

Disclosures Based on the TNFD Framework

TNFD

Taskforce on Nature-related Financial Disclosures

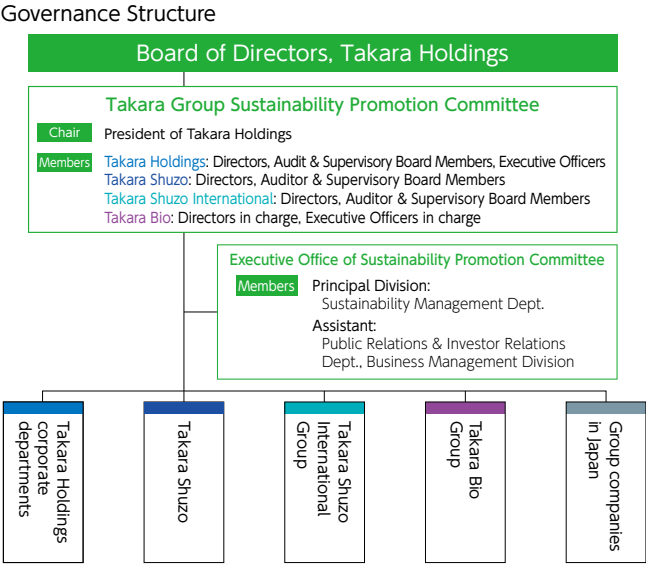
The Takara Group positions the harmonization of its business activities with global environmental preservation as one of its key challenges, and is actively implementing initiatives toward these ends. Recognizing that the loss of natural capital, including biodiversity, is an important issue that has an impact on the sustainability of its business, the Group continues to assess and respond to risks and opportunities related to natural capital in accordance with the framework of the Taskforce on Nature-related Financial Disclosures (TNFD), while also disclosing relevant information and engaging its stakeholders in dialogue.

Governance

The Takara Group has established the Takara Group Sustainability Promotion Committee chaired by the Representative Director and President of Takara Holdings under the supervision of the Board of Directors to deliberate on matters such as assessing the risks and opportunities posed by the loss of natural capital—including biodiversity—on the Group’s business, formulating strategies, and setting targets. In addition, it has established the Executive Office of Sustainability Promotion Committee as a subordinate organization of the Takara Group Sustainability Promotion Committee to handle issues related to nature. Based on the decisions of the Takara Group Sustainability Promotion Committee, the Executive Office of Sustainability Promotion Committee plans and implements specific activities for each company in the Group.

The Takara Group recognizes the impacts it may have on the human rights of various stakeholders, including not only its employees but also business partners, customers, and local communities. In order to respect the human rights of all stakeholders, the Group has established the Takara Group Human Rights Policy and developed a human rights due diligence process in accordance with the Guiding Principles on Business and Human Rights of the United Nations.

The Takara Group Sustainability Promotion Committee reports on sustainability initiatives including these nature-related issues to the Board of Directors.



Management of Risks and Their Impacts

The Takara Group identified risks and opportunities for Takara Shuzo Co., Ltd. and Takara Shuzo International Co., Ltd. (Overseas Alcoholic Beverages Business, Japanese Food Wholesale Business in overseas markets).^{*1} During the identification process, we assessed transition risks and physical risks in accordance with the LEAP approach recommended by the TNFD. During the assessments, we identified risks and opportunities that are projected to have a significant impact across short-, medium-, and long-term time frames, taking into account the probability and scale of such impacts. The Takara Group Sustainability Promotion Committee reports to the Board of Directors on the details of identified risks and opportunities and the countermeasures.

Analysis Based on Strategy and the LEAP Approach

The Takara Group analyzed the relationship between the businesses of subject companies and nature (dependencies, impacts, risks, and opportunities). It carried out its analyses in accordance with the steps of the LEAP approach.

