

Preserving 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. Hanmi Pharm includes the protection of natural ecosystems and the preservation of biodiversity in its environmental management policy and is carrying out various activities accordingly. In addition, we are making efforts to ensure that it is applied to not only all our business sites but also throughout our whole supply chain.

Classification	2023 Achievements
AMR framework activities	<p>Compliance with the AMR framework (API PEC/PNEC<1)</p> <p>[Paltan Smart Plant] Conducted environmental risk assessment using PEC/PNEC. [Hanmi Fine Chemical] No antibiotics were detected within the wastewater effluent when conducting antibiotic detection validation.</p>
Environmental protection activities	<p>Planted more than 1,000 trees in the Hanmi Green Forest. / Participated in more than five environmental purification activities.</p> <p>[Company-wide] Planted 1,290 trees in the Hanmi Green Forest. / Engaged in two activities aimed at eradicating invasive non-native plants. [Pyeongtaek Bio Plant] Conducted a green beautification event at the Chupal Industrial Complex twice and attended a further 4 times. [Hanmi Fine Chemical] Participated in environmental improvement activities hosted by the local government on nine occasions.</p>
Classification	2024 Goals
AMR framework activities	<p>Compliance with the AMR framework (API PEC/PNEC<1)</p> <p>[Hanmi Fine Chemical] Conduct risk assessment and checks to detect the presence of antibiotics.</p>
Environmental protection activities	<p>Plant more than 1,000 trees and 7,000 nectar-bearing plants in the Hanmi Green Forest. Participate in more than five environmental cleanup activities.</p> <p>[Company-wide] Plant trees in the Hanmi Green Forest and Gangwon nectar grove. Conduct activities aimed at eradicating invasive non-native plants that disturb local ecosystems. [Pyeongtaek Bio Plant] Participate in and perform environmental cleanup activities: Achieve a cumulative employee participation rate of at least 50%. [Hanmi Fine Chemical] Participate in twenty environmental improvement activities hosted by the local government.</p>

Compliance with AMR (Antimicrobial Residence)

Hanmi Pharm is working hard to prevent AMR (Antimicrobial Residence) wastewater from flowing into marine ecosystems. We undertake measures to detect antibiotic substances and conduct ecological risk assessments¹⁾ 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 PEC²⁾/PNEC³⁾ 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: If PEC/PNEC<1, there is no adverse risk to the ecosystem.
 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.)

OUR COMPANY	+
SPECIAL TOPIC	+
ESG MANAGEMENT	+
ENVIRONMENT	-
Environmental Management	
Minimizing Environmental Impacts	
Spreading an Eco-friendly Corporate Culture	
▶ Preserving Biodiversity	
SOCIAL	+
GOVERNANCE	+
ESG FACT BOOK	+
APPENDIX	+
ESG POLICIES	+

Compliance with the Nagoya Protocol

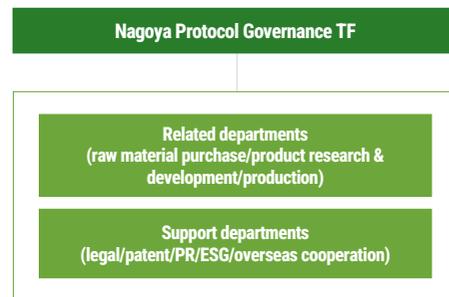
Hanmi Pharm is making diverse efforts to promote healthy supply chain management despite the global supply chain crisis. Particularly in the case of medicines, 80% of which are made with raw natural ingredients derived from animals and plants, we consider the loss of biodiversity and the destruction of local ecosystems to constitute an important challenge to the sustainable growth and development of the biopharmaceutical industry, so we check and review the related risks accordingly. Furthermore, Hanmi Pharm Group supports the Nagoya Protocol, which pursues the preservation of biodiversity and the fair and equal sharing of the benefits accruing from the use of biological resources, and we have built a compliance system to promote the sustainable use of biological resources and to contribute to the prosperity of all humankind.

