

The Republic of Korea's new vision through forests — paving the way for a global forestry renaissance

Dr. Park Eunsik, Director General of the International Affairs Bureau, Korea Forest Service

The Republic of Korea (ROK) currently has a 63 per cent forest cover, twice the world average of 31 per cent, ranking it fourth among OECD countries. The transformation of the country's forests is truly remarkable — according to a 1969 United Nations report, Korea's forests were described as “difficult to recover due to long-term degradation”. However, progress made since then has been widely acknowledged and celebrated on the global stage.

This transformation is a testament to the unwavering dedication and efforts of the country over the past five decades. Through overcoming obstacles and implementing effective reforestation measures, Korea has demonstrated its tremendous potential for restoring degraded forests, serving as a model of good practice to other nations grappling with similar challenges. Korea's dedication to sustainable forest management sets an extraordinary example for the global community, encouraging collective action towards a greener and more resilient future.

A half-century of success: remarkable achievement in forest restoration and management

From the late 19th century until the mid-1950s, Korea experienced extreme forest degradation. The forests suffered severe devastation during the period of Japanese Colonial Rule until 1945, as trees were indiscriminately cut down to meet the demands of wars. The already depleted forests subsequently faced further destruction during the three-year Korean War which exacerbated the damage inflicted on the landscape, with most mountains becoming barren. In 1953, the average growing stock per ha was a mere 5.7m³ and these conditions persisted into the early 1970s with minimal improvement to just over 10m³. Forest degradation had severe and long lasting effects on the lives of citizens. The absence of forests on mountains led to soil erosion, frequent landslides, floods, and droughts, which hindered economic growth and endangered the safety of the people.

After the Korean War, Korea's GNP per capita stood at a meagre US\$ 65, placing the country among the poorest



Korea's forests in the 1970s (top) and today (above)

Evaluation results of forest's functions that provide public benefits, 2020

Forest public benefit assessments



Total value:
US\$ 199 billion

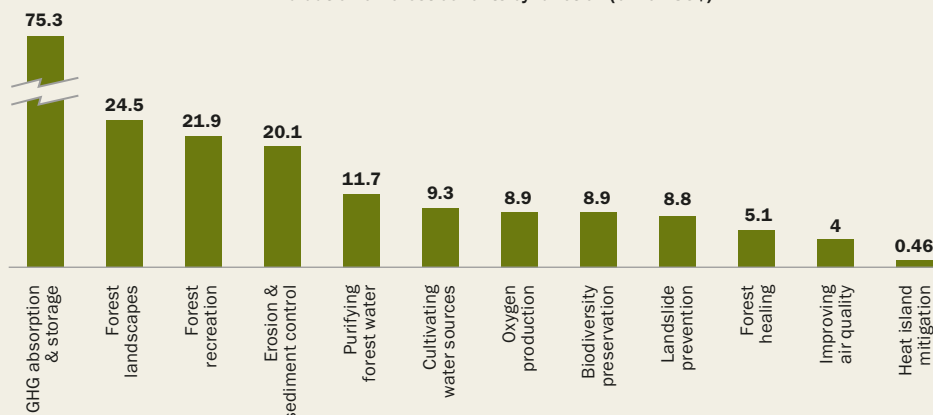


Share in GDP:
13.3%



Annual value per capita:
US\$ 3,850

Valuation of forest benefits by function (billion US\$)



nations in the world. In order to uplift its people from poverty and improve their quality of life, the Korean government initiated the 5-year Economic Development Plan (1962–1966). Concurrently, the government acknowledged the importance of rehabilitating forests to conserve the land and provide resources for rural regions. Against this backdrop, the Forest Act was created in 1961 to lay the groundwork for the restoration of degraded forests, while the establishment of the Korea Forest Service in 1967 played a pivotal role in driving this initiative forward.

The implementation of the first National Forest Plan (1973–1982) marked a significant milestone, aiming to restore one million ha of forest by planting an astounding 2.1 billion trees over a span of ten years. Through resolute governmental leadership and the fervent engagement of the Korean people, the plan achieved notable results, surpassing its initial targets within six years. By 1978, an impressive 2.9 billion trees had been planted across 1.08 million ha, showcasing the exceptional success of this concerted effort.