► Steps of the LEAP approach

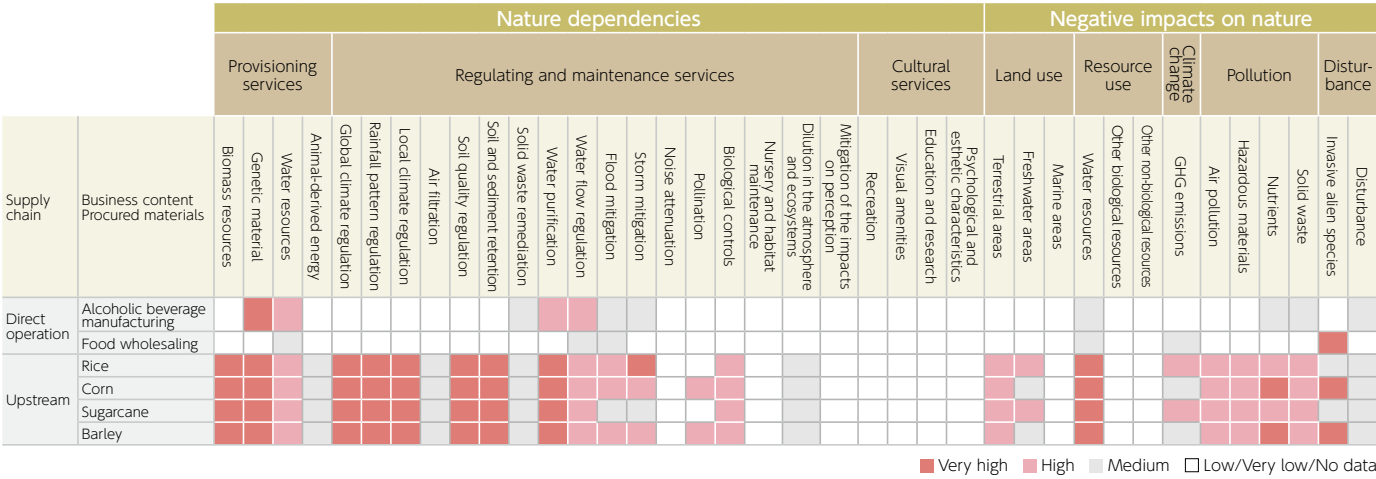
Scoping	Identify the potential relationships between core businesses and nature, and select the businesses for detailed assessment
Locate	Understand the characteristics of the natural environment surrounding locations of direct operations and raw material sourcing, and identify priority areas for assessment and action
Evaluate	Evaluate the dependencies and impacts on nature of subject businesses across the entire supply chain
Assess	Analyze nature-related risks and opportunities of subject businesses across the entire supply chain
Prepare	Compile evaluation results, organize and review countermeasures, and disclose them

^{*1} Subject companies: Takara Shuzo Co., Ltd.
Takara Shuzo International Co., Ltd.
• Overseas Alcoholic Beverages Business
(Takara Sake USA Inc., Takara Shuzo Foods Co., Ltd., The Tomatin Distillery Co. Ltd., Takara Shuzo Asia Pacific (HK) Co., Ltd., Shanghai Takara Shuzo International Trading Co., Ltd., Age International, Inc., Ontario Spring Water Sake Company)
• Japanese Food Wholesale Business in overseas markets
(Mutual Trading Group, Tazaki Foods Group, FOODEX Group, Cominport Group, Nippon Food Supplies Company Pty Ltd., Kagerer & Co. GmbH, Tokyo Mutual Trading)

Scoping

Using the TNFD-recommended tool (ENCORE) and other reference materials, we identified the connections between our businesses and nature and selected businesses for detailed assessment.

[Nature dependencies and magnitude of impact]



In direct operations, we found that alcoholic beverage manufacturing has a greater dependence on and impact on key aspects of nature, such as water resource use, compared to food wholesaling. We also discovered that the production of agricultural crops in the upstream part of the supply chain—regardless of the type of crop—is heavily dependent on nature and has a significant impact on it. Among these, the Company procures significant quantities of rice, which is not only a critical ingredient in sake brewing but is also considered an essential element of Japan’s agricultural ecosystem due to its cultivation in paddy fields.

