7.3 Water Resources Management

The Company's operating sites in northern Taiwan (e.g., Taipei Office and Taoyuan Longtan Plant) are located in areas of "low" water stress level according to Aqueduct assessment tool of the World Resources Institute (WRI), meaning that a relatively balanced overall water demand and supply has been achieved. The water for the Taipei area is supplied by Feitsui Reservoir, and the water source is stable with no record of water shortage in the past years. Longtan Plant primarily uses groundwater, and there is no immediate risk in the short term; however, it is still necessary to monitor the potential risks associated with over-extraction and policy restrictions. On the other hand, the subsidiary's manufacturing facility located in the Songjiang District of Shanghai, China, is situated in a "high water stress area" assessed according to WRI, indicating that the water resources in the area face intense competition and the stability of the water supply is lower, such that it is likely to be affected by water restrictions or supply interruption, causing potential challenges to the Company's operational continuity.

Although the annual average rainfall in Taiwan is approximately 2,500 mm, 2.6 times the global average, the country still faces a high risk of water shortage due to its steep terrain and concentrated population, resulting in per capita water availability being only 1/5 of the global average. In response to the differences in regional water resource risks, the Company not only continues to promote water saving measures and diverse water consumption strategies, but also incorporates "production flexibility" into the risk management consideration. When a specific location experiences water shortages or regulatory restrictions, production capacity can be allocated across factories to flexibly adjust production deployment. For example, priority can be given to the Longtan Plant, which has a relatively stable water supply, so as to reduce the risk of potential supply interruptions or delivery delays, thereby enhancing overall operational resilience and sustainable competitiveness.

Water resource risk assessment for operating locations

Location	Area	Water withdrawal source	WRI Aqueduct water stress rating	Potential risk	Management approach
Taipei office and retail stores	Taipei City	Tap water (Feitsui Reservoir)	Low	Water source is stable with no record of water shortage in past years; however, Taiwan is a country with a high risk of water shortage	Monitor water conditions, and implement daily water-saving management.
Longtan Plant	Taoyuan Longtan District	Groundwater	Low	The plant does not rely on surface water; however, it is necessary to be aware of the policy risks of excessive groundwater extraction and potential future water withdrawal limitations	Manage water-use efficiency, regular water quality monitoring, and regulatory monitoring
Microbio (Shanghai) Headquarters and Songjiang Plant	Songjiang District, Shanghai	Tap water (local water plant)	High	The region where the headquarters and plant are located is a high-stress water area, and competition for water resources is intense. Potential risks include water use restrictions and interruption of the water supply.	Promote water-saving improvement projects, assess the feasibility of water reclamation and other solutions.

• Water Withdrawal and Water-Resource Management

Water is an indispensable key factor for Microbio's operations, from the planting of raw materials, water usage for the production process, to R&D experiments, which all require stable water resources. In order to tackle the potential water shortage challenges in the future and make a substantial contribution to SDG 6's "Ensure availability and sustainable management of water and sanitation for all", we are committed to promoting excellent water resource management. This includes water recycling and strict drainage water treatment measures. To enhance water saving and water-use management, Microbio regularly collects water-use data and implements comprehensive water monitoring. The main source of water consumed by Longtan Plant is groundwater for production and cooling processes. Groundwater is withdrawn in compliance with permits issued by the Taoyuan City Government, and the plant regularly reports withdrawal amounts and conducts water quality testing as required. Although it is not a traditional municipal water source, the plant treats groundwater as a precious resource and manages it effectively. In recent years, we have continued to implement pipeline leakage repair, water-tank recovery, and equipment water-saving optimization measures to improve water-use efficiency and alleviate water resource stress. The feasibility of introducing reclaimed water has been assessed; however, based on the consideration of the installation cost, reclamation conditions, and expected benefits, it is not yet economically feasible in the short term and has not yet been included as part of the items for recent implementation. We will continue to monitor policy trends and technological developments and perform reviews regularly. The following is the water resource statistics for Microbio and its subsidiaries over the past years. Please refer to Appendix 5 for details on water withdrawal and sources of each business location.

