# **Sustainability Vision and Materiality**

For the Tsumura Group, sustainability management is none other than the embodiment of our Sustainability Vision.

Since we are promoting a business that uses crude drugs, which are substances provided by nature, and leading it into the future, we need to be extremely sensitive to changes in the natural environment as well as any potential crises it may face. Our commitment to making fullest use of the gifts of nature and continuing to contribute to human health and medicine is embedded in our Sustainability Vision, "Living with nature for tomorrow." Throughout the Kampo value chain, we aim to realize sustainability for people, society, and the global environment. We will work to realize a recycling society in our own way, by ensuring that all resources, not only crude drugs but also water and air, are returned to nature.

As we strive to achieve our Business Commitment, "Lively Living for Everyone," we are incorporating the Group's Sustainability Vision, which upholds our Corporate Value, "The Best of Nature and Science," into our concrete activities through our Long-Term Management Vision.

The Long-Term Management Vision, TSUMURA VISION

"Cho-WA" 2031, takes the theme of "Cho-WA: Creating a Future in a Well-Balanced State," and aims to create a future that achieves "Cho-WA" (a well-balanced state) between mind and body, between individuals and society, and between Kampo medicine and Western medicine through the three Ps.

# **Revision of Materiality**

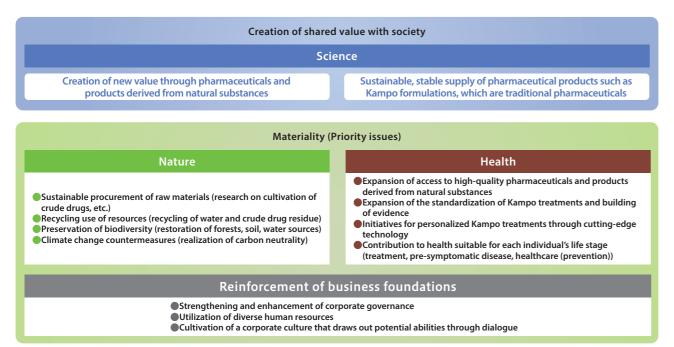
In September 2023, the Group redefined its priority issues (materiality) based on its Corporate Purpose, in order to contribute to solving global issues through its business activities and realize an increase in its corporate value.

This review involved changing from the previous bottomup formulation process to a top-down process based on the commitment of the CEO. The objective in doing so is to communicate our social and economic value creation story in a clear way both inside and outside the Company. Looking ahead, we will promote dialogue and co-creation with our stakeholders by promoting information disclosure based on materiality.

# Living with nature for tomorrow. **Sustainability Vision**

### The Tsumura Group's New Materiality

The Tsumura Group's materiality (priority issues) refers to its initiatives for business to embody its Corporate Purpose, "Lively Living for Everyone," and its Corporate Value, "The Best of Nature and Science." All values related to nature and health that are created by the Tsumura Group's business lead to the creation of shared value with society.



### **Process for Formulation of New Materiality**



\*Three methods (levers) for realizing CSV (Creating Shared Value) advocated by management scholar Michael Porter. ((1) Creation of next-generation products and services, (2) Improvement of productivity

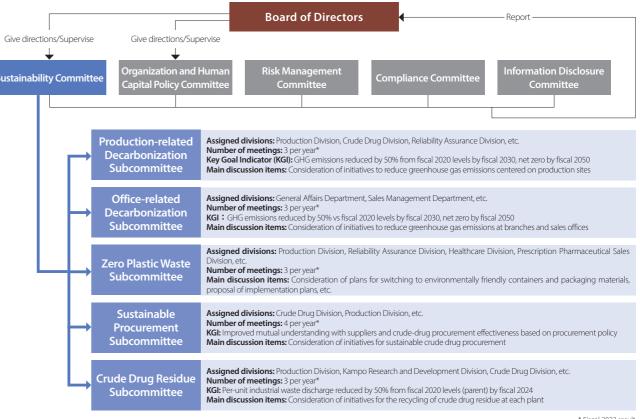
# **Sustainability Promotion System**

We recognize that response to issues related to sustainability, such as consideration for global environmental issues like climate change and respect for human rights, are important management priorities. The Sustainability Committee is under the supervision of the Board of Directors. The committee examines and monitors the Company's overall direction and activities in order to see that these issues are reflected in concrete strategies. In addition, five subcommittees have been formed under the Committee, with each one responsible for organizing cross-organizational discussions on knowledge, experience and research findings collected from various divisions in accordance with the mediumto long-term environmental goals and other targets. Furthermore, to stimulate more active discussion, regular opportunities are provided to report the results of each subcommittee to the