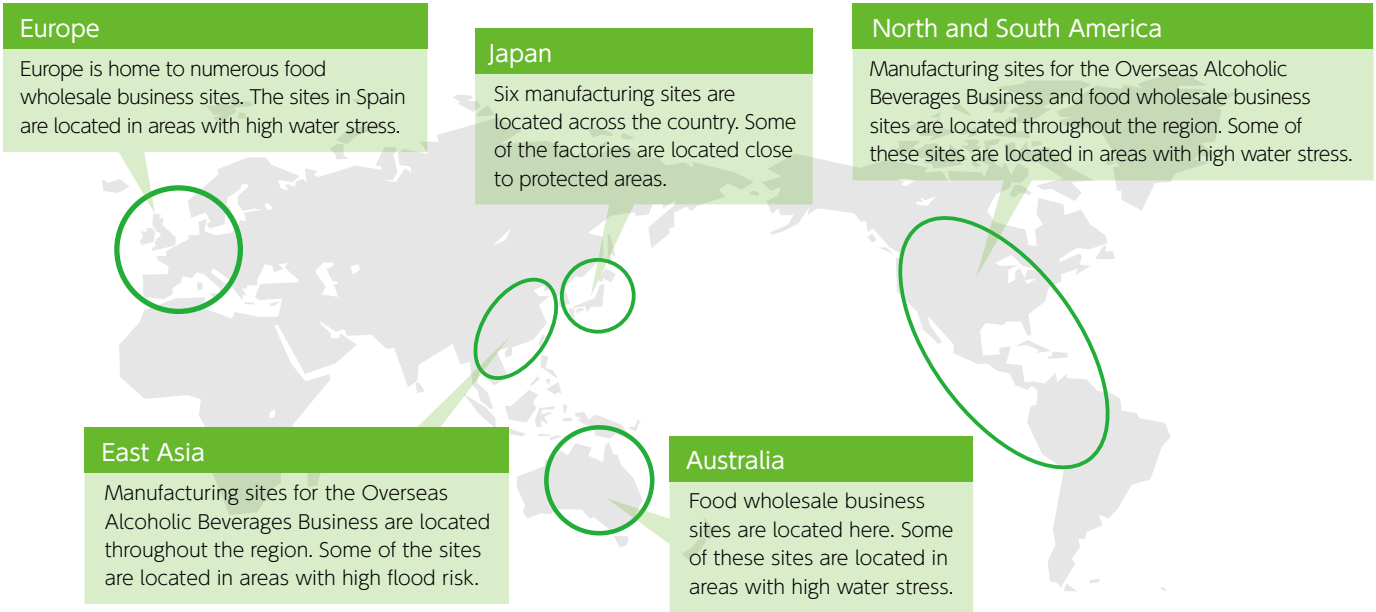
Given the above, we identified alcoholic beverage manufacturing as the subject of evaluation for direct operations, and rice production—which is closely tied to nature and serves as a key ingredient for the Takara Group’s value proposition of “*Washu* and Japanese foods as a part of everyday global cuisine”—as the subject of evaluation for the upstream part of the supply chain.

Locate

Alcoholic Beverage Manufacturing (Direct Operation)

Characteristics of the natural environment in the location of the direct operation site

To identify areas where environmental assessment and action should be prioritized, we gathered location data for our 68 business sites (6 manufacturing sites in Japan, 7 Overseas Alcoholic Beverages business sites, and 55 Japanese Food Wholesale Business sites) and assessed the state of the natural environment in their surrounding areas. Assessments were conducted for each site using data^{*2} obtained from external tools and other sources, in accordance with the five criteria defined by the TNFD (importance for biodiversity, ecosystem integrity, rapid decline in ecosystem integrity, importance for ecosystem service provision, and physical water risks).



It has come to light that some of the alcoholic beverage manufacturing sites are located in areas that are important for biodiversity or have high water risk. It has therefore been determined that these sites should prioritize the reduction of environmental impact and implement measures to mitigate water risk.

Rice Production (Upstream on the Supply Chain)

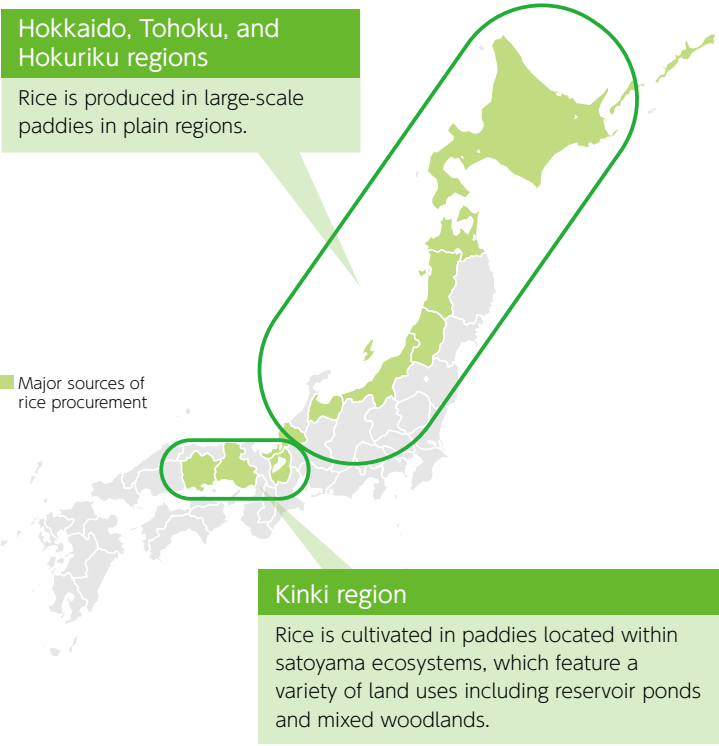
Major sources of rice procurement in Japan and the characteristics of the natural environment in those locations

