Integrated Analysis and Disclosure of Natural Capital and Climate Change (TNFD and TCFD)

The Tsumura Group is conducting management based on its Corporate Philosophy, using its seven capitals as sources to create shared value with society. In the process, the crude drugs that play an indispensable role in our core Kampo business are essentially natural capital. Accordingly, we recognize that conservation and restoration of natural capital, including biodiversity, and responding to climate change through decarbonization and other means are essential, and we are proactively and continuously promoting initiatives in this regard. For disclosure, we adopted the frameworks set out by the recommendations of the Taskforce on Climate-related Financial Disclosures (TCFD) in fiscal 2021 and the Taskforce on Nature-related Financial Disclosures (TNFD) in fiscal 2024.

Natural capital and climate change are closely and inseparably related. The final recommendation of the TNFD also states the importance of integrating nature-related and climate-related disclosures. Based on this, in fiscal 2025, we conducted integrated analysis and disclosure of nature-related and climate-related issues linked to some parts of "Corporate Governance," "Risk Management," and "Strategy," as well as "Metrics and Targets."

Corporate Governance

The Board of Directors is responsible for making important decisions regarding risks and opportunities including natural capital and climate change, and the Group's sustainable growth and medium- to long-term increase in corporate value. Moreover, when the Board of Directors decides on strategy and makes investment decisions and so forth, it takes into consideration and impacts related to natural capital and climate change.

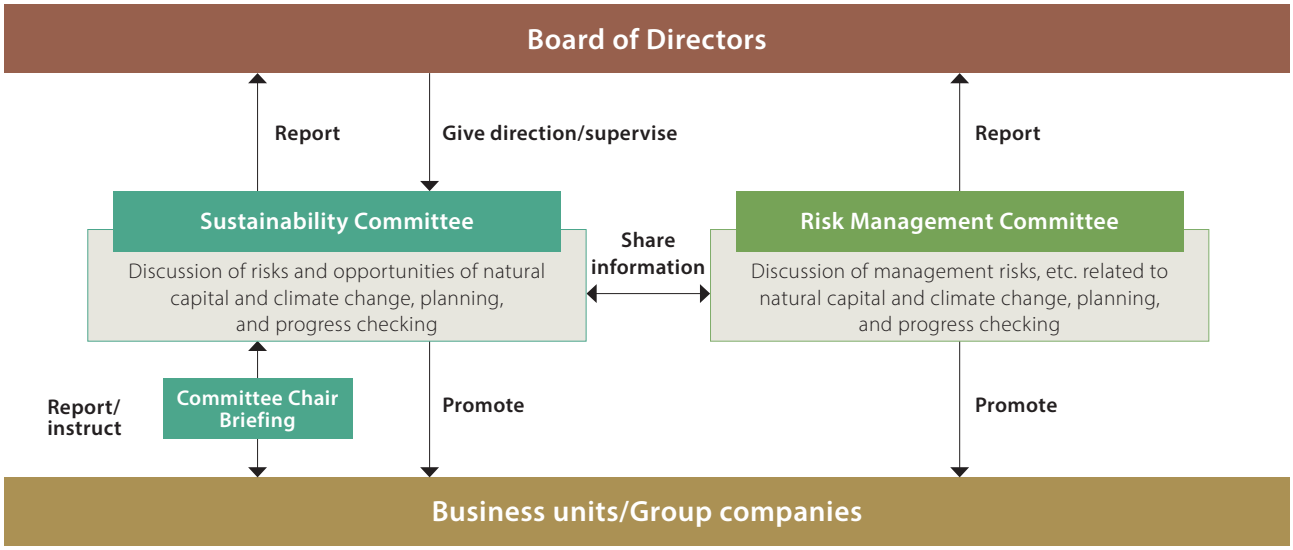
The Sustainability Committee deals with discussion topics related to sustainability, including natural capital and climate change. In fiscal 2023, the Committee Chair Briefing was established to create a structure for reporting on the progress of each subcommittee's initiatives and swiftly giving management instruction on them.