Committee Chair (Co-COO Sugii) as part of efforts to enhance the effectiveness of sustainability activities. We will strive to ensure such effectiveness by responding flexibly to changes in the social environment and the requirements of the times.

#### Main Discussion Items of the Sustainability Committee (Fiscal 2022)

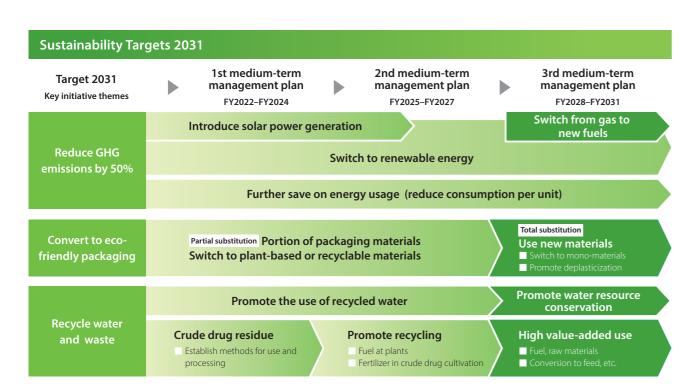
- Discussion and approval of TCFD disclosure proposal
- Formulation of Sustainability Charter
- · Progress report on medium- to long-term environmental targets
- · Discussion on materiality renewal, report on support for each initiative, CDP results report, report on community contribution activities, etc.



\* Fiscal 2022 result

# Materiality and Management Strategy KGIs/KPIs

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	Materiality		First medium-term management plan strategic challenges	Indicators (KGIs/KPIs of each organization)	Fiscal 2022 result	Fiscal 2024 target values
	Sustainable procurement of raw materials (research on cultivation of crude drugs, etc.)			Domestic business net sales	124,698 million yen	Net sales CAGR 5% (fiscal 2022–2024)
			Continuously expanding the Kampo market by providing     Kampo solutions that match the needs of each and every physician	Percentage of physicians prescribing 10 or more prescription Kampo formulations	32%	50% or more
	Recycling use of resources (recycling of water and crude drug residue)			Number of universities teaching four or more courses in Kampo medicine	78 universities	82 universities
				Number of medical website users	Not disclosed	Not disclosed
Nature				Number of detailing impacts	4.77 million	5.7 million
	Preservation of biodiversity (restoration of forests, soil, water sources)		Using KAMPOmics to build evidence on Kampo and promote the scientific study of pre-symptomatic diseases	Number of treatment guideline listings for Kampo formulations (Type B and above)	99	130
				Progress in development of TU-100 in the United States	Currently in latter stage phase II clinical trial	-
	Climate change countermeasures (realization of carbon neutrality)		<ul> <li>Expanding sales of crude drugs and drug pieces in China and entering the traditional Chinese medicinal products business</li> </ul>	China business net sales	15.3 billion yen	Net sales CAGR 30% (fiscal 2022–2024)
				M&A of a traditional Chinese medicinal products company	In negotiation with multiple companies	M&A complete
	Expansion of access to high-quality pharmaceuticals and products derived from natural substances		Innovating the IT platform and crude drug selection,     and promoting the implementation of Al and automation     toward reforming the Kampo value chain	Annual production plan achievement rate	Not disclosed	Not disclosed
				Labor productivity in factories (compared to fiscal 2021)	102%	120%
	Expansion of the standardization of Kampo treatments and building of evidence			Average score of the Corporate Philosophy survey (5-point scale)	4.06 points	Maintain 4.00 points or higher
Health		///X\\\	5 Creating value through organization and human capital and promoting reform to boost job satisfaction	Progress rate on acquisition of Outstanding Employers Promoting Health and Productivity Management certification	Preparing for acquisition	Acquisition
	Initiatives for personalized Kampo treatments through cutting-edge technology	<b>/</b> /// \\\\		Percentage of female recruitment	44%	50%
				Percentage of mid-career hires	55%	40%
	Contribution to health suitable for each individual's life stage (treatment, pre-symptomatic disease, healthcare (prevention))			Employee engagement/satisfaction (5-point scale)	3.58 points	3.90 points
				Efficacy of crude drug procurement based on the "Tsumura Procurement Policy"	Start of implementation of Tsumura Procurement Policy	Verification with production groups 50% comple
	Strengthening and enhancement of corporate governance			Reduction in number of wild crude drug items used (compared to fiscal 2020)*1	Elimination of one item	Elimination of one or more items
				Reduce the usage of plastics (compared to fiscal 2020)*2	-	-10%
		\ / / \	Initiatives for the achievement of the Sustainability Vision (medium- to long-term environmental targets)	GHG emissions (compared to fiscal 2020)*3	+12.9%	-3%
Reinforcement of business	Utilization of diverse human resources	/ /		Per-unit energy consumption (YoY)*4	-4.8%	-1%
foundations				Per-unit water intake (compared to fiscal 2020) <sup>#5</sup>	+6%	-10%
	Cultivation of a corporate culture that draws out potential abilities through dialogue	/		Per-unit industrial waste discharge (compared to fiscal 2020)*6	-	-50%
				*1: Fiscal 2020 result: 34 items	2021 result: 154 GJ/t *5: Fiscal 2020 result: 113.01 t/	*6: Fiscal 2020 result: 1.76 t/t
		I				