Building upon the ambitious accomplishments of the first plan, the second National Forest Plan (1979–1988) swiftly followed, leading to the restoration of 325,000 ha of forests and the creation of 80 commercial forests. Additionally, the plan facilitated the establishment of forest management systems for the restored forests, including support programmes for private forests. The second plan concluded in 1987 with great success, ahead of its initial schedule. These collective endeavours culminated in Korea's average growing stock per ha reaching 31m³ in 1987.

As a direct outcome, the diligent execution of National Forest Plans spanning from 1973 to 2021 led to the planting of more than 10 billion trees, effectively restoring forests to their former glory. As of 2021, Korea boasts an outstanding average growing stock of 165m³ per ha, surpassing the OECD average of 131m³. This achievement showcases a notable 29-fold increase compared to the figures from 1953. These accomplishments not only underscore Korea's unwavering dedication to reforestation and sustainable forest management but also set an inspiring example for the rest of the world, spearheading global reforestation endeavours.

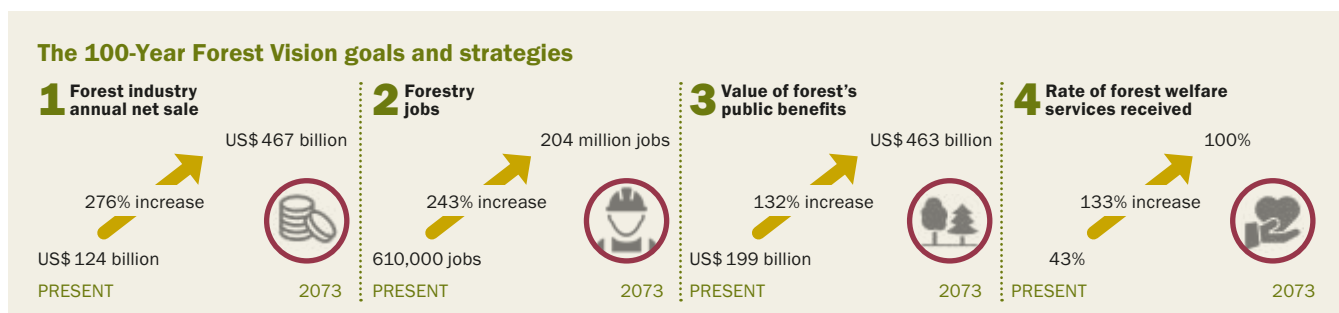
Beyond reforestation: Korea's journey towards sustainable forest management

Following the conclusion of the second National Forest Plan, Korea's forest policy gradually shifted its focus towards enhancing the economic, environmental, and social functions of forests. The third National Forest Plan (1988–1997) concentrated on maximizing the value of forests by increasing sources of income and the public benefits derived from them. Notably, the third plan marked a significant milestone by recognizing the evaluation of the non-market values of forests, including their contributions to public benefits such as water resources and wildlife conservation.

The goal of the fourth National Forest Plan (1998–2007) was to foster a lush green country where people and forests harmoniously coexist. The scope of this plan expanded beyond viewing forests solely as natural resources and encompassed their various functions that provide public benefits. Subsequently, the fifth National Forest Plan (2008–2017) presented the vision of a green welfare country where all citizens can experience harmony with forests. This plan emphasized the creation of a framework in which forests serve as foundations for work, rest, and living, establishing a virtuous cycle of various forest functions and benefits. Furthermore, the role of forests as carbon sinks was reinforced to address the climate crisis.

The sixth National Forest Plan (2018–2037), currently underway, has been extended from its initial 10-year time frame to a comprehensive period of 20 years, aligning it with other national planning systems such as land use planning and natural environment conservation planning. With the vision of economic forests that create jobs, forest welfare enjoyed by all, and ecological forests for people and nature, the concept of a circular economy with forests was included. This concept promotes sustainable economic growth and generates social added value by increasing investment in people. The plan also emphasizes stronger connections with the global community's Sustainable Development Goals, specifically through the implementation plans for SDG 13 (Climate Action) and 15 (Life on Land).