The chair of the Sustainability Committee is the Director Co-COO, who is the officer in charge of sustainability-related operations. The committee chair (Director Co-COO) reports all themes discussed at the Sustainability Committee to the Board of Directors.

The Board of Directors confirms the content of all matters reported by the Sustainability Committee, including whether they contribute to the embodiment of the Company's Purpose, Corporate Philosophy, and sustainability vision, then provides direction and supervision.

Furthermore, the Company aims to sustainably increase its corporate value through the realization of the long-term management vision, including natural capital and climate change. Accordingly, since fiscal 2022, we have included the achievement rate on progress targets for sustainability issues related to natural capital and climate change as part of the evaluation for medium- to long-term performance-linked stock compensation (long-term incentive) of the Company's directors (excluding directors who are members of the Audit and Supervisory Committee and non-executive directors) and executive officers who have entered into a service agreement with the Company. The allocation ratio for this factor is 25%.

Corporate Governance System Related to Natural Capital and Climate Change



Risk Management

Risks related to natural capital and climate change are discussed by the Sustainability Committee, which mainly handles sustainability-related themes, and the Risk Management Committee, which deals with management risks. The two committees share information and are responsible for the assessment and control of risks.

The Sustainability Committee analyzes risks and opportunities presented by natural capital and climate change to the Group's management strategies over the medium to long term and discusses countermeasures, also taking into account advice from outside experts. The results of these analyses and discussion are reported to the Board of Directors, which provides the necessary instruction and supervises the status of countermeasures.

The Risk Management Committee determines a priority order and discusses countermeasures, including BCP responses, for risks such as operation stoppage at plants due to any cause, giving consideration to the degree of financial impact and the likelihood of occurrence. The results of these discussions are reported to the Board of Directors. The risks discussed by the Sustainability Committee and Risk Management Committee are integrated and managed as operating risks.

Strategy

Based on analysis results up to fiscal 2024, the Company renewed its risk and opportunity identification and assessment in a format that integrates nature-related and climate-related risks. To assess the risks and opportunities, we held interviews and workshops with relevant internal divisions and made reference to advice from outside experts.

It Is difficult to accurately foresee the uncertain future of natural capital and climate change. However, we analyzed the ways in which risks and opportunities could emerge under three different future scenarios, in order to confirm and discuss the resilience and response strategies of our businesses in the global scenarios that could occur. For each of the three scenarios, we evaluated the importance of each risk and opportunity in 2030 and 2050.

Moreover, in evaluating the importance of each risk and opportunity, we considered the level of impact (small: less than 1.0 billion yen, medium: between 1.0 billion yen and 10.0 billion yen, large: over 10.0 billion yen), and the likelihood of occurrence (low: less than once in 10 years, medium: once every few years, high: once a year or more), and made the evaluation by envisaging a case where the effect of countermeasures was discounted.

For further information about integrated TCFD and TNFD disclosures, such as analysis of risks and opportunities, please refer to the Company website. (In Japanese)
https://www.tsumura.co.jp/sustainability/environment/tnfd-tcfd/

Scenarios #1 through #4

	#1	#2	#3	#4
(1) Degradation of ecosystem services	Mild	Advanced	Severe	Mild
(2) Policies, laws and regulations	Strengthened	Strengthened	Delayed	Delayed
(3) Technology	Considerably advanced	Advanced	Limited advancement	Limited advancement
(4) Market and societal interest	High	High	Low	Low
(5) Status of climate change	On track for a temperature increase of 1.4–1.5℃ by 2100 (1.5℃ Scenario)	On track for a temperature increase of 1.7–1.8℃ by 2100 (2℃ Scenario)	On track for a temperature increase of 2.4–4.4℃ by 2100 (4℃ Scenario)	On track for a temperature increase of 1.4–1.5℃ by 2100 (1.5℃ Scenario)

Note: Items (2) to (4) are in relation to climate and nature.