When we organized the major domestic (Japanese) sources of the rice we procure by prefecture, we found that we procure significant amounts from the Hokkaido, Tohoku, and Hokuriku regions, which are among Japan’s leading rice-producing areas, as well as from the Kinki region. We used satellite imagery and other tools to pinpoint the locations of rice paddies in these areas to carry out our assessments. As was the case for direct operations, we used the TNFD’s five criteria for our assessment, also incorporating indicators*3 reflecting the “satoyama ecosystem,” and carried out an analysis while taking the natural characteristics of rural Japan into account.

The assessment results showed that in the Hokkaido, Tohoku, and Hokuriku regions, rice tends to be produced in paddy fields spread across vast plains. It is well known that the large-scale rice paddies in these regions form important habitats for waterfowl and other birds. In the Kinki region, on the other hand, rice tended to be cultivated in paddies located within “satoyama ecosystems,” which are made up of diverse environments including farmland, mixed woodlands, and reservoir ponds. Such “satoyama ecosystems” are considered important for the preservation of biodiversity in Japan because their diverse environments support a wide variety of species, resulting in high levels of biodiversity. It was therefore suggested that rice production in these areas might be important for the preservation of organisms inhabiting the satoyama.

In fact, it has been confirmed that a large number of satoyama species inhabit the rice paddies in the Kinki region that are associated with the Group. The rice paddies in Kyoto Prefecture’s Nantan City—where Takara Shuzo runs its Farm School for elementary school students and their families—are surrounded by mixed woodlands, and many organisms can be observed there. The rice paddies in Hyogo Prefecture’s Nishiwaki City, where the Yamada Nishiki rice used in *Sho Chiku Bai Shirakabegura Nend* is cultivated, are located close to forests, reservoir ponds, and rivers that the prefecture has designated as protected areas. Many species are thought to inhabit these areas.

Based on these assessment results and other factors, while rice paddies in all regions from which we procure rice are important from a natural perspective, those in the Kinki region were judged to be of particularly high importance from the perspective of satoyama preservation.



The rice paddies of Hyogo Prefecture’s Nishiwaki City, where the rice used in *Sho Chiku Bai Shirakabegura Nend* is cultivated

Nend is made with Yamada Nishiki rice, cultivated in collaboration with the exemplary farmers of Nishiwaki City in Hyogo Prefecture. Located in satoyama ecosystems that are known for their diversity of land use, the rice paddies are surrounded by forests, reservoir ponds, and rivers that have been designated protected areas by the prefecture and inhabited by a rich variety of species.



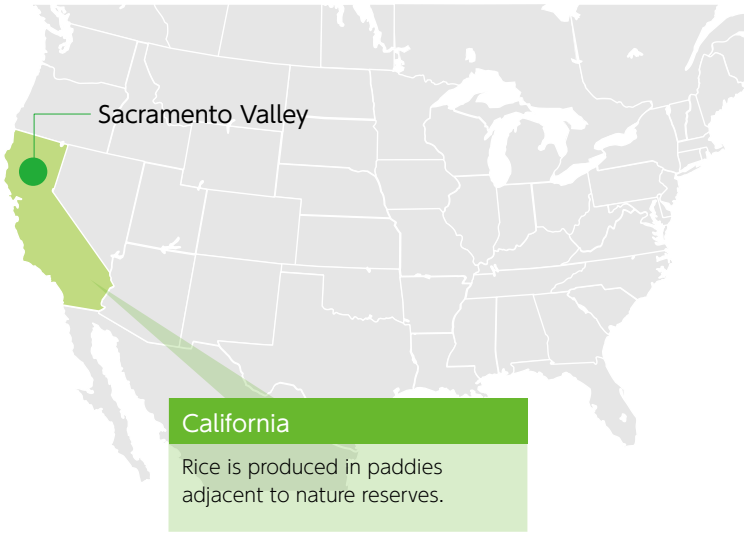
Sho Chiku Bai Shirakabegura Nend and the rice paddies of Nishiwaki City

