

Great Giant Foods



Business Context

Great Giant Foods (GGF) is an integrated group of companies in the agriculture and food sectors owned by the Gunung Sewu Group business group. It has a presence in more than 60 countries and employs over 25 000 people. GGF is a brand entity in fresh fruit products, processed fruit, plant-based, and protein-based product categories, which are marketed under several trademarks. One of its entities, PT Great Giant Pineapple, was founded in 1979 and focuses on pineapple plantations and the pineapple fruit processing industry. It is currently the largest private integrated can pineapple plantation in the world, with a market share of 20-25%. Most of its agricultural and food products are produced on 32,000 hectares of land in Lampung, South Sumatra, and East Java.

GGF has incorporated several circular economy and zero waste practices into its operations, including liquid and solid waste management. GGF's commitment to implementing 'zero waste production' in the value chain is realized through operational excellence. The operations of each GGF business unit are carried out based on a sustainable integrated farming model that applies the three main principles of a circular economy, namely minimizing waste, maintaining the optimal use of products and materials, and regenerating natural systems. GGF's business model prioritizes the utilization of waste and leftover materials for production to be reused and processed into value-added products. The resulting waste will not become waste but rather a resource, an input for further industrial processes within the GGF circular economy ecosystem.

Assessment

WHY? What was the objective of the assessment?

This assessment objective is to minimize the loss value from food loss that goes to landfills and to maximize value creation through integrated upcycling processes.

Therefore it aims to generate positive value and impact from reusing by-products and conducting upcycling processes to create value for the business's value-chain and related communities.

This capital approach provides a fundamental framework for implementing business *operation excellence* to minimize environmental impact, especially from the waste they have. Business dependence and business risk can gradually decrease by applying a circular economy model in our business ecosystem, which includes natural, social, and economic aspects. With the business growing every year, they ensure that every risk that arises can be converted into new opportunities. It allows us to create new sources of revenue, reduce operation costs and strengthen the company's competitive advantage while providing benefits to our partners, community, and consumers.

WHAT? What was the scope of the assessment?

Figure 1 Potential business' dependencies and impacts



GGF has many impacts and dependencies; for example, the dependence on external factors such as climate – affects the products' quality. Their production depends on natural capital through soil health and fertility, water resources (quantity and quality), climate (temperature, rainfall). Some of those issues have already been addressed through the company's continuous improvement initiatives, for example, by applying the concept of regenerative agriculture (soil health improvement and waste use efficiency, natural biocontrol and energy efficiency).

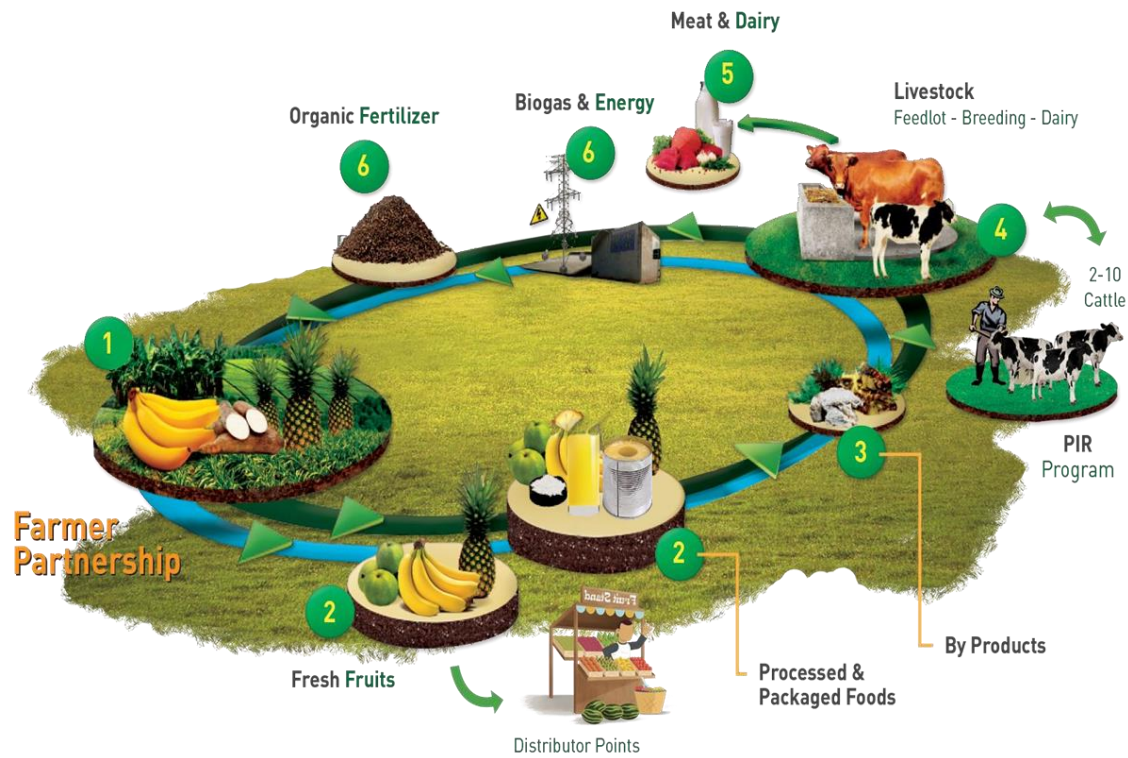
Many impacts drivers and dependencies were identified as potentially relevant (water, energy, knowledge, worker's health, soil use, GHG emission, etc), but after conducting a materiality assessment, food loss and waste circularity were chosen as the most material ones.

