Governance

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Climate Change Response and Environmental Management

**Preservation of Biodiversity** 

Social

# **Preservation of Biodiversity**

Hanmi Pharm recognizes that the restoration of ecosystems and the preservation of biodiversity are important aspects of our sustainability. We will strive to prevent all factors that threaten biodiversity during a given project. In the event we cause damage, we will restore and offset it. We include the protection of natural ecosystems and the preservation of biodiversity in our environmental management policy and are carrying out various activities accordingly. In addition, we are making efforts to ensure that it is applied not only to all our business sites but also throughout our whole supply chain.

# **Biodiversity Performance and Goals**

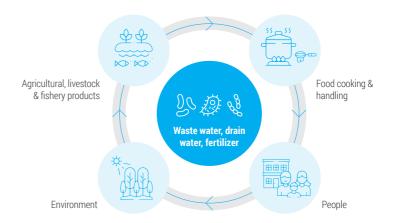
| 2024 target                            |   | Achievement rate |
|--|---|------------------|
| AMR framework<br>activities            | Comply with the AMR Framework (API PEC/PNEC<1).   | 100%             |
|  | [Hanmi Fine Chemical] Conduct a validation and risk assessment of antibiotics detection.  | 100%             |
| Environmental<br>protection activities | <ul> <li>Plant 1,000 or more trees in the Hanmi Green Forest and participate in 5 or more environmental cleanup activities.</li> <li>Plant more than 7,000 trees for bees.</li> </ul>   | 100%<br>0%       |
|  | [Company-wide] - Plant honey source trees in the Hanmi Green Forest and Gangwon /Conduct activities to remove plants that disrupt the ecosystem. [Pyeongtaek Bio Plant]   | 100%             |
|  | - Participate in and carry out environmental cleanup activities: Achieve a cumulative employee participation rate of 50% or more.  [Hanmi Fine Chemical]  Participate in at least 20 local government environmental improvement activities. | 100%<br>100%     |

<sup>1) 3,400</sup> trees were planted in April 2025 due to difficulties in planting trees in winter and the replacement of superior varieties in 2024.

| 2024 target                            |   |  |
|--|---|--|
| AMR framework<br>activities            | Comply with the AMR Framework (API PEC/PNEC<1).   |  |
|  | [Hanmi Fine Chemical] Conduct a validation and risk assessment of antibiotics detection.  |  |
| Environmental<br>protection activities | · Plant over 1,000 trees in the Hanmi Green Forest.<br>· Participate in 5 or more environmental cleanup activities.   |  |
|  | [Company-wide] - Plant trees for bees in the Hanmi Green Forest and Gangwon /Conduct activities to remove plants that disrupt the ecosystem. [Pyeongtaek Bio Plant] - Participate in and carry out environmental cleanup activities: Achieve a cumulative employee participation rate of 50% or more. [Hanmi Fine Chemical] Participate in at least 10 local government environmental improvement activities. |  |

## **Compliance with AMR (Antimicrobial resistance)**

Hanmi Pharm is working hard to prevent AMR (Antimicrobial resistance) wastewater from flowing into marine ecosystems. We undertake measures to detect antibiotic substances and conduct ecological risk assessments<sup>1)</sup> of wastewater generated by our antibiotic production bases. Through this, we are making efforts to check the probability of adverse effects on individuals and population groups and minimize environmental impact. The Paltan Smart Plant and Hanmi Fine Chemical continuously monitor PEC<sup>2)</sup>/PNEC<sup>3)</sup> values and strive to keep them below 1, a value which indicates that there is no adverse risk to the ecosystem. Moreover, for new projects, the company will conduct environmental impact assessments according to the related regulations, and endeavor to conduct the assessments after discussing relevant matters with local residents and local communities, based on related laws and regulations.



- 1) Ecological risk assessment: PEC/PNEC
- 2) PEC (Predicted Environment Concentration): Concentration of chemical substances derived from the environment estimated by a prediction model.
- 3) PNEC (Predicted No-Effect Concentration): Environmental concentration measured and evaluated to have no harmful effects on organisms, other than humans, inhabiting the ecosystem.