Historical Water Resource Statistics of Microbio and Its Subsidiaries (Unit: Million Liters)

Location	2021			2022			2023			2024		
	Withdrawal	Discharge	Consumption	Withdrawal	Discharge	Consumption	Withdrawal	Discharge	Consumption	Withdrawal	Discharge	Consumption
Microbio	12.033	4.617	7.416	12.986	4.517	8.469	9.020	5.227	3.793	16.763	6.450	10.313
Microbio (Shanghai)	10.734	-	-	6.909	-	-	8.275	8.275	0	6.180	6.180	0
Cotton Field Organic	-	-	-	13.290	13.290	0	14.017	14.017	0	14.045	14.045	0
Total (Raw Sum)	22.767	4.617	7.416	33.185	17.807	8.469	31.312	27.519	3.793	36.988	26.675	10.313
Total (Based on CSA Formula)			18.150			15.378			3.793			10.313
Coverage Rate (Consolidated Paid-in Capital Basis)		66.76%			100.00%			100.00%			100.00%	

Note 1: According to the S&P Global Corporate Sustainability Assessment (CSA) equation, if the complete water resource statistics are not available: Total Water Consumption = Total Water Withdrawal - Total Water Discharge.

Note 2: No statistics are available for the Nangang Office since the Building Management Unit didn't provide any water fee information.

Note 3: The operation center of Microbio has been relocated from the Xinyi Office to the Zhongxiao Office since January 1, 2024.

Note 4: Water consumption statistics for Cotton Field Organic have been tracked since 2022. The water consumption data for some of the retail stores is included in the rent and cannot be separated for statistical purposes. The water resource used by Cotton Field Organic's headquarters, retail stores, and logistics center is primarily domestic water, and withdrawal is deemed equal to discharge.

Note 5: Some production activities continued at Microbio (Shanghai) between 2021 and 2022; however, complete water resource data was not available, such that the water drainage volume and water consumption volume were not disclosed. It has been converted to office and R&D use since February 2023, and the water resource consumption primarily refers to domestic water, and withdrawal is deemed equal to discharge.

In 2023, due to a decrease in the production of the Longtan Plant, four abnormal water leakage points in the plant area were repaired, including the leakage repair of the water replenishment pipeline of the 6-ton water tower, the repair of the cracked bottom of the cooling water tower, the leakage repair of the RO water dispenser system, and the water backwash bucket inflow. Floating balls were repaired, so water consumption was reduced by 31.94% compared to the previous year. The underground pipeline leakage at Microbio (Shanghai) has been repaired after routine data monitoring and comparison with the data of the same period. In 2024, Longtan Plant's capacity utilization rate increased such that the water consumption also increased. The Factory Affairs unit performed routine equipment inspections, and no abnormalities were found. Water resource management is also one of the Company's climate risk adaptation measures and is integrated with the flexible design of production line relocation, in order to ensure operational resilience and to reduce the risk of water supply interruption.

• Wastewater Discharge and Water Pollution Prevention

In order to mitigate the potential environmental impact of the operations, the wastewater treatment of Microbio complies with the requirements of environmental laws and regulations. Wastewater from the Xinyi and Nangang locations is discharged into municipal sewages for treatment. Longtan Plant operates in accordance with legal requirements and commissions an independent third party to conduct effluent quality testing every six months. Domestic wastewater from the subsidiary Cotton Field Organic and the Group's office facilities is directly discharged into the municipal sewer system. As such, discharge volumes are not separately recorded. According to GRI 303-4 Standards, for office water with negligible evaporation and consumption, water withdrawal volume can be reasonably considered to be equivalent to water discharge volume. Consequently, this report estimates the water discharge volume based on actual water withdrawal volume. Since there was no production activity at the Microbio (Shanghai) headquarters and the Songjiang Plant during the reporting period, the water drainage volume was estimated based on actual water withdrawal volume, and wastewater quality met the required standards and was discharged to the Songjiang sewage treatment plant. Wastewater volumes and discharge destinations for each site are detailed in Appendix 5.