Establishment of the Nagoya Protocol Integrated Information System (H-ABS)

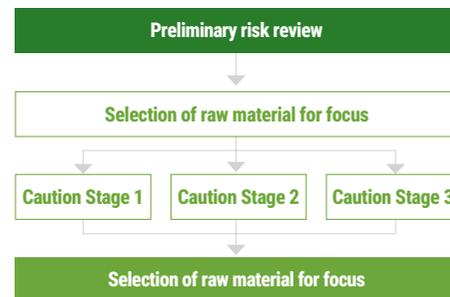
Hanmi Pharm Group commenced developing our Nagoya Protocol Compliance System in 2018, and established an in-house process with which the relevant personnel must comply when using genetic resources. In addition, the company continues to perform activities aimed at raising awareness of the need to comply with the Nagoya Protocol. In 2020, we launched the Korea-US Nagoya Protocol Integrated Information System (H-ABS), and we ensure compliance with the ABS (Access & Benefit Sharing) obligations based on a prior review of the utilization of genetic resources. Through this, we are checking whether the Nagoya Protocol and the related regulations of the countries that provide us with genetic resources can be complied with, and we ensure that our employees and suppliers comply with the Protocol and its regulations.

H-ABS posts information about the Nagoya Protocol and the current status of legal regulations related to each country, and provides guidelines and Q&As for the persons in charge of each task. Furthermore, users can use "Product Search" to check whether a specific product contains raw materials as prescribed in the Nagoya Protocol. In addition, through the 'Integrated Review Request' function, field operators can review in advance whether the genetic resources we intend to research and develop are subject to the Nagoya Protocol, check the Nagoya Protocol and the related laws of countries that provide genetic resources, and check whether the genetic resources to be used comply with the Nagoya Protocol. In addition, we have enacted our own internal "Nagoya Protocol Compliance" policy regarding each stage of response and the actions to take in each situation in order to ensure a systematic and effective response and thereby comply with the Nagoya Protocol when using raw materials relevant to genetic resources. We also provide guidance to suppliers and take measures designed to ensure that they comply with the Nagoya Protocol when supplying raw materials to our company.

Nagoya Protocol Governance TF



Nagoya Protocol Policy



Activities related to the Nagoya Protocol

Hanmi Pharm Group conducts periodic in-company training related to the Nagoya Protocol and engages in PR activities through screen savers and posters in order to raise our employees' awareness of it. Furthermore, we have enhanced the internal compliance system by monitoring trends at home and abroad through meetings with officials related to national institutions related to the Nagoya Protocol and by listening to the opinions of experts. We are carrying out internal and external activities to implement the Nagoya Protocol, such as contributing a manuscript and participating in the writing of "Cases of domestic bio companies' response to the Nagoya Protocol" in 10 Years of the Nagoya Protocol and the Bio Industry, as well as participating in the BNBP (Business and Biodiversity Platform). We strive to fulfill our environmental and social responsibilities by adopting and disseminating the Nagoya Protocol governance system to the biopharmaceutical industry and educating working-level officials in the industry. Hanmi Pharm has been recognized for such ESG contribution activities, winning awards in two categories, namely, "ESG Inhouse Team of the Year" and "INNOVATIVE In-house Team of the Year" at the 2022 ALB Law Korea Awards hosted by ALB (Asian Legal Business), a global legal media entity under Thomson Reuters. In addition to this, we won awards in two categories in 2023, i.e. ASIA TOP 15 IN-HOUSE TEAMS and KOREA In-House Team of the year. Hanmi Pharm will continue making concerted efforts to comply with the Nagoya Protocol, pursuing the continuous enhancement of in-company compliance through various internal and external activities.