# **Initiatives to Solve Social Issues**

# **#OneMoreChoice Project**

Aiming for a healthy society where everyone can live comfortably and without having to endure ailments, Tsumura has been promoting the #OneMoreChoice project since 2021.

We are working to solve issues based on our own survey, and have promoted the messages, "80% of women hide that they are enduring pain\*7" and "Let's start by knowing the difference." Based on these, we have received many messages of support from consumers, mainly through social media. Internally, we also implemented #OneMoreChoice Action in April 2022, aiming to be a company free from hidden endurance. We are also promoting initiatives such as changing the leave system to resolve employees' health issues.

The knowledge acquired through these activities has been developed into #OneMoreChoice Training, to

\*7: Hidden endurance refers to engaging in work or housework while enduring physical or mental illness. It is a registered trademark of TSUMURA & CO.

leverage our achievement of a company free from hidden endurance. We began providing this training free of charge in September 2022. The Company's employees have acted as visiting lecturers at companies, groups, universities, and other organizations 16 times\*8 so far to provide the training. From April 2023, we received support from four universities to start Carellege Action,\*9 an initiative that aims to create environments where university students do not have to hide that they are enduring pain. We have also started providing opportunities for free health consultation with experts.

Going forward, we will expand this project in coordination with companies, universities, and other

organizations, working to solve social issues and realize a healthy society.



mental illness. It is a registered trademark of TSUMURA & CO.

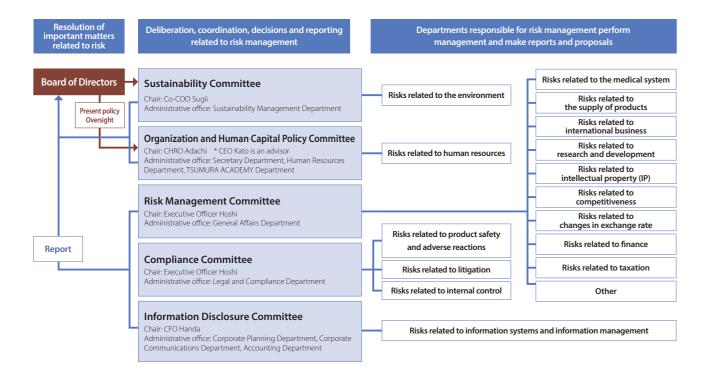
\*8: As of July 2023 \*9: Carellege is a portmanteau of Care and College created by the Company.

