Remote Sensing.

ACADAMIC ACTIVITIES

• AGU USA 2018: The development Chronology of south Korean compressed growth as a reference
Sea Jin Kim[1], Cholho Song[1], Youngjin Ko[1], Halim Lee[1], Woo-Kyun Lee[1*]

*corresponding author: leewk@korea.ac.kr

• KCCS South Korea 2019: Analysis for forest watershed conservation function by climate change
http://www.ekscc.re.kr/
Youngjin Ko[1], Halim Lee[1], Hyun-Woo Jo[1], Chul-Hee Lim[1], Cholho Song[1], Mina Hong[1], Woo-Kyun Lee[1*]
*corresponding author: leewk@korea.ac.kr

• IUFRO Brazil 2019: Life cycle assessment of carbon footprint of harvested wood products of Larix Kaempferi in Korea
Youngjin Ko[1], Cholho Song[1], Mina Hong[1], Woo-Kyun Lee[1*]

*corresponding author: leewk@korea.ac.kr

• ACRSSouth Korea 2019: Analysis of forest watershed impact by climate change in kangwon province
Youngjin Ko[1], Halim Lee[1], Hyun-Woo Jo[1], Chul-Hee Lim[1], Cholho Song[1], Mina Hong[1], Somie Yoo[1], Woo-Kyu n Lee[1*]

*corresponding author: leewk@korea.ac.kr

• 2020 EGU General Assembly Conference: Evaluation of Forest Water Storage by changing Land Cover in Ko rea Peninsula

Youngjin Ko[1], Halim Lee[1], Lee seul-gi[1] Hyun-Woo Jo[1], Chul-Hee Lim[1], & Lee, W. K. (2020, May).

*corresponding author: leewk@korea.ac.kr

• AGU 2021: Identifying Tree Ring Growth influencing climate change scenario

Youngjin Ko[1], Hyun-Woo Jo[1], Sujong Lee[1], Halim Lee[1], Chul-Hee Lim[2], Joon Kim[1], and Woo-Kyun Lee[1]

*corresponding author: leewk@korea.ac.kr

• AGU 2022: Identifying Forest soil information based on Machine learning for south korea
YoungJin Ko[1], Taejin Park[2,3], Moonil Kim[4], Gomee Choi[5], Mina Hong[1], Jiwon Son[1], Woo-Kyun Lee[1]
*corresponding author: leewk@korea.ac.kr