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# **Compliance with the Nagoya Protocol**

Hanmi Group has recognized that there is an ongoing global supply chain crisis due to rapid climate change and environmental degradation and is making multifaceted efforts to manage our supply chain responsibly. As a leading domestic pharmaceutical and biotech company that manufactures pharmaceuticals, cosmetics, and health functional foods, Hanmi Group remains committed to preventing the loss of biodiversity and the destruction of ecosystems while striving for sustainable growth and development. As part of these efforts, Hanmi Group deeply sympathizes with the principles of the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization under the Convention on Biological Diversity (the "Nagoya Protocol"), which came into effect on October 12, 2014, and has established an internal compliance system for the Nagoya Protocol in order to monitor the relevant developments, so as to contribute to the sustainable use of biological genetic resources and the shared prosperity of humanity, and continuously raise awareness among our employees to ensure full adherence to its provisions.

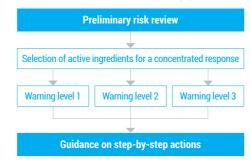
### Development and Operation of the Nagoya Protocol Integrated Information System (H-ABS)

Hanmi Group initiated the establishment of its Nagoya Protocol compliance system in 2018, defining the processes required for researching and developing products that utilize biological genetic resources. Hanmi Pharm also formed an internal governance task force (TF) to support efforts to comply with the Nagoya Protocol. In 2020, Hanmi Grouplaunched the Hanmi-Access to Genetic Resources and Benefit Sharing (H-ABS) system, an online compliance platform. The H-ABS provides employees with the latest information on the Nagoya Protocol and the relevant regulations in other countries. Through the "Product Search" menu, employees can easily check whether any currently stocked or sold products are subject to the Nagoya Protocol. Furthermore, the "Integrated Review Request" service enables researchers to verify whether raw materials used in research fall under the scope of the Nagoya Protocol and to receive preemptive guidance on mitigating any identified risks. This ensures full compliance with the Access & Benefit Sharing (ABS) obligations under the Nagoya Protocol. Hanmi Group is also establishing internal compliance standards to guide employees on the required actions at each response stage and scenario, ensuring adherence to protocol-related regulations. Additionally, the company is preparing to implement internal regulations specifically related to compliance with the Nagoya Protocol.

## **Nagoya Protocol Governance TF**



# Internal Procedures Related to the Nagoya Protocol



## **Activities Related to the Nagoya Protocol**

Hanmi Group continuously carries out promotional activities related to the Nagoya Protocol, including in-house training for affected departments, deployment of companywide screensavers and posters, and participation in various seminars and contests to advance compliance with the protocol both internally and externally. In August 2024, Hanmi Group attended the CPHI Korea, a global exhibition for the pharmaceutical, biotech, and health functional industries. In November 2024, Hanmi Group participated in the 2024 ABS Corporate Seminar, hosted by the Korea Biotechnology Industry Organization. Hanmi Group also monitored the latest developments in Digital Sequence Information (DSI), which has recently been included within the scope of the Nagoya Protocol. Additionally, in November 2024, Hanmi Group took part in the 1st ABS (Access & Benefit Sharing) Short-form Contest, organized by the National Institute of Biological Resources under the Ministry of Environment, winning an Excellence Award for its participation. Through these proactive efforts, Hanmi Group continues to raise awareness among its employees regarding compliance with the Nagoya Protocol.

In January 2025, Hanmi Group's training team visited the R&D center to conduct foundational training for employees involved in research and development. This initiative



Hanmi Pharm's Nagoya Protocol in-house promotion poster.

aimed to guide employees on potential future risks, reinforcing the company's commitment to environmental and social responsibility through various efforts. As a result, Hanmi Group achieved the remarkable feat of being named among the Asia Top 15 In-House Teams for the third consecutive year at the awards ceremony organized by Asian Legal Business (ALB), a global legal media outlet under Thomson Reuters. Hanmi Group will continue participating in diverse internal and external activities to further enhance corporate compliance and ensure adherence to the Nagoya Protocol.