# **Risk Management Systems**

The Tsumura Group recognizes that appropriately performing risk management is one of the most important issues in management, and endeavors to provide a management system headed by the Board of Directors. Pursuant to the Companies Act, the Board of Directors establishes the systems required for ensuring the appropriate execution of duties of executive officers, and all executive officers identify risks in their respective duties, and engage in the implementation of operation and management.

The Risk Management Committee is chaired by the Executive Officer in charge of the General Affairs Department, and centrally

manages significant risks. Furthermore, in addition to performing management according to the nature of each risk after categorizing and defining risks in line with the Risk Management Regulations, the committee evaluates reports and proposals from each department responsible for risk management, and deliberates and coordinates the understanding and appropriate response to groupwide risks. The deliberation, coordination and decisions in the Risk Management Committee are periodically reported to the Board of Directors, and the Board of Directors resolves important matters related to risk.



	Risk items	Details of significant risks	Risk mitigation measures
1	Risks related to the medical system	Risks related to administrative developments such as government policies to curb healthcare spending Risk of domestic/overseas regulations concerning the development and manufacture of pharmaceutical products	Building understanding of the value of Kampo formulations     Cooperation with industry bodies and recommendations to relevant ministries and agencies     Establishment of evidence of efficacy of prescription Kampo formulations     Activities to raise the profile of prescription Kampo formulations
2	Risks related to the supply of products	Risk in the procurement of raw material crude drugs due to unforeseen weather conditions, natural disasters, etc., changes in the scope of legal restrictions on imports and exports, or unexpected changes in political and economic conditions  Risk in the procurement of secondary raw materials and other materials due to sudden supply-and-demand-related distribution concerns caused by natural disasters or unstable social conditions  Risk of loss of production and distribution functions due to natural disasters, fires, power outages, etc.	Securing sufficient inventory volume  Expansion of range of suppliers of crude drugs domestically and overseas  Continued expansion of cultivated land under own management  Establishment of purchasing structure involving multiple suppliers  Diversification of manufacturing sites and product supply sites  Introduction of earthquake mitigation/resistance measures at production facilities
3	Risks related to product safety and adverse reactions	Risk of occurrence of problems with product quality or safety Risk of unexpected side effects	Compliance with quality control standards in the country or region Promotion of initiatives that emphasize quality with respect to all products, including both products manufactured in-house and those manufactured by CMOs Thorough management of raw material crude drugs in accordance with the Regulations on the Tsumura GACP Policy Promoting proper use of products by promptly and appropriately collecting safety information on products and strengthening the dissemination of information on adverse drug reactions

