PT. Great Giant Pineapple

WATER REPORT

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Water Efficiency Management Program

Water Use Assessment

At PT. Great Giant Pineapple, we conduct monthly monitoring of our water usage. This assessment is designed to review and analyze our water consumption, identify key activities and functions with significant water use, evaluate processes and services affecting water quality, and track the quantities of water used. We regularly report the results of these assessments to our Board of Directors to ensure effective oversight and management of our water resources.

After the water assessment is conducted through data gathering and indicators monitoring, actions will be determined to focus on reducing water consumption.

To support water use assessment, we have developed a real-time operational dashboard that monitors and evaluates various indicators, including water resource usage.

Action to reduce water consumption

1. GGP implements an **irrigation system** designed to optimize the efficient use of water in plantations by setting irrigation priority standards.
2. **Water assessment** GGP regularly conducts water assessments. Monthly Monitoring: water consumption index, water footprint that oversee directly by management board.

Action to improve waste water quality

All liquid waste is managed first through the Waste Water Management Installation (WWTP) facility before being channelled into the sewer. GGP built two large-capacity WWTP facilities, namely WWTP 1 Pineapple, WWTP 2 Pineapple. In addition to these large WWTPs, GGP also has WWTP facilities at each poll dipping and warehouse mixer in the plantation area. Part of the liquid waste from the pineapple canning factory is processed into biogas, and the liquid waste is managed through WWTP 2 Pineapple. The remaining liquid waste from the pineapple canning factory is managed through WWTP 1 Pineapple.

This liquid waste treatment aims to minimize water pollutant contents in order to comply with environmental quality standards. The output water quality from this treatment facility is monitored every month through laboratory tests conducted by an accredited external laboratory. Its execution refers to Lampung Regional Regulation No. 11 of 2012 on The Management of Water Quality and Water Pollution. Our commitment is to meet the established environmental quality standards. Upon meeting the quality standards, liquid waste is then channelled into the Way Ilo river (tributary of Way Pengubuan river).

Target to reduce water use (quantitative target & time-bound)

Catchment Area-Based Land Design

We have optimized our water catchment areas to provide sustainable water sources through rain harvesting, particularly during the dry season.

Target : Groundwater usage < 40% in 2030

Water Use Efficiency

We enhance water use efficiency by leveraging the latest technology and Internet of Things (IoT) solutions.

Target : Water usage index < 98.0 L/kg of processed pineapple product in 2030

Application of water recycling

At PT. Great Giant Pineapple, one of our largest sources of water consumption comes from groundwater, which is essential for our production processes. To address this significant usage, we are committed to enhancing our practices to reduce groundwater consumption.

One of our key initiatives is the implementation of an advanced water recycling system in our packing house (PH). This system is designed to optimize water usage by recycling the water used to wash bananas harvested from our plantations before they are packed and shipped to our customers.

Our latest initiative involves installing advanced water filters in the banana washing tanks. Previously, the water used for washing bananas was single-use—used once and then discarded. Now, we have integrated a filtration system that allows the used water to be filtered and purified, enabling it to flow back through the system for reuse in washing subsequent batches of bananas.

Picture 1&2 : The filtration system in packing house banana

Training for Water Efficiency Management Program

In some packing houses, there is a push for socialization and campaigns on water and energy conservation before starting work, as packing houses are heavily involved in water consumption for washing fruit before it reaches the customer.

Picture 1: Briefing or Campaign to Save Water

Water Consumptions

Water consumption	Unit	FY 2021	FY 2022	FY 2023	FY 2024	Target FY 2024
Water withdrawal (excluding saltwater)	Million cubic meters		6.41	6.78	7.58	
Water discharge (excluding saltwater)	Million cubic meters		1.53	1.49	1.46	
TOTAL NET FRESH WATER CONSUMPTION (A-B)	Million cubic meters		3.04	11.83	12.23	**12.81**

Between 2021 and 2022, our plantation was significantly affected by La Niña, a climate phenomenon that brought excessive rainfall and caused widespread waterlogging, compelling us to rely heavily on aerial water drops to manage excess water and protect our crops. However, in stark contrast, the years 2023 to 2024 were marked by an intense El Niño event, leading to prolonged droughts and soaring temperatures. This extreme dryness severely reduced water availability, drastically increasing our water demand to sustain crop health and productivity. These back-to-back climate extremes highlight the growing challenges posed by global climate variability on agricultural water management.