Specifically, GGF identified that currently food waste represents a business risk. Fruit that does not meet production standards will divert to the alternative purpose. The impact of food loss will increase landfill and generate potential loss – as products can't be marketed.

With the increase in production capacity and the development of new products, consistency in fulfilling the quality of the waste discharged into the ecosystem is a challenge.

For the assessment scope, the business identified the sources and causes of loss and devised a reduction strategy to transform risks into opportunities. The strategy consists in applying the hierarchy of reduce, reuse, donate food before it arrives to be used as compost.

Figure 2 Circular and integrated GGF ecosystem



The circular economy incorporated in GGF's business provides opportunities to create added value to inefficient processes. This circular concept approach has provided opportunities by creating new business lines in their operations as a waste management unit into value-added products. For example, the food loss issue can make the option to add value to non-utilized fruits through the segregation process. The fruits that still have better quality in this segregation will be processed into other utilizations such as donations and used as raw materials for processing products of small and medium enterprises.

For this reason, after screening all their potential material issues, GGF decided to scope their assessment on **food loss, circular economy** and the positive values generated from their reduction strategy. The anticipated benefits of the assessment are:

- Generate value and results from analyse of impacts can show – in a coherent framework – the cost saving and potential loss.
- It is also a way to monitor their progress toward food loss reduction (in tons and value of unutilized fruits).
- It helps secure operations excellence to minimize fruit loss.

The target audience is the company’s top management, shareholders, and stakeholders regarding the result of the project improvement. External stakeholders, such as the community, also play important roles.

The scope of this capital assessment is carried out in all integrated Great Giant Foods business units operations in Central Lampung Regency, Indonesia, which include:

- Plantations and processed fruit manufacture,
- Tapioca industries,
- Bromelain enzyme industries,
- Dairy and cattle fattening industries.
- Others supporting division

This capital valuation approach focuses on projects the company has implemented and maintained by identifying the value chain from upstream, direct operations to downstream. The measured impact of the project is the creation of new value for the business world, society, and related stakeholders in qualitative, quantitative and monetary terms.

It assesses both impact and dependencies; along with a valuation perspective that encompasses business and societal values.

In this assessment, they re-identified the impacts and opportunities of waste management starting with the baseline of **2021** practices, although several significant initiatives have been created since the company was founded in 1979. The time horizon to complete the assessment and best practices is 2030 but data is constantly monitored.

HOW? What was measured and valued?

They measure the level of value creation from each business model based on a circular economy principle. In this regard, they identify the opportunities and impacts of the integrated business unit value chain. The dominant impact generated is waste or by-products from production as pineapple leaves or manure. The waste used in the assessment consists of food and non-food waste. Waste management is carried out by analyzing the usability of food and non-food waste in a closed-loop system. Internally, this waste can be reused to provide benefits regarding raw material substitution, cost savings or other utilization alternatives that offer a competitive difference. Externally, the efforts made have a valuable impact on the community or partners in terms of increasing welfare and strengthening the economy by creating shared values.

Practically, the metrics used for food loss and waste are the volume of loss value in ton of unallocated food, the loss value and value creation (called income generated) (in Indonesian Rupiah) from cost saving. The metrics used for business circularity are value creation (income Generator and cost saving). Data comes from direct measurement in field studies and from desk assessments.

During the assessment period, GGF has innovated with a green practice approach. Measurement, monitoring, and evaluation of the value creation resulting from the value chain is carried out regularly. They mapped the types of waste and identified the opportunities for innovation that could be generated. Opportunities are assessed by conducting a preliminary analysis, study cost-benefit analysis and field trials. Partnership schemes with the community are also a consideration to have a bigger impact.

WHAT NEXT? What were the results of the assessment?

The assessment results show that the impact of implementing a circular economy in