Nagoya Protocol Integrated Information System (HABS)



In-company training related to the Nagoya Protocol



Trophy of the 2023 ALB Law Korea Awards



Hanmi Pharm's in-company poster promoting the Nagoya Protocol

- OUR COMPANY +
- SPECIAL TOPIC +
- ESG MANAGEMENT +
- ENVIRONMENT -
 - Environmental Management
 - Minimizing Environmental Impacts
 - Spreading an Eco-friendly Corporate Culture
- ▶ Preserving Biodiversity
- SOCIAL +
- GOVERNANCE +
- ESG FACT BOOK +
- APPENDIX +
- ESG POLICIES +

Environmental Cleanup Activities

BEE Happy project

Hanmi Pharm runs the "BEE Happy Project" to protect the natural ecosystems and habitats of honeybees, an important link in the restoration of natural ecosystems and the preservation of biodiversity. The "BEE Happy" project consists of two subprojects: one aimed at creating bee farms to increase the number of honeybees, and another aimed at supporting beekeepers in regions hit by wildfires by supporting the restoration of their sources of nectar. To ensure the smooth operation of the BEE Happy project, the company signed an MOU with the Korean Apicultural Association in 2022 and is continuing with the related projects. In 2023, we planted 1,350 nectar-bearing trees in the Gyeongbuk region, and produced 160kg of quality Acacia honey under the project to create apiaries. This honey was subjected to quality inspections by the Apicultural Products Research Institute according to honey specification standards, and was donated to 'Ongi Chango (Warm Storage),' a non-profit store for vulnerable members of society.



Project to establish apiaries in the capital region to increase the honeybee population + Support project for apiaries to restore their sources of nectar



Creation of Hanmi Green Forest

Since 2022, Hanmi Pharm has been cultivating the Hanmi Green Forest in order to practice carbon neutrality and promote biodiversity, and planting trees and rare plants in cooperation with Pyeongtaek-si and the Southern Gyeonggi Ecological Education Research Institute. Starting with the first forest in the vicinity of the Tongbok stream in Pyeongtaek-si, we planted the fourth Hanmi Green Forest in 2023. In 2023, we planted 1,090 trees and 200 rare plants - which are expected to absorb 1,090 kg of carbon dioxide per year - in the northern and western areas of Pyeongtaek-si.

Cumulative number of trees planted
1,340 trees

Cumulative reduction in CO₂
1,160kg



Environmental Protection Activities

Hanmi Pharm's Pyeongtaek Bio Plant engaged in activities to contribute to the local community including activities to clean-up and beautify the Chupal Industrial Complex, where it is a tenant. In 2023, we carried out garbage collection activities in and around the industrial complex, business sites, and parks on six occasions. In recognition of our forest and garden vitalization activities at Pyeongtaek-si, we were awarded a plaque of appreciation for our contribution to the urban forest garden by the Pyeongtaek-si Green City Office in December 2023. Hanmi Fine Chemical carries out environmental clean-up activities under a project to take good care of beautiful industrial complex areas and the Purumi practice group. In 2023, we participated in clean-up/garbage collection activities at Gomsol Nuri Forest (a buffer green belt) within the Sihwa National Industrial Complex and Okgu Stream on nine occasions. Going forward, Hanmi Pharm and Hanmi Fine Chemical will continue to engage in environmental improvement activities and volunteer activities.



Activities for Removing Invasive Non-native Plants

To preserve local biodiversity, Hanmi Pharm is carrying out campaigns to eradicate invasive non-native plants that damage people and livestock and interfere with the growth of native plants. In 2023, Hanmi Pharm employees and their families removed invasive nonnative plants such as Sicyos angulatus (bur cucumber), Asian hop, etc. from around the Songpa-gu Dulle-gil in cooperation with the Songpa-gu Volunteer Center.



Safety Management of the LMO Research Laboratory

When conducting research and experiments, Hanmi Pharm takes into account the impact they will have on nature, such as antibiotic resistance and disruption of the ecosystem, according to the 'Transboundary Movement of Living Modified Organisms Act' for the safe management of LMO research laboratories. As well as actively developing and implementing independent safety measures to prevent accidents, we conduct systematic safety training and are regularizing bio-safety management and internal inspections based on the in-company online system. In 2023, to improve the percentage of separate disposal of medical wastes from LMO research facilities, we conducted training on separate disposal for research workers in the LMO research facility, put up relevant posters, and inspected the disposal of medical waste on a regular basis. We will continue doing our utmost to create an excellent research environment.