Asia Top 15 In-house Teams Award trophies presented by ALB (Asian Legal Business).



In-house Nagoya Protocol screensaver.



The 1st Access & Benefit Sharing (ABS) Short-form Competition

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# **Environmental Protection Activities**

## **BEE Happy project**

Due to recent climate change, the decline in bee populations has emerged as a serious social issue, potentially leading to ecosystem collapse. In response, Hanmi Pharm is operating a bee conservation program, recognizing bees' crucial role in restoring natural ecosystems and preserving biodiversity. The BEE Happy Project aims to increase bee populations by establishing beekeeping sites. To facilitate this initiative, we signed an MOU with the Korea Beekeeping Association in 2022 and have since carried out related projects. In 2024, through a project to establish beekeeping sites, we successfully produced 250 kg of high-quality wildflower honey. This honey underwent quality testing at the Beekeeping Products Research Institute, ensuring compliance with applicable standards. We also developed our own packaging and donated the honey to the first and second branches of "Ongichango (Warmth Warehouse)," a nonprofit store that supports the residents of undeveloped neighborhoods.





#### **Creation of Hanmi Green Forest**

Since 2021, Hanmi Pharm has been dedicated to achieving carbon neutrality and preserving biodiversity by creating several Hanmi Green Forests, planting trees and rare plants to support ecosystem conservation efforts. Starting with Hanmi Green Forest No. 1 near Tongbokcheon in Pyeongtaek, Hanmi Pharm has since expanded the number of forest sites with the addition of six further sites. This project has been carried out in collaboration with Pyeongtaek and the Southern Gyeonggi Ecological Education Institute. In 2024, we conducted two rounds of planting at Shindae Leports Park and Sopung Garden, planting 1,090 trees and 200 rare plants. These efforts are expected to absorb approximately 1,090 kg of CO2 annually, contributing to environmental sustainability.



Cumulative planting (trees)



Cumulative contribution to



# **Environmental Cleanup Activities**

Hanmi Pharm's Pyeongtaek Bio Plant has carried out environmental cleanup activities within the Chupal Industrial Complex, where the company is located, contributing to the local community. In 2024, the Pyeongtaek Bio Plant conducted waste collection efforts on six occasions in the industrial complex, surrounding business sites, and nearby parks. The plant plans to continue carrying out environmental improvement and volunteer activities in the future. Hanmi Fine Chemical has also participated in environmental improvement initiatives within the Siwha National Industrial Complex, engaging in programs such as "Creating a Beautiful Industrial Complex" and "Green Action Group." Through these efforts, the company has taken part in environmental cleanup projects across green buffer zones and the Okgucheon Stream. Hanmi Pharm and Hanmi Fine Chemical remain committed to conducting environmental improvement activities on an ongoing basis.







# **Activities to Remove Plants that Disrupt the Ecosystem**

Each year, Hanmi Pharm conducts activities aimed at preserving biodiversity by eliminating species of invasive plants that harm humans and livestock and disrupt the growth of other plants. In 2024, we partnered with the Songpa-gu Volunteer Center, organizing an event along the Songpa Trail, which saw good participation by employees and their families. After receiving professional training, the volunteers worked to remove invasive plants such as Sicyos angulatus and Asian hop.



# **Managing Safe LMO Research Laboratories**

Hanmi Pharm ensures the safe operation of our Living Modified Organism (LMO) research laboratories by complying with the "Transboundary Movement of Living Modified Organisms Act" and carefully considering their potential impacts on antibiotic resistance and ecosystem disruption. We have implemented a systematic safety training program, developed a biosafety management process based on an internal online system, and conducted regular inspections to actively implement in-house safety measures for preventing accidents. To improve the separate collection rate of medical waste at our LMO research facilities, we have provided training for those of our employees who are engaged in research, placed posters to reinforce awareness, and carried out regular inspections of medical waste disposal. We remain committed to fostering an optimal research environment through continuous safety and compliance efforts.