	Risk items	Details of significant risks	Risk mitigation measures
4	Risks related to international business	Risk that contingent liabilities or unrecognized liabilities will be discovered after acquisitions or alliances related to the launch of operations in China, and that the expected business value and future synergies from business integration will not be realized     Risk of unexpected changes in laws/regulations or in political/economic conditions	Conduct careful due diligence concerning the financial condition, dealings, etc., of companies/businesses subject to M&A Reinforcement of business management functions through the establishment of Tsumura China Inc.
5	Risks related to R&D	Risk that future growth (globalization of prescription Kampo formulations, development of pre-symptomatic and personalized medicine) or performance cannot be maintained or improved (standardization of Kampo treatments cannot be accelerated) Risk that standardization of Kampo treatments cannot be accelerated due to the number of Kampo products listed in treatment guidelines	[Global and Japan] Periodic verification of feasibility (return on investment and business feasibility assessment) of R&D plans     [Japan] Expansion of business target areas (beyond the medical-use domain to include the total healthcare domain)
6	Risks related to intellectual property (IP)	Risk of decline in competitiveness due to IP rights infringement by third parties Risk of disputes stemming from the infringement of third-party IP rights	Thorough information management in accordance with Company rules  Acquisition of industrial property rights such as patents and trademark rights in connection with newly-developed technologies, new products, etc.  Investigation into IP rights belonging to other companies, e.g., confirmation of prior trademarks, confirmation of prior patents related to newly introduced technologies, etc.
7	Risks related to human resources	Risk of being unable to secure or systematically develop the necessary human resources Risk of a decline in societal standing due to insufficient action to tackle occupational health and safety issues, harassment, etc.	Clarification of human resource criteria and personnel numbers required for management strategy execution, and establishment of recruitment techniques Securing of global human resources for the development of operations in China and the United States  Cultivation of personnel who can conduct business based on the Group's Corporate Philosophy and development of diverse human resources through the Tsumura Academy Systematic development of human resources based on the Human Resources Development Policy Provision of thorough labor affairs management education primarily to managers and increase in opportunities for communication through the use of one-on-one meetings and other modes of communication
8	Risks related to competitiveness	Risk of entry into prescription Kampo market by Japanese and foreign pharmaceutical companies Risk of launch of new drugs by Japanese and foreign pharmaceutical companies in major markets for prescription Kampo formulations	Ensuring superiority through the stable procurement of safe crude drugs, steady supply of prescription Kampo formulations of uniform quality, and accumulation of evidence on their safety and efficacy
9	Risks related to changes in exchange rate	Risk of large fluctuations in the exchange rate relevant to the import of raw material crude drugs and Kampo powdered extract from China	Stabilization of costs and cash flows over the long term through tools such as forward exchange contracts while taking into account exchange rate trends
10	Risks related to finance	Risk of changes in retirement benefit obligations Fundraising risk Risk of price fluctuation for marketable securities	Early identification of changes in the external environment, market environment, circumstances at related companies, etc., and swift action to respond to such changes     Maintaining relationships with financial institutions, particularly the main bank
11	Risks related to taxation	Risk of being charged additional tax or subject to double taxation due to differences of opinion with the tax authorities in each country	Calculation of taxation amounts and proper payment thereof in accordance with the tax laws of each country     Compliance with the transfer pricing tax regimes applied in each country
12	Risks related to the environment	Risk of violating laws or regulations by causing soil contamination, water pollution, etc. Risk of receiving evaluation that our efforts to conserve the natural environment is insufficient	Compliance with environment-related laws and regulations     Preservation of natural environments through environmentally conscious activities
13	Risks related to litigation	Risk of various lawsuits being filed for, for example, side effects of pharmaceutical products including Kampo and crude-drug formulations, harm to health, product liability, labor issues, infringement of intellectual property rights, contract nonperformance, environmental pollution, etc.	Avoiding actions that could lead to lawsuits and early identification of problems by establishing a Group compliance system (rules, whistleblower system, organization, etc.)     Establishment of corporate governance structure for Group companies     Ongoing close collaboration with attorneys
14	Risks related to information systems and information management	Risk of IT systems malfunctioning due to large earthquakes or other disasters such as fire, power outages, etc. Risk of systems failing or confidential information being leaked as a result of cyberattacks by malicious third parties, carelessness or negligence by employees, etc.	Proper investment in strengthening IT systems Formulation of a business continuity plan (BCP), implementation of drills that simulate the occurrence of an emergency, etc. Thorough communication of internal rules concerning information management to everyone within the Company, and reinforcement of information management
15	Risks related to internal control	Risk of being unable to ensure the effectiveness or efficiency of operations Risk of being unable to ensure the integrity of financial reports Risk of unlawful conduct, fraud, etc.	Establishment and operation of internal control system     Establishment and operation of internal management standards     Periodic internal audits and internal control evaluations
16	Other	Risk of business being suspended as a result of the domestic and worldwide spread of COVID-19	Measures to prevent infection and halt the spread of disease     Establishment of a structure for the stable supply of products based on BCP     Acquisition of infrastructure for working from home (laptops, web meeting systems)

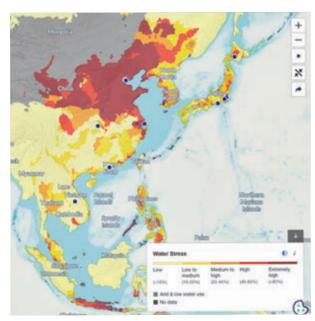
### **Response to Climate Change**

#### Why this Issue is Important to Tsumura

Crude drugs are substances that come to us directly from nature. The Tsumura Group employs crude drugs as raw materials. As such, in order to grow sustainably, we need to be extremely sensitive to changes in the natural environment as well as any potential crises it may face. To ensure the future continuation of the abundant natural environment that forms a pillar of our business, we are focusing in particular on our responses to climate change and water risk. In order to reduce these risks, the Company is promoting initiatives for carbon neutrality, while focusing on the development of new technologies in the areas of crude drug cultivation and production technology.