*2 Assessments based on the five TNFD criteria were carried out using the data and tools below.
■ Importance for biodiversity: Assessed using IBAT to verify sites’ proximity to areas of high importance for biodiversity (protected areas and Key Biodiversity Areas) and their STAR (Species Threat Abatement and Restoration Metric) values.
■ Ecosystem integrity: Assessments are carried out using the Biodiversity Intactness Index provided by the Natural History Museum in London.
■ Rapid decline in ecosystem integrity: Assessments are carried out using the WWF Biodiversity Risk Filter’s Pressures on Biodiversity index, which shows the degree of impact on nature.
■ Physical water risks: Aqueduct is used in assessments to confirm the baseline water stress and flood risk.
■ Importance for ecosystem services: Global Forest Watch is used in assessments to confirm the proximity to areas managed by Indigenous Peoples and Local Communities (IPLCs).

*3 Assessments were carried out using data from the Satoyama Index, which evaluates satoyama ecosystems based on the diversity of land use. We referred to the paper below for the data. A low value for this index indicates a homogeneous region with a large amount of large-scale farmland and little land used for purposes other than agriculture. A high value for this index indicates that the area is home to a well-preserved satoyama ecosystem, characterized by a varied mix of land uses such as rice paddies, reservoir ponds, and mixed woodlands. Areas with a high Satoyama Index are thought to be home to a large number of plants and animals that inhabit the satoyama, such as frogs and dragonflies. Reference document: Akira Yoshioka, Taku Kadoya, Junichi Imai and Izumi Washitani, “Overview of land-use patterns in the Japanese Archipelago using biodiversity-conscious land-use classifications and a *Satoyama* index,” *Japanese Journal of Conservation Ecology* 18: 141-156 (2013)

Major sources of rice procurement in the United States and the characteristics of the natural environment in those locations

Takara Sake USA Inc. uses rice produced in California’s Sacramento Valley, one of the leading rice-producing regions in the United States, to brew its sake. Following the approach used for rice suppliers in Japan, we assessed the rice-growing regions in California in accordance with TNFD criteria to ascertain their potential importance for biodiversity preservation and their potential risk of water shortages.



Rice paddies in the Sacramento Valley



(From left) MUJI WA and Sho Chiku Bai OCEAN VIEW and SKYLINE, produced in the U.S.