Scenario Analysis Evaluation Result

- As a result of collating the risks and opportunities whose level of importance was evaluated as "High" ("important risks and opportunities") for scenarios #1 through #3, it was found that important risks were comparatively more numerous under scenarios #2 and #3, where ecosystem service degradation was severe.
- On the other hand, "transition to low-environmental-impact, high-efficiency production processes (cultivation technology, agricultural methods)" under scenario #1, and "change in needs due to climate change" under scenarios #2 and #3, were evaluated as presenting important business opportunities for the Group.
- We evaluated 13 risks and opportunities overall (8 risks and 5 opportunities), and confirmed that response measures have been taken for all risks and opportunities.

Evaluation of Importance of Risks and Opportunities and Response Measures

Risks and opportunities				Environmental theme		Financial impact on the Tsumura Group				Response measures
No.	Category		Item	Climate change	Natural capital	Details	Scenario	Importance level evaluation 2030	Importance level evaluation 2050	
1	Transition risks	Policies, laws and regulations	Carbon tax	●		• Cost increase due to introduction of carbon tax	#1	Medium	Medium	• Reduction of Scope 1 and 2 emissions (energy saving, solar power installation, use of renewable energy, etc.) • Supplier engagement to reduce Scope 3 emissions • Streamlining of logistics
							#2	Medium	Medium	
							#3	Medium	Medium	
2			Strengthening of laws and regulations, certification systems, etc.	●	●	• Cost increase due to climate change policy and biodiversity protection policy in China leading to export restrictions and reduction in areas suitable for cultivation, etc.	#1	Medium	High	• Diversification to multiple crude drug production areas and countries • Development of crude drug cultivation technology (including wild crude drug domestication) • Appropriate management of inventories based on risk • Collection of local information and reflection in measures
							#2	Medium	High	
							#3	Low	Medium	
3		Compensation liability	Legal action/ administrative penalties		●	• Compensation claims arising from environmental welfare lawsuits brought by NGOs and administrative penalties in relation to environmental impacts on land used for cultivation in China	#1	Low	Low	• Diversification to multiple crude drug production areas and countries • Appropriate management of inventories based on risk • Continuous contract cultivation based on the Tsumura Procurement Policy, and maintenance and strengthening of Tsumura GACP system • Wide-ranging supplier engagement activities including support for local communities
							#2	Low	Low	
							#3	Low	Low	
4	Physical risks	Acute	Increased severity of abnormal weather and natural disasters	●	●	• Production activity disruption, crude drug procurement cost increase, and remediation cost increase caused by damage or logistics disruption due to increased frequency and severity of floods, storms, landslides, and other natural disasters affecting the Company or suppliers, including crude drug cultivation areas	#1	Low	Medium	• Diversification to multiple crude drug production areas and countries • Development of crude drug cultivation technology • Appropriate management of inventories based on risk • Collection of local information and reflection in measures • Building and expansion of BCP
							#2	Medium	High	
							#3	Medium	High	
5		Chronic	Reduced harvests due to degradation of ecosystem services		●	• Procurement cost increase due to medicinal plant productivity decline caused by increase in pest insects	#1	Low	Low	• Diversification to multiple crude drug production areas and countries • Development of crude drug cultivation technology
							#2	Low	Medium	
							#3	Medium	High	
6			Increase in average temperatures	●		• Procurement cost increase due to decrease in areas suitable for crude drug cultivation, etc. • Increase in air conditioning cost in the supply chain • Increase in procurement cost due to increase in lactose price	#1	Low	Medium	• Diversification to multiple crude drug production areas and countries • Development of crude drug cultivation technology • Change in transport and storage format for crude drugs
							#2	Medium	High	
							#3	High	High	
7-1			Water resource shortages	●		• Decrease in sales due to decrease in production caused by drought or water shortage (crude drug cultivation areas) • Increase in cost due to procurement of municipal water owing to groundwater/ industrial water shortage (product production areas)	#1	Low	Medium	• Diversification to multiple crude drug production areas and countries • Introduction of facilities that reuse water for manufacturing
							#2	Low	Medium	
							#3	Medium	High	
7-2			Deterioration of water pollution		●	• Procurement cost increase due to relocation of crude drug cultivation from areas where water pollutant concentration is high to areas where it is low • Increase in purification cost in product production areas	#1	Low	Low	• Diversification to multiple crude drug production areas and countries • Improvement of water purification technology at in-house sites
							#2	Low	High	
							#3	Medium	High	