The year 2023 marks the 50th anniversary of the implementation of the first National Forest Plan which was known as the Forest Rehabilitation Plan. Over the past five decades,



Korea has made significant efforts in restoring degraded forests and improving the value of forests. As forests thrive, deliberate measures are taken to enhance their diverse functions and ensure sustainable management. Consequently, Korea has witnessed the continuous expansion of the economic, environmental, and social contribution fulfilled by its forests.

As of 2021, the forest industry in Korea achieved annual sales surpassing US\$ 120 billion, generating around 610,000 jobs in related sectors. In an effort to preserve biodiversity, 12 per cent of the total forest area has been designated as protected. Forests are also instrumental in the absorption and storage of approximately 38 million tonnes of carbon on an annual basis, playing a critical role in mitigating climate change.

Moreover, around 43 per cent of the Korean population actively engages with forests to enhance their welfare, participating in activities such as forest recreation, education, and healing. Additionally, approximately 19 per cent of the population resides in mountainous villages, using forests for their livelihood. Beyond the goods traded in markets, such as timber, forests in Korea contribute significantly to public benefits. As of 2020, the value of these benefits amounted to over US\$ 195 billion per year. This implies that each Korean receives benefits from forests equivalent to US\$ 3,737 annually.

Forging a sustainable future: Korea's new forest vision for a happier country

In 2023, the Korea Forest Service has unveiled the 100-Year Forest Vision, bridging the accomplishments of the past 50 years with the aspirations for the next 50 years. This vision serves as a testament to the enduring dedication of the Korean government in harnessing the power of forests to drive comprehensive national development. It embodies a long-term commitment to foster a sustainable and harmonious relationship between the people and invaluable resources, with the ultimate goal of flourishing with forests.

The plan sets forth ambitious goals — to enhance sustainable forest management, the national economy, people's happiness and safety, as well as respond to global and national critical issues, the vision delineates six strategic approaches: economic forest, environmental forest, social forest, forest disaster control, international forest cooperation, and forest science and technology. These strategic approaches will guide efforts to achieve the future envisioned, where forests play a pivotal role in fostering holistic well-being and prosperity for the Korean people.

To safeguard and preserve our forests, the goal is to maintain the total forest area at its current level, which accounts for about 63 per cent of the total land mass. Additionally, steps

will be taken to expand the protected forest, with a target of encompassing 30 per cent of the total forest area. Sustainable forest management will be a key policy, encompassing the cycle of planting – tending – harvesting – planting again. To support effective forest management and disaster control, the development of forest roads will be prioritized. Furthermore, promoting forestry mechanization will facilitate domestic wood production. These efforts are expected to increase the wood self-sufficiency rate. By adopting these measures, Korea aims to ensure the long-term vitality and sustainability of its forests while fostering a balanced and self-sufficient approach to wood production.

Forests will play a crucial role in the journey towards achieving carbon neutrality. To this end, there will be a focus on expanding carbon absorption and wood production in domestic forests, while also enhancing the carbon storage capacity of urban areas through the development of wood-friendly cities and wooden public buildings. Moreover, efforts will be made to improve living conditions in mountainous villages, fostering the development of forest culture and promoting forest tourism. Urban forests will be nurtured to enhance the welfare of all citizens, ensuring that forests are accessible and enjoyed by everyone.

Through these comprehensive efforts, a forestry renaissance will be achieved, enhancing the happiness and well-being of the Korean people through their profound connection with forests. By recognizing the multifaceted benefits of forests and embracing sustainable practices, Korea is poised to lead the way in fostering a harmonious relationship between people and nature, while actively working towards a greener and more resilient future.

Growing together: sharing reforestation and forest management expertise

Since the inception of Korea's bilateral forest partnerships in 1987 with the signing of a Forestry Cooperation Agreement between the Republic of Korea and Indonesia, Korea has demonstrated a steadfast commitment to international forest cooperation by establishing bilateral ties with 39 countries across all six continents and has actively contributed to forest restoration in developing countries.