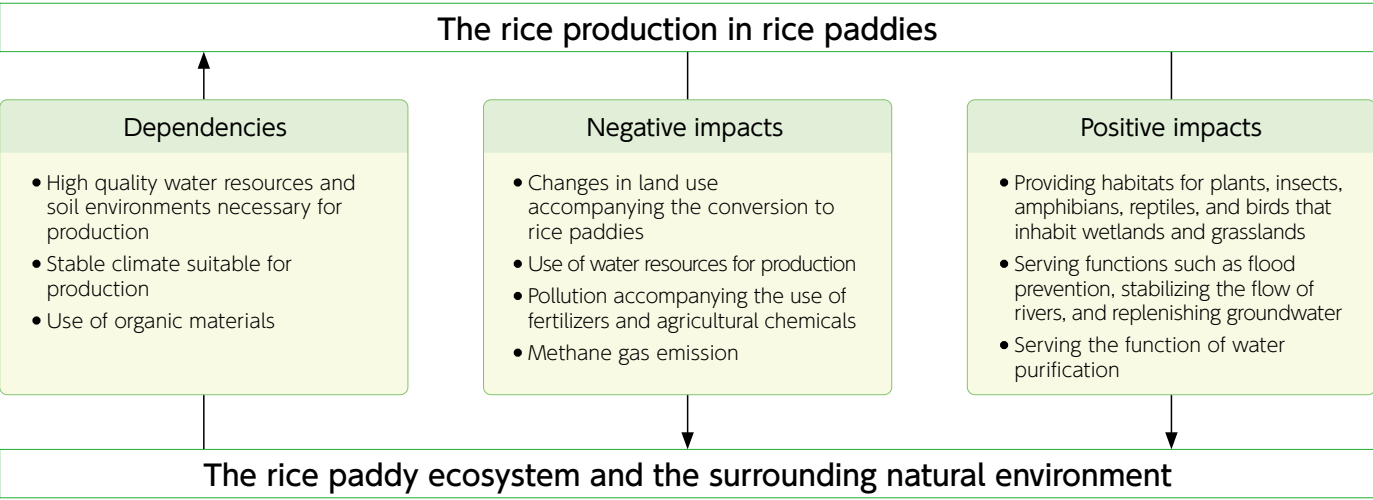
Evaluate

We conducted a more detailed analysis of dependencies and impacts, drawing on the assessment results from the Scoping phase and the analysis results from the Locate phase.

In the directly operated alcoholic beverage manufacturing, it has been found that, because clean water is used, the impact of water resource use is significant, and there is a heavy dependence on ecosystem services such as water purification and flow regulation.

We have determined that rice cultivation, which is at the upstream end of the supply chain, involves issues such as land use associated with the conversion of farmland, pollution caused by fertilizers, and the use of water resources. Furthermore, while aspects of rice production do negatively impact the environment, we have also determined that maintaining the environment of rice paddies has the potential to yield various positive effects on nature. Since rice paddies are kept flooded, they form valuable habitats for amphibians, reptiles, fish, aquatic insects, and birds that inhabit wetlands. The embankments and ridges between paddies also form valuable grassland habitats that are used by many plants and animals. Rice paddies are furthermore known to serve functions such as flood prevention, stabilizing the flow of rivers, and replenishing groundwater. Even taking into account the characteristics of the rice paddies at the procurement sites identified through the analysis in the Locate phase, these positive impacts were considered highly significant.

[The relationship between rice production and nature in rice paddies]



Assess

Given the dependence and impact on the natural environment in each region’s alcoholic beverage manufacturing and rice production—as assessed during the Locate and Evaluate phases—we examined the nature-related risks and opportunities associated with the businesses. We considered two scenarios: one in which market-based and regulatory measures to conserve natural capital are implemented, and another in which natural capital continues to degrade. Based on these scenarios, we conducted an analysis projecting changes in society and ecosystems regarding their dependence on and impact on nature. The risks and opportunities determined to be significant through scenario analysis are as follows.

Alcoholic Beverage Manufacturing (Direct Operation)

We found that there is a possibility of transition risks arising from tightened regulations and changes in consumer preferences, as well as physical risks such as water shortages caused by climate change and water quality deterioration due to ecosystem degradation. On the other hand, we confirmed the existence of business opportunities for tapping into new markets, such as the development and sale of sake made from rice grown using environmentally friendly farming methods.

[Results of the assessment of risks and opportunities related to nature in alcoholic beverage manufacturing]

Risks	Content
Transition risks	Increased manufacturing costs resulting from the tightening of regulations on the reduction of GHG emissions
	Increased manufacturing costs resulting from the tightening of regulations aimed at reducing environmental impacts—such as pollution and waste generation—during product manufacturing
	Decreased sales resulting from changes in consumer preferences as they seek products with a lower environmental impact
Physical risks	Reduced production volumes resulting from water shortages due to insufficient rainfall, drought, and other factors
	Increased production costs resulting from changes in water volumes and the deterioration of water quality due to land development and the decline of habitats close to water sources
	Reduced production volumes and increased equipment maintenance costs due to damage to factories caused by flooding and extreme weather events
Systemic risks*4	The decline of the entire sake brewing industry due to the deterioration of regional water systems caused by rising temperatures and changes in ecosystems
Opportunities	Content
Opportunities	Tapping into new markets by developing and selling environmentally friendly products
	Cost reductions resulting from energy-saving initiatives and improvements in water use efficiency
	More stable procurement of materials resulting from initiatives to use sustainable containers and packaging

*4 Systemic risk: The risk of an entire system collapsing due to the chain reaction of multiple risks

Rice Production (Upstream on the Supply Chain)

We found that there is a possibility of transition risks arising from tightened regulations as well as physical risks such as declines in yield caused by climate change. On the other hand, we have confirmed opportunities for us in implementing environmentally friendly farming practices, supporting research and activities aimed at preserving biodiversity in rice paddies, gathering insights gained through such research and activities for both the Company and society as a whole, and developing environmental education.