Risks and opportunities				Environmental theme		Financial impact on the Tsumura Group				Response measures
No.	Category		Item	Climate change	Natural capital	Details	Scenario	Importance level evaluation 2030	Importance level evaluation 2050	
8-1	Opportunities	Resource efficiency and resilience	Transition to low-environmental-impact, high-efficiency production processes (water)	●	●	・Cost reduction through reuse of water and steam used in the Company's facilities	#1	Low	Medium	・Introduction of facilities that reuse water for manufacturing ・Reuse of heat at production sites
							#2	Low	Medium	
							#3	Low	Low	
8-2			Transition to low-environmental-impact, high-efficiency production processes (energy)	●		・Reduction of energy costs due to increased production efficiency through the introduction of new technology	#1	Low	Low	・Promotion of energy saving ・Reuse of heat at production sites
							#2	Low	Low	
							#3	Low	Low	
8-3			Transition to low-environmental-impact, high-efficiency production processes (cultivation technology, agricultural methods)	●	●	・Increase in resilience and reduction of production costs through development of cultivation technology and regenerative agriculture methods	#1	Low	High	・Development of crude drug cultivation technology
							#2	Low	Medium	
							#3	Low	Medium	
9		Energy sources	Expansion of renewable energy	●		・Reduction of electricity purchasing costs through the introduction of solar power generation systems at the Company's own facilities and sites	#1	Low	Low	・Introduction of solar power generation systems ・Installation of small-scale hydroelectric generation systems in wastewater pipes
							#2	Low	Low	
							#3	Low	Low	
10		Products, services, and markets	Change in needs due to climate change	●		・Increase in demand and expectations for Kampo formulations from society and demand expansion	#1	Medium	Medium	・Timely and accurate collection of information on medical needs and reflection in production plans
							#2	Medium	High	
							#3	High	High	

Metrics and Targets

Metrics

The Group has set Scope 1, 2, and 3 GHG emissions as a metric for managing climate-related risks and opportunities.

Furthermore, from the second medium-term management plan, we are engaging in sustainability activities from the four perspectives of realization of carbon neutrality, realization of Nature Positive, building Tsumura's circular economy, and building relationships with the local community and society, operating with the strategy of improving governance and evaluation throughout these activities. Guided by the principle that climate and natural capital are closely related and inseparable, in our Sustainability Targets 2027 described below, we have connected sustainability categories with materiality, and set direct targets for climate change and nature-positive goals, giving consideration to their dependence and impact on natural capital. We have also partially included targets related to the risks and opportunities mentioned above, which we will manage going forward.

Targets

In our Sustainability Targets 2027, we have started initiatives to reduce GHG emissions (Scopes 1 and 2), as well as addressing Scope 3 emissions through supply chain engagement, with the aim of achieving carbon neutrality.

Our targets related to natural capital include promotion of new wild crude drug domestication, biodiversity preservation activities, and registration of Nationally Certified Sustainability Managed Natural Sites, along with promotion of adoption of new materials for plastics, use of industrial waste (crude drug residue), and water reuse. Targets related to natural capital contribute to mitigation of and adaptation to climate change.