Business Impact of Water Related Incidents

Incidents	Currency	FY 2021	FY 2022	FY 2023	FY 2024
Total actual and opportunity costs (e.g. forgone income) from water-related incidents	*USD*	*0*	*0*	*0*	*0*

PT Great Giant Pineapple (GGP) did not have any water-related incidents with a financial impact above 10,000 USD.

Water Risk Management Program

Water Risk Management Program

This water risk management program utilizes the risk assessment framework developed by the Task-Force on Nature-related Financial Disclosures (TNFD), incorporating the LEAP (Locate, Evaluate, Assess, and Prepare) approach, and integrating it with the risk level framework provided by WWF Risk Filter for a thorough analysis. By leveraging these established frameworks, the program carefully evaluates potential water-related risks. The insights gained from this assessment are essential for crafting effective plans and actions, ensuring that all potential risks are adequately addressed and that proactive measures are taken to mitigate any identified threats.

Locate : Identify and map the water-related dependencies and impacts relevant to the organization, such as water sources, usage, and any potential effects on local water systems.

In 2024, PT. Great Giant Pineapple conducted a comprehensive Water Risk Assessment for its operations in Lampung area, encompassing approximately 30,000 hectares. Our area is divided into four Plantation Groups & Central area: Central, Plantation Group 1, Plantation Group 2, Plantation Group 3 and Plantation Group 4. The Central and Plantation Groups 1-3 are located at the Terbanggi Besar site in Lampung Tengah, while Plantation Group 4 is situated at the Way Kambas site in Lampung Timur. Other than that, we also identified risk related to our Supply Chain and Product Use Phase.

Evaluate: Assess the significance of these water-related dependencies and impacts on the organization's operations, including potential financial, operational, and reputational consequences.

- **Agricultural Water Dependencies**

Irrigation Needs : Pineapple cultivation requires significant amounts of water for irrigation. This is particularly crucial in areas with irregular rainfall. The water is needed to ensure optimal growth conditions for the pineapple plants throughout their development cycle.

Water Quality for Crop Health : The quality of water used for irrigation affects crop health. Contaminated water can harm the plants and lead to poor fruit quality, which is essential for both fresh fruit and processing into canned products.

- **Processing Water Dependencies**

Cleaning and Preparation: Significant quantities of water are used in processing facilities to wash and clean pineapples before they are canned. This step is critical for ensuring the fruit meets hygiene and safety standards.

Product Processing: Water is also used in various stages of the processing such as cooling and sterilization processes.

- **Supply Chain Water Dependencies**

Transportation and Storage: Water may be used in the transportation and storage processes to maintain freshness, particularly if the pineapples are transported in a manner requiring humidity control or cooling.

Assess: Analyze the specific risks and opportunities associated with water management, considering various scenarios.

Water Risk Level Based on WWF Water Risk Filter 2023

(Scope : Own Operations)

Risk Indicator	Score of Site PG 1- 3 and Central (Lampung Tengah)	Score of Site PG 4 (Way Kambas Lampung Timur)	Potential impacts on our businesses, strategy and financial planning (For top 5 key risk indicators)	Management Plan & Response Strategy (For top 5 key risk indicators) 2 sites (30.000 Ha)
Scape of Basin Physical Risk	**1,9**	**1,94**		
1. Water Scarcity/Water Quantity	**1,4**	**1,8**		
1. Flooding	4	3	1. **Crop Damage**: Floods can damage or drown pineapple plants, reducing yield and fruit quality. 2. **Increased Costs**: Costs for repairs, cleaning, and additional labor can rise due to flooding. 3. **Environmental Impact**: Floods can lead to soil and water pollution, affecting future farming conditions.	At GGF, we implement flooding risk management, with several initiatives, such as: 1. **Optimizing water flow on land** by creating channels and installing culverts based on the land's contour to accelerate surface water flow and minimize water logging & flooding risk. 2. **Increasing reservoir capacity**. Reservoir function as rainwater catchment areas. Enhancing reservoir capacity will maximize the collection of rainfall and minimize flooding in surrounding areas. 3. **Landforming**. Elevating land in areas that identified as flood-prone location to protect crops from being submerged. 4. **Planting water logging tolerant crops.** Such as bamboo and