• Water Resource and Bio-Diversity

It has been determined upon assessments conducted with the aid of IBAT (Integrated Biodiversity Assessment Tool) that the Microbio Longtan Plant is located in an environmentally non-sensitive area with no environmental protection areas, nature reserve areas, or major wildlife habitats within a radius of 10 kilometers. Direct impacts on biodiversity have therefore been ruled out. On the other hand, Microbio is deeply aware of the fact that water and biodiversity are closely intertwined and that water resources are crucial for the normal functioning of ecosystems Since the Longtan Plant discharges water into the receiving water body, Xiaoli River, Microbio focuses on water resource management as a top-priority measure to maintain biodiversity in the vicinity of the plant and avoid indirect impacts on the river ecosystem.

Micorbio conducts waste and sewage treatment in high standards. The drugs and health products produced by the Longtan Plant has no heavy metals or harmful chemical substances are included in the production process. Pollutants are prevented from entering the discharged water from the source. The use of the Upflow anaerobic sludge bed treatment (UASB) and the BioNET systems developed and designed by ITRI allows wastewater to be treated by biological methods to reduce the use of chemicals, and achieves the goal of zero impact on natural water bodies.

The subsidiaries Cotton Field Organic, Microsoy International, and Microbio (Shanghai) are all situated in environmentally non-sensitive areas. Their effluents conform to local laws and regulations and don't generate any negative impacts on biodiversity and water resource protection. Cotton Field Organic also promotes products of "organic agriculture", "vitality", "product traceability", and "sustainable seafood" through product quality declarations and product selection standards. The aim is to emphasize support for friendly farming practices and conservation-oriented aquaculture certifications as a practical strategy for retailers and consumers to jointly participate in biodiversity protection.

In addition, the photocopy paper used in Microbio operation center Zhongxiao office meets the PEFC (Programme for the Endorsement of Forest Certification) standards, ensuring that the papers come from sustainably managed forests and supports responsible forest protection and biodiversity conservation. The subsidiary, Cotton Field Organic, launched a newly developed organic product, Symbiota, in 2024. The product's packaging uses colorful boxes certified by the Forest Stewardship Council (FSC), demonstrating the Group's commitment to sustainable packaging and biodiversity protection. Through these international certification systems, the Group is committed to avoiding excessive deforestation and destruction of endangered species' habitats, supporting the health and integrity of forest ecosystems, and promoting the realization of the goals of overall biodiversity conservation.

In addition to the continuous implementation of ecological-friendly actions within the scope of its own operations, we also actively support the United Nations Convention on Biodiversity. In 2023, we formulated a biodiversity policy, which was officially released in 2024 after the Chairman's signature approval. Execute biodiversity risk assessment and engage and communicate with stakeholders, committed to creating positive biodiversity value and mitigating impacts on biodiversity.

To strengthen its sustainable initiatives of the upstream production end, the subsidiary Cotton Field Organic organized the first "Golden Cotton Award" event in 2024 as a way recognizing farmers and organizations demonstrating outstanding achievements in ecological conservation, sustainable agriculture, and circular economy practices. The event also covered award categories like "Ecological Conservation" and others, emphasizing the importance of biodiversity conservation and sustainable farming practices. The event also received guidance and recognition of expert review mechanism from the Agriculture and Food Agency, Ministry of Agriculture. Through the systemic initiative and benchmark selection of the Golden Cotton Award, distribution channels will gradually enhance the ability to identify sustainability risks and provide positive incentives to the upstream agricultural supply chain. In terms of the biodiversity dependency risk assessment, Microbio has preliminarily identified that its pharmaceutical and health food production processes are highly dependent on clean water sources and a stable supply of raw materials (such as medicinal plants). In the future, the Company will follow the principles outlined in the policy to progressively conduct an inventory on current ecological resource use status, to identify the level of dependency and to evaluate alternative solutions, in order to use such information as reference for internal resource management and stakeholder communication.