With the rise of global challenges like the climate crisis, desertification, deforestation, and biodiversity loss, Korea's focus has shifted towards collaborative efforts to address these issues. Against this backdrop, the ROK has proposed global forest initiatives and joined hands with various international organizations. The Forest and Landscape Restoration Mechanism and the Food and Agriculture Organization of the United

Nations (FAO) (FLRM), and the Forest Ecosystem Restoration Initiative with the Convention on Biological Diversity (FERI), among others to commit to various global forest initiatives have been launched.

Furthermore, at the 10th session of the Conference of Parties (COP10) of the UNCCD, hosted in Changwon, ROK in 2011, the Changwon Initiative was launched to support global efforts to combat desertification and land degradation. The initiative has performed a vital role in developing and promoting Land Degradation Neutrality (LDN), one of the targets of SDG 15, and enabled Korea to support the Greening Drylands Partnership (GDP) which has helped 16 developing countries restore their degraded land and forests. Serving as a bridge between developed and developing countries, Korea put its efforts to solve global forest issues.

Recently, Korea has joined the Forest & Climate Leaders' Partnership (FCLP), and led three significant cooperation projects in collaboration with United Nations organizations. These projects include Assuring the Future of Forests with Integrated Risk Management (AFFIRM), Sustaining an Abundance of Forest Ecosystems (SAFE), and the Reducing Emissions from Deforestation and Forest Degradation (REDD+) Capability Building Platform (REDD+ CBP). These initiatives were announced during the 15th World Forestry Congress, which Korea hosted in May 2022. These projects exemplify Korea's commitment to international cooperation in protecting forests and promoting sustainable development.

AFFIRM, in collaboration with FAO, is dedicated to establishing a forest disaster risk management platform and enhancing forest fire response capabilities within developing countries from 2022 to 2025. Its primary objective is to strengthen the resilience of forests and local communities by effectively managing and mitigating forest-related risk. Through this partnership, AFFIRM aims to contribute to the sustainable management and the protection of forests.

In partnership with The United Nations Environment Programme, SAFE focuses on ecosystem restoration in

vulnerable areas with significant biodiversity in developing countries from 2023 to 2030. This initiative focuses on establishing a comprehensive monitoring system, developing income-generating programmes for local residents, and supporting capacity building efforts. By restoring ecosystems, SAFE seeks to enhance biodiversity conservation and improve the well-being of communities dependent on forest resources.

The REDD+ CBP project, in cooperation with the UN-REDD+ Programme, has developed a capacity building platform for the implementation of REDD+ in developing countries from 2023 to 2027. This initiative focuses on reducing greenhouse gas emissions by promoting sustainable forest management practices, combating deforestation, and encouraging forest conservation efforts. By supporting countries in implementing REDD+ policies, the project aims to contribute to global climate change mitigation efforts and foster sustainable forest management practices.

Over the past three decades, Korea has been proactive in expanding international forest cooperation, encompassing various areas such as forest fire management, landslide prevention, pests and diseases control, forest inventory utilizing information and communication technology, forest recreation and tourism, as well as forest restoration. These endeavours reflect Korea's dedication to addressing global challenges and fostering sustainable forest management practices.

In March 2023, the Korea Forest Service unveiled the second International Forestry Cooperation Plan (2023–2027) with the primary objective of expanding official development assistance (ODA) for global forests and taking on an active role in collective response to global environmental issues. Through its international forest cooperation efforts, Korea strives to share its expertise, exchange knowledge, and contribute to global forest conservation and restoration. By collaborating with other nations and organizations, Korea wishes to join the journey with the global community in addressing the challenges our forests face and realize a sustainable future for both people and the environment.



Left: The Korea Forest Service renews the MOU on forestry cooperation with the Ministry of Agriculture and Rural Development in the presence of the two leaders, Hanoi, Vietnam, 2023. Right: NAM Sunghyun, Minister of the Korea Forest Service, plants mangrove seedlings, Nin Binh, Vietnam, 2023