Water Risk Level Based on WWF Water Risk Filter 2023

(Scope : Own Operations)

				coconut in prone-flood locations.
2. Water Quality	3	3		
3. Ecosystem Service	2,45	1,5		
Scape of Basin Regulatory Risk	**2,4**	**2,4**		
4. Enabling Environment	**2**	**2**		
5. Institutions & Government	3	3		
6. Management Instrument	2,15	2,15		
7. Infrastructure & Finance	2,45	2,45		
Scape of Basin Reputational Risk	**3,83**	**3,83**		
8. Cultural Importance	5	5	If a business fails to acknowledge the cultural importance of water, it might face backlash or criticism. This can harm its reputation and lead to negative public perception.	GGF actively participates in supporting the availability and sustainability of water for local communities. 1. **Prevent hazardous waste** from being wasted and polluting the river, which are the lifeblood of people around GGF. 2. **Protecting water resources** that used by local communities. 3. **Support communities water needs,** such as building deep wells in several villages especially during dry season.
9. Biodiversity Importance	4,5	**4,5**	**Species Loss**: Damage to water sources can lead to the loss of species that depend on them, reducing biodiversity and upsetting the balance of nature.	Water resources are an essential component in GGF. Therefore, some of the initiatives and risk mitigation that we carry out are: **Starting from upstream.** We minimize waste, from fertilizer and our process, to our water resources. Where we measure the

Water Risk Level Based on WWF Water Risk Filter 2023

(Scope : Own Operations)

				optimal use of fertilizer so that minimal fertilizer is leached and also substitute some chemical fertilizers for organic fertilizers. **Downstream**, we make water treatment to purify the waste we produce, build barriers to prevent erosion, and plant conservation plants around the water resources we have.
10. Media Scrutiny	3,55	3,55	Negative media coverage of a company's water management practices can harm its public image. Issues like pollution, waste, or poor conservation practices may lead to criticism and damage the company's reputation.	Mitigation plan: 1. Minimize waste that goes into water resources. GGF always processes the waste water produced and monitors the quality of the treated waste. By processing and monitoring, we can ensure that no hazardous waste is released into water resources. 2. Implement Water Reduce, Reuse, and Recycle. GGF always actively strives to reduce groundwater use, one of which is by implementing 3R. Where we utilize existing waste, manage it, and reuse it in operational activities. 3. Water Conservation. GGF always

Water Risk Level Based on WWF Water Risk Filter 2023

(Scope : Own Operations)

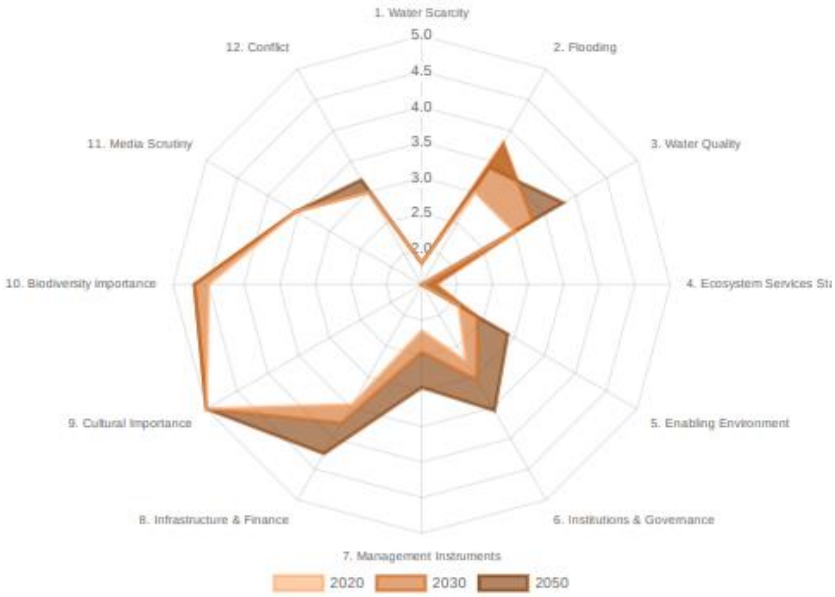
				strives to protect the water resources we have. One of them is by making the area around the water body a conservation area, where we plant several conservation plants to reduce erosion, protect water quality, and maintain the health of the surrounding micro-ecosystem.
11. Conflict	3	3		
Scape of Operational Physical Risk	**2,46**	**2,85**		
12. Water Scarcity	2,5	2,95		
13. Water Quality	1,95	1,45		
Scape of Operational Regulatory Risk	**1,45**	**2,15**		
14. Enabling environment	1,3	2,4		
15. Institution & Government	1,6	1,9		
Scape of Operational Raputational Risk	**2,62**	**2,76**		
16. Media Scrutiny	1	1		
17. Conflict	3,5	3,7	Managing or mitigating conflicts can increase operational costs. Companies might need to invest in security, alternative water sources, or conflict resolution measures.	We build a good and strong relationship with the community around us. Some initiatives and mitigation plans such as: 1. **Protecting water resources around GGD and the communities.** In this way, we guarantee that water resources are always available in quantity and quality for communities around us. 2. **Actively support communities during dry season when water availability is very limited.** Such us providing clean water or by bulding deep well.