[Results of the assessment of risks and opportunities related to nature in rice production]

Risks	Content
Transition risks	Increased procurement costs resulting from the tightening of regulations on the reduction of GHG emissions during rice production
	Increased procurement costs resulting from the tightening of regulations aimed at reducing environmental impacts during in rice production, such as with the use of agricultural chemicals and fertilizers
Physical risks	Increased procurement costs resulting from reduced harvests caused by heat stress
	Increased procurement costs resulting from reduced harvests caused by pests and diseases, non-native species, and damage caused by wildlife
	Increased procurement costs resulting from reduced harvests caused by water shortages from insufficient rainfall, drought, and other factors
	Increased procurement costs resulting from reduced harvests caused by flood damage and extreme weather events
	Increased procurement costs resulting from reduced harvests caused by the abandonment of farmland accompanying the increasing number of people exiting agriculture
Systemic risks	Changes in the rice production environment in rural Japan resulting from rising temperatures, changes in ecosystems, and changes in society, such as the aging population
Opportunities	Content
Opportunities	Considering and implementing environmentally friendly farming practices
	Supporting research and activities that contribute to preservation and are focused on themes such as rice paddy biodiversity
	Implementation of environmental education focused on themes such as rice paddy biodiversity

Prepare

The Company responds to the risks and opportunities identified in this analysis through a variety of countermeasures and initiatives.

[Countermeasures to address the nature-related risks identified by the Company]

Risks	Countermeasures	Overview	Place of disclosure
Measures to address risks related to the tightening of regulations to reduce GHG emissions	Boiler fuel gasification	Converting boiler fuel from heavy oil to liquefied natural gas (LNG). We have also installed energy-saving equipment, such as high-efficiency boilers.	Takara Holdings’ Response to Climate Change
	Installation of solar panels	Takara Shuzo’s Kurokabegura distillery has achieved 100% renewable energy usage through the installation of a solar power generation system on the distillery premises and other measures.	
	CO ₂ emissions reduction in transportation processes	We are reducing CO ₂ emissions during product transportation through measures such as promoting high-efficiency transportation, modal shifts, and improving loading efficiency when shipping products.	
	Introduction of electric forklifts	We are reducing CO ₂ emissions by introducing electric forklifts and cutting down on the use of LPG.	
Measures to address risks related to water shortages	Assessing water risk	We are assessing the water stress situation in the countries where our manufacturing sites are located.	Takara Holdings’ Use Water Resources Sustainably
	Installation of water-saving equipment	Cooling towers have been installed at Takara Shuzo’s Kurokabegura distillery to reduce water usage by recycling cooling water.	
	Reuse of cleaning and cooling water	Sophisticated water treatment technology is being used at Takara Shuzo’s Matsudo Plant to appropriately manage and reuse the cleaning and cooling water used in manufacturing processes.	
	Reuse of hot water for sterilization	At Takara Shuzo Fushimi Plant, hot wastewater from the pasteurizer, which is used for sterilizing products, is reused for the boilers, which are a type of production equipment.	
	Reuse of factory hot wastewater	Takara Shuzo’s Shimabara Plant effectively utilizes the clean hot wastewater produced in the distillation process by providing it to hot spring businesses of Shimabara City and nearby residents for domestic use.	

Current initiatives related to the nature-related opportunities identified by the Company

Environmentally friendly initiatives related to *Sho Chiku Bai Shirakabegura Nend*

We are engaged in initiatives that take environmental impact into consideration in the production of Yamada Nishiki rice, the primary ingredient in *Nend*. We are controlling the methane gas emitted during rice cultivation by extending the mid-season draining period and using microbial agents to accelerate the decomposition of rice straw. In addition, we are reducing the use of pesticides to preserve the biodiversity in our fields.



Employing environmentally friendly measures in the fields

Takara Shuzo Farm School

Takara Shuzo runs an initiative called the Farm School in the rice paddies of Kyoto Prefecture’s Nantan City. It is a hands-on educational program allowing participants to experience the “bounties of nature and the interconnectedness of life” as they enjoy the natural surroundings. Participants experience the rice growing process from start to finish, actually planting the seedlings and harvesting the rice. As the rice paddy is located in a satoyama area, it is home to a rich variety of fauna, including water fleas, clam shrimp, water scorpions, Japanese gliding frogs, and forest tree green frogs, all within view of program participants as they work together in the paddies.