See the website for details on Sustainability Targets 2027.
https://www.tsumura.co.jp/sustainability/tsumura-group/

Sustainability Targets 2027 (Reference Year: Fiscal 2020)

Materiality*1	Sustainability category	Major item (issue)	LTI-II*2	Metrics	Targets	
					Fiscal 2027	Fiscal 2031
Nature ①	**Realization of carbon neutrality**	GHGs	●	GHG emissions reduction (Scopes 1 and 2)	15% reduction	50% reduction
				Number of supply chain engagements (Scope 3)	Crude drugs and raw materials, etc.: 51	—
Nature ② Nature ③	**Realization of Nature Positive**	Research on domestication of crude drugs	●	Domestication of wild crude drugs (number of items)	7 items*3	23 items
		Restoration of forests, soil, water sources		Biodiversity preservation activities (number of areas)	4	—
				Registration of Nationally Certified Sustainability Managed Natural Sites	2	—
Nature ④	**Building Tsumura's circular economy**	Plastics	●	Adoption rate of new materials (%)	30%	50%
		Industrial waste		Promotion of crude drug residue use (conversion to valuable materials, %)	30%	—
		Water		Water reuse rate (%)*4	60%	—
Health ①	**Building relationships with the local community and society**	Initiatives in crude drug production areas and production sites for: •Conservation of the natural environment •Regional revitalization (education, employment) •Employee training		Cooperation with crude drug cultivation areas and communities (developing the next generation)	6	—
				Sustainability education e-learning for officers and employees (programs)	5	—

*1 Materiality labels signify the following. Nature ①: climate change countermeasures (realization of carbon neutrality); Nature ②: preservation of biodiversity (restoration of forests, soil, water sources); Nature ③: sustainable procurement of raw materials (research on domestication of crude drugs, etc.); Nature ④: recycling use of resources (recycling of water and crude drug residue); Health ①: expansion of access to high-quality pharmaceuticals and products derived from natural substances.
*2 Items marked with ● are managed as part of the indicators for long-term performance-linked stock-based compensation (LTI-II).
*3 Of the 119 crude drug items used by the Company, the number of items using wild crude drugs in the reference year (fiscal 2020) was 34.
*4 Applies to the four plants in Shizuoka, Ibaraki, Shanghai, and Tianjin (These four account for approximately 96% of the overall volume of wastewater for the Group (as of fiscal 2023). Moreover, the wastewater discharged by the plants is cleaner than the intake water.)

Respect for Human Rights

The Tsumura Group is working to ensure that human rights are respected in accordance with its Sustainability Charter, the Tsumura Human Rights Policy, and the Tsumura Procurement Policy. In our value chain, we periodically audit production area companies and purchasing-related business partners, who are the suppliers for Tsumura's raw material crude drugs.

The crude drug and raw materials procurement divisions consider human rights risk analysis and prevention in the supply chain to be part of their human rights due diligence. Through dialogue with our business partners, we examine their consideration for human rights, labor, and health and safety, as well as examining the situation regarding energy. We aim to collaborate on identification of issues and taking countermeasures against them. In addition, under the Tsumura Procurement Policy, whenever we enter a new contract with a production organization procuring crude drugs, we always conduct checks, and when conducting a GACP audit,*5 we use check lists to conduct observations and interviews from an occupational health and safety perspective. The results are evaluated by the Sustainable Procurement Subcommittee and the Sustainability Committee, before being reported to the Board of Directors. Looking ahead, we intend to strengthen our engagement on Scope 3 emissions, including the perspective of human rights due diligence.

The Sustainability Committee is at the center of our human rights risk management structure, supervising initiatives related to human rights policies and making reports to the Board of Directors. The Human Resources Department undertakes human rights training, human rights risk analysis and prevention, and the creation and improvement of various systems. The Legal/Compliance Control Department operates a contact desk to respond to consultation requests from employees. We are currently building internal systems in collaboration with related divisions with the aim of establishing a Human Rights Subcommittee under the Sustainability Committee during fiscal 2026. This will further strengthen our structure for promoting human rights due diligence, advancing and deepening our initiatives to realize sustainable supply chains.

*5 Tsumura's own audit method based on the Tsumura GACP Guidelines