Assessment of Future Scenario Based on WWF Water Risk Filter 2023

(Scope : Own Operations in Lampung Site)

Scenario of Our Operations Based on Current Trend (Lampung Tengah (Terbanggi Besar) Site)

Scenario of Our Operations Based on Current Trend (Lampung Timur (Way Kambas) Site)



Based on the scenario for both site (Lampung Tengah & Lampung Timur), it can be concluded that:

Considering current trends & pessimistic pathway, by 2030 and 2050, it is crucial to concentrate on mitigating certain high and very high-risk indicators. These include flooding, water quality, institution & governance, infrastructure & finance, cultural importance & biodiversity importance.

Based on the WWF Risk Filter future scenario by 2030 and 2050. Some of indicators can be concluded that:

Future Water Quantities Available

The possibility of water scarcity in 2030 and 2050 is categorized as low risk which means that the water supply is under controlled until 2050, the company still apply the conservation effort to maintain the water supply.

Future Water Quality-Related Risks

The future water quality in 2030 and 2050 has medium and high-risk categories. It can be caused by the expansion of the production of the company that will cause the increment of fertilizer usage. Indirectly it will impact to our water quality. Other than that, increment of population around the company is also affect our water quality supply.

Future Impact on local stakeholders

Culture importance risk indicator can be one of the indicators that measure the future impact on our local stakeholders. The rationale is that the greater the number of culture within a given region, the greater the chance that water is perceived as a social and/or cultural good and that would pose reputational risk to businesses. For both sites are categorized as high-risk culture importance. In both site, majority of communities are farmers who really depend on water. The huge usage of water by the company will be impacted to the low reputation of the company if company is not do the effort related to the water quantity and quality loss.

Future potential regulatory changes at a local level

Potential regulatory changes at a local level might be happen in the future. Based on WWF Risk Filter it categorized as high risk. It because of there are some potential changes in regulation related to water consumption from Lampung Tengah government. It happens because of the government is shuffled with other elite, there is the different priority from the elite. In 2024, government stated there will be a changing regulation to give water tax for reservoir in future. Even though, there is no planning yet to give the water tax for company, but it is predicted to be happen in the future.

Exposure of Supplier to Water Risk

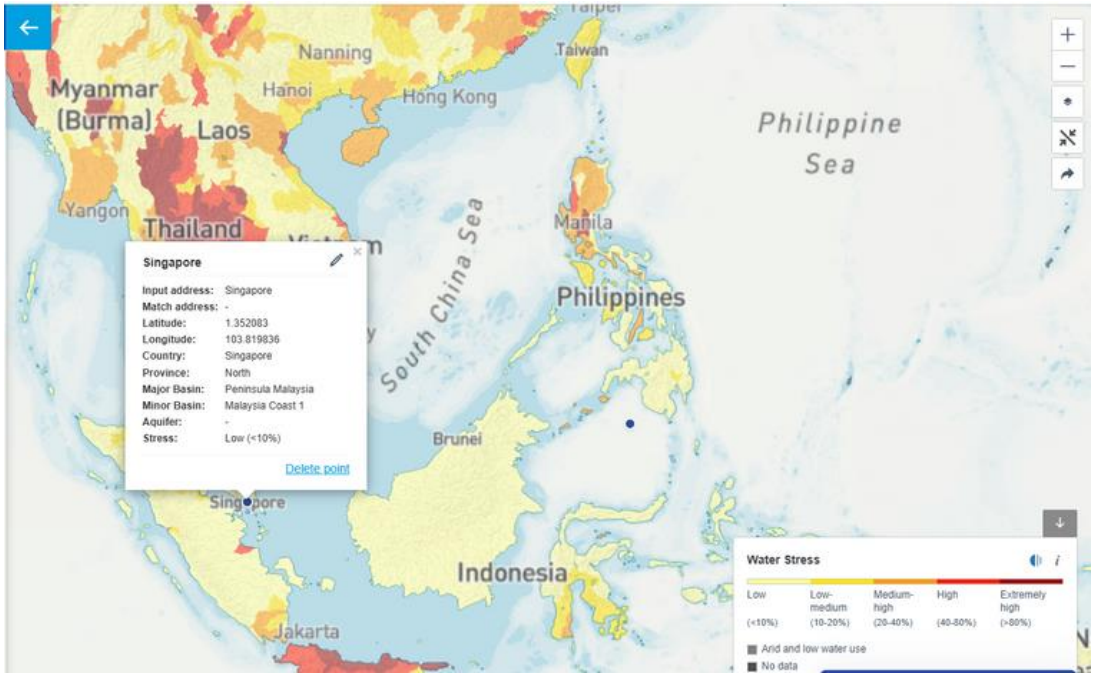
PT. Great Giant Pineapple has 3 suppliers from tier-1 category that supply agricultural commodities (raw sugar and refine sugar) for our canned pineapple products. These suppliers located in:

1. Suppliers are located in Singapore
2. Suppliers are located in Lampung Province, Indonesia

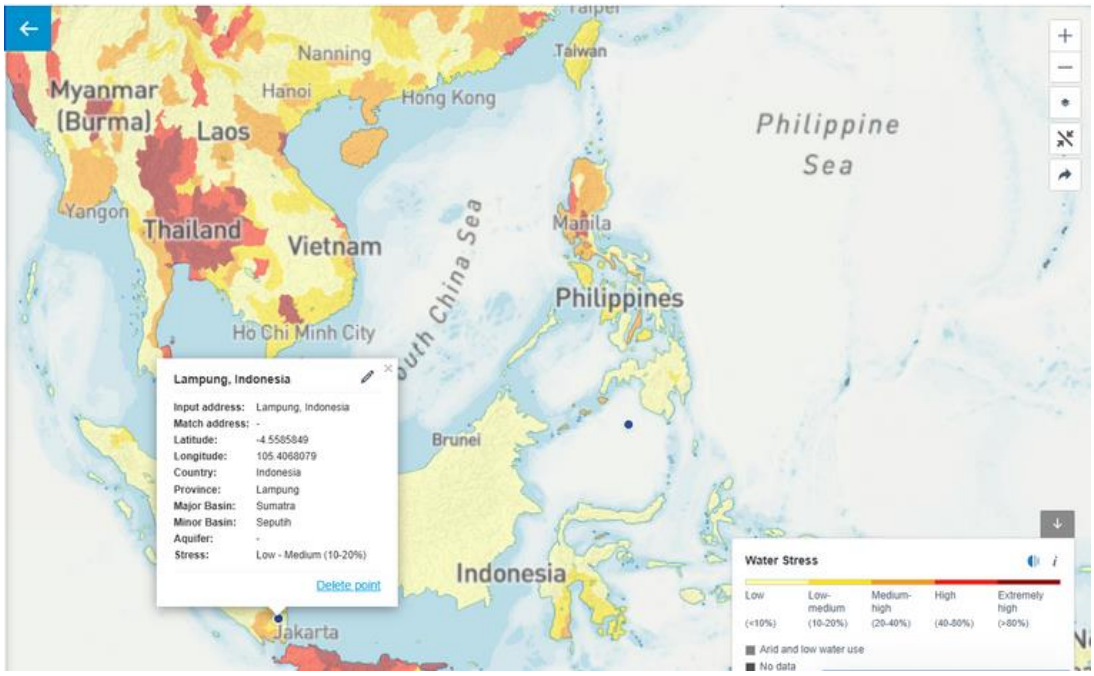
Meanwhile, 100% of our raw materials (fruit) are produced directly from our own plantation in Lampung Province, Indonesia.

Based on Water Risk Atlas that created by World Resource Institute (WRI's Aqueduct Global Water Tool) can be analyzed that our supplier who located in Singapore is categorized as low risk (<10%). For suppliers who located in Lampung Province are categorized as low-medium risk (10-20%). Based on the analysis can be concluded that all of our suppliers are not located in water stress area, so we do not collaborate with our tier-1 suppliers related to water risk.

Agricultural Commodities	% of sourced agricultural commodities originating from water-stressed areas (e.g. <1700 m3/(person*year) or high, very high and severe) (mandatory)
Sugar	0
% of Cost of goods purchased in last FY	0



Picture 1. World Resources Institute Water Risk Atlas (Singapore)



Picture 1. World Resources Institute Water Risk Atlas (Lampung, Indonesia)