### **Corporate Governance System Related to** Climate Change

The Board of Directors is responsible for making the most important decisions on matters based on the risks and opportunities associated with climate change and other factors with a view to ensuring the sustainable growth of the Group. The Sustainability Committee, which is chaired by the Co-COO, receives the decisions made by the Board of Directors and sets out policies related to sustainability, GHG emission reduction targets and measures, and so forth. The committee also reports regularly to the Board of Directors on matters such as the status of activities and new issues arising, and reflects the feedback and advice from the board into targets and measures. The Sustainability Committee and Risk Management Committee share information and are responsible for the



Source: WRI Aqueduct, https://www.wri.org/aqueduct

assessment and control of risks associated with climate change. Important matters are reported to the Executive Committee and the Board of Directors.

The Company is taking initiatives to reach the goal of reducing Scope 1 and 2 GHG emissions by 50% from fiscal 2020 levels in fiscal 2030. In fiscal 2023, we made some pathways for achieving this goal, such as introducing offsite PPA, phasing in solar power generation at all sites, and incorporating systems for hydro power generation in the wastewater treatment facility of our new Shizuoka Plant, which is currently under construction.





Solar panel at Shizuoka Plant

Solar car ports at Ibaraki Plant

# Response to Water Risk Due to Global Warming

The Tsumura Group has conducted a scenario analysis\*1 envisaging the world in 2050 based on the TCFD recommendations. Among the major risks under the 4°C scenario, in fiscal 2022 we held a detailed discussion\*2 of our response to water risk. Currently, at the No. 3 SD Building of our Ibaraki Plant, we have installed new equipment for reusing the water used in manufacturing, and we are examining strategies to mitigate water risk, such as applying the expertise we have acquired there elsewhere. Moreover, some of our crude drug cultivation sites are under high water stress, and we are responding by innovating crude drug cultivation techniques, diversifying cultivation sites, and securing appropriate inventories.

- \*1 For more details, please refer to the Company's website.

  Responding to climate change: Information disclosure based on the TCFD recommendations https://www.tsumura.co.in/applich/cure-in-philips/hite/hite/al-n--in-hit
- \*2 Evaluation of water stress using the "Aqueduct Water Risk Atlas" developed by the World

### Water stress at Head Office and manufacturing sites: Risk evaluation results

- Japan: six sites, all with no risk \*3
- China: nine sites, of which three have risk (Tianjin, Shenzhen, Shanghai)
- Laos: one site, no risk
- Evaluation period: 2040
- \*3 Some sites were deemed to be extremely high or high risk. However, having considered factors such as the status of water usage at the sites, it was judged that no significant

# **Respect for Human Rights**

The Tsumura Group supports global norms such as the International Bill of Human Rights and is taking measures to respect human rights. We consider any violation of human rights in our supply chain unacceptable, for example, at companies and suppliers in production areas where we procure raw material crude drugs. We have therefore been conducting periodic audits of production area companies and suppliers for some time. To date, we have not found any significant issues relating to the human rights of employees, such as forced labor. In April 2022, the Group formulated the Tsumura Human Rights Policy and the Tsumura Procurement Policy, which cover all of the Group's officers and employees, production area companies and production groups, and all suppliers with direct contracts.

Furthermore, the Procurement Division conducts human rights due diligence for analysis and prevention of human rights risk in the supply chain. With regard to production groups from which the Group procures crude drugs, we conduct observation and interviews from an occupational health and safety perspective using a checklist when conducting GACP audits\*4, based on the Tsumura

Procurement Policy. The results are evaluated by the Sustainable Procurement Subcommittee and the Sustainability Committee, then reported to the Board of Directors. In fiscal 2022, we conducted explanation meetings to local production groups in Japan, China, and Laos, to promote understanding of our procurement policy.

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.

In fiscal 2022, we conducted study sessions on human rights and harassment at all business sites for all employees. We will promote initiatives such as the production of materials related to human rights and utilize them in ongoing training for all employees.