Through such activities, we aim to inform society of the importance of preserving biodiversity in rice paddies and foster environmental awareness, while developing our own knowledge regarding rice—a key procurement item for our business—and nature.



The Farm School in action

The Takara Harmonist Fund

Takara Holdings established the Takara Harmonist Fund in 1985, on the occasion of the 60th anniversary of the Company’s founding. Every year since, it has offered assistance for activities and research for the preservation of biodiversity and other efforts to maintain the abundant natural environment. The fund contributes to the promotion of biodiversity preservation, expanding the scope of its activities as a supporting organization through initiatives to protect Japan’s natural environments (including forests, grasslands, and wetlands), research aimed at protecting the species that inhabit these areas, and grants to nature preservation organizations nationwide.

Funding for activities and research to conserve biodiversity is important to achieve nature positive outcomes. Such funding is, however, severely lacking. This situation is recognized as an issue both in Japan and internationally, as evidenced by the “Kunming-Montreal Global Biodiversity Framework,” adopted at the Conference of the Parties (COP-15) to the Convention on Biological Diversity in December 2022, which includes a target (Target 19) to direct funding toward biodiversity preservation. Consequently, the importance of funding is expected to grow in the future.

Japan is home to many preservation organizations and research groups that persistently carry out their steadfast activities across the country. We believe that these initiatives form the backbone of Japan’s nature-positive efforts, and we will continue to support them through grants from our fund. We also believe it is important to raise awareness among the general public about these activities being carried out in various regions, and we will continue to spread information about them through on-site visits and reporting on our grant recipients.

In addition, many of the preservation activities and research projects we fund are related to biodiversity preservation in paddy fields. The fund’s initiatives are therefore important for the Company’s business as well, as they help us to build up our knowledge about the relationship between rice, one of the key commodities we procure, and nature.



Grant recipients at work

Metrics and Targets

The Group monitors its environmental performance and sets targets, many of which are aligned with TNFD disclosure metrics.

Items with established targets	Metrics	Place of disclosure	Relationship with TNFD disclosure metrics
Appropriate water usage	The amount of water used on a production volume basis	EnvironmentTAKARA HOLDINGS INC.Reduction of Water Usage in the Production Process and the Changes in Intensity	Core global metric C3.0
Limiting waste generation	Waste reuse rate	EnvironmentTAKARA HOLDINGS INC.Promotion of a Circular Economy through Reduction and Recycling of Plant Waste	Core global metric C2.2

Monitored items	Metrics	Place of disclosure	Relationship with TNFD disclosure metrics
Water pollution	Volume of wastewater, quality of wastewater	ESG DataTAKARA HOLDINGS INC.Appropriate Water Usage	Core global metric C2.1
Waste, amount recycled	Total quantity of waste, quantity recycled	EnvironmentTAKARA HOLDINGS INC.Promotion of a Circular Economy through Reduction and Recycling of Plant Waste	Core global metric C2.2
Pollution	Amount of hazardous waste	ESG DataTAKARA HOLDINGS INC.Waste Generation	Core global metric C2.2
Plastics	Amount of plastic waste generated in production processes	ESG DataTAKARA HOLDINGS INC.Disposal of Plastic	Core global metric C2.3
Air pollution	Amount of air pollutants emitted	ESG DataTAKARA HOLDINGS INC.Air Emissions	Core global metric C2.4
Water usage	Amount of water used	ESG DataTAKARA HOLDINGS INC.Appropriate Water Usage	Core global metric C3.0
Amount of raw materials used	Amount of raw materials and packaging materials used	ESG DataTAKARA HOLDINGS INC.Use of Resources	Core global metric C3.1
Environmental compliance	Penalties and fines for violations of environmental laws	ESG DataTAKARA HOLDINGS INC.Environment Compliance	Core global metric C7.2
Investments in preservation	Number of projects supported and monetary amount of grants awarded by the Takara Harmonist Fund for activities and research to protect ecosystems and biodiversity	ESG DataTAKARA HOLDINGS INC.Preservation of Ecosystems and Biodiversity	Core global metric C7.3
Environmental education	Number of Farm School participants	ESG DataTAKARA HOLDINGS INC.Environmental Education Held in Collaboration with Local Communities	Core global metric C7.3