\*4 Tsumura's own audit method based on the Tsumura GACP Guidelines

### **Resource Circulation**

The Tsumura Group is working to renew the 3Rs (reduce, reuse, recycle) and create mechanisms for resource circulation.

Most of the industrial waste generated by the Group is residue left over from extract produced during the Kampo formulation manufacturing process (crude drug residue). Some of this material is traded for value, and the Group sells it for uses such as biomass fuel, which helps to reduce CO2 emissions from thermal power stations. Other residues are also 100% recycled by composting and so forth.

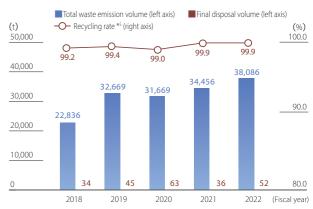
In parallel with resource recycling, we are also focusing on creating better mechanisms for resource circulation. Crude drug residue contains about 80% water. Although we utilize residues for recycling as described above, because they are carried to external processing facilities with a significant volume of water in them, they incur an environmental burden and an economic cost. Currently, the Company is researching and examining methods of applying fertilizer manufacturing technology to reduce the water content of residues without placing a load on the environment.

As an initiative to assist with circular use of water resources, we have implemented a system for reusing cooling water from the extracted liquid condensation process for Kampo extract at four plants in Shizuoka, Ibaraki, Shanghai,

and Tianjin. In fiscal 2022, these four plants accounted for around 96% of the entire wastewater volume for the Group.

In addition, we are looking at switching to environmentally friendly packaging materials considering the strengthening regulations, such as the enforcement of the Act on Promotion of Resource Circulation for Plastics.

## Total waste emissions, final disposal volume, and recycling rate



Note: Waste includes industrial waste (including ones under special management), as well as municipal solid waste. \*5 Recycle rate = recycled volume/total waste emission  $\times 100$ 

# **Preservation of Biodiversity**

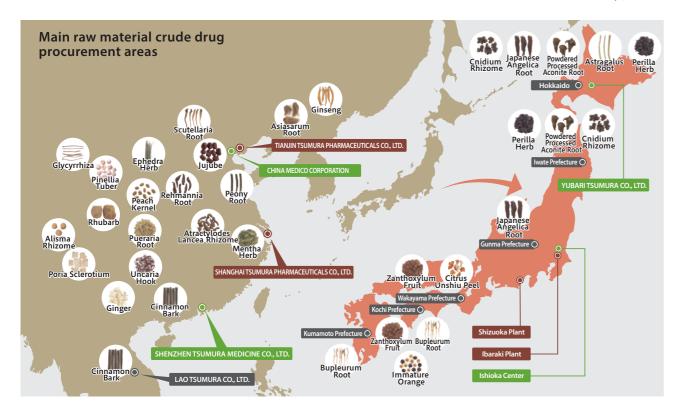
### Why this Issue is Important to Tsumura (Approach Since our Foundation)

Depletion of natural resources, such as wild plants, poses a direct management risk to the Tsumura Group, since its business uses crude drugs as raw materials. Given this background, we have a long history of working to preserve biodiversity, from our earliest days. The first president, Jusha Tsumura, considered the identification of varieties that can be used as raw material crude drugs, their cultivation backed by science, and the preservation of varieties as important priorities from the time of the Company's foundation, and made a tremendous effort in this area. In 1924, we founded Tsumura Research Institute for Pharmaceutical Science for the purpose of conducting scientific research and analysis of botanical compounds and Kampo medicines. In subsequent years, the results from the institute have contributed significantly to the rise of Kampo medicines. Furthermore, at the same time as the foundation of the institute, Jusha also started work on establishing the Tsumura Medicinal Plant Garden.

Around the time, Dr. Tomitaro Makino, Japan's leading authority on plant taxonomy, was in charge of the Journal of Japanese Botany, an international academic journal that was concerned with the survey and study of wild plants. In 1926, Jusha approved of Dr. Makino's activities and decided to support him, and so Tsumura Research Institute for Pharmaceutical Science took over publication of the journal. The two men collaborated through the creation of the journal, working for many years to bring to light the diversity of Asian plants and promote the taxonomic and pharmacognostical evaluation of medicinal plants, which are the foundation of Kampo medicines, as well education.

Over the past few years, the Group has been focusing on the development of advanced appraisal technology for plant varieties, building a plant variety library, and developing expert human resources in order to pass on bountiful ecosystems to the next generation. In addition, the Group has analyzed and evaluated variations in quality caused by differences in the production environment and harvest timings of raw material crude drugs (medicinal crops), accumulating production expertise for ensuring consistency. Currently, Tsumura has indicated consideration for biodiversity in the Sustainability Charter formulated in 2022, and is actively implementing a range of measures, such as appropriate harvesting of wild crude drugs, careful management of crude drug production based on the Tsumura GACP, and appropriate use and testing of agrochemicals.

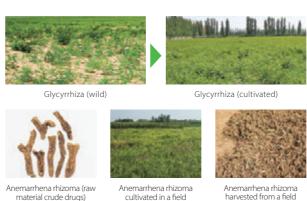




### **Cultivation of Wild Crude Drugs**

With a view to preserving biodiversity, the Group has included a target of reducing the number of wild crude drugs it uses within its medium- to long-term environmental targets for fiscal 2031. Among the raw material crude drugs that we use, 110 are derived from plants, and 34 of these are wild plants. By introducing cultivation of these going forward, we aim to reduce the number of wild products used to 11 by fiscal 2031.

In fiscal 2022, we switched completely to cultivated products for a crude drug known as Anemarrhena rhizoma. Until now, we have needed a certain quantity of wild Anemarrhena rhizoma with a high level of standard ingredients, but improvement of the production method of the cultivated product has proved successful in increasing the level of standard ingredients, and through practical production testing, we are on course to be able to build a production system that does not depend on wild products.



# Cooperation with Local Community though Crude **Drug Cultivation**

cultivated in a field

(plant name Anemarrhena

material crude drugs)

The Tsumura Group considers diversification of cultivation areas an important strategy for sustainable crude drug procurement. Among other advantages, this strategy helps to preserve the natural environment in cultivation areas, contributes to regional revitalization, and increases the productivity of farmers by transferring technologies to them.

#### **Tosa Tsumura Forest**

One of our main cultivation areas in Japan is the town of Ochi in Kochi Prefecture. Here, we are engaged in a joint forest project called the Tosa Tsumura Forest. The project is operated by four partners: Kochi Prefecture, Ochi Town, Human Life Tosa, and the Tsumura Group. 2023 marked the 16th year of the project, which was initiated in 2008 for the purpose of protecting the natural environment and revitalizing the region of the cultivation area. Tosa Tsumura Forest covers an area of approximately 77 ha., or around 16 times the area of the Tokyo Dome. In addition to preserving the water source for the Niyodogawa river system, Human Life Tosa members conduct medicinal plant harvesting and processing experience lessons for local junior high school students, while the Company's employees contribute to systematic learning by providing visiting lessons and so forth.

#### **Initiatives in Laos**

In Laos, we cultivate raw material crude drugs in our own managed gardens. In 2011, we proposed a survey and removal of unexploded ordnance to ensure the safety of the land for the cultivation of crude drugs as a public-private partnership project.\*6 The proposal was accepted under the "Public-Private Partnership for Accelerating Growth" promoted by the Japanese government. Through this project, we are promoting expansion of local employment along with the transfer and diffusion of agricultural technologies.

\*6 A governmental program begun in April 2008 to accept proposals from private companies for the purpose of contributing to the expansion of job opportunities, technology transfer, and trade and investment promotion, which ODA (Official Development Assistance) cannot pursue alone, through the cooperation between private companies' activities and the ODA in developing countries.

# Other activities

In cultivation areas in China, we are contributing to increased standards of living through the cultivation of crude drugs. In Sichuan Province, we are implementing a project with a local company to cultivate wild rhubarb. We have built an industrial chain of cultivation, harvesting, and processing, contributing to increased income for farmers and reducing uncontrolled harvesting of wild rhubarb. In Jilin Province, a large-scale ginseng processing plant is run by a local company. Strict quality management and inspection for agrochemicals residue and so forth have increased the brand reputation of the products, creating an exemplary model for sustainable local industry.

### **Years of Cultivation of Main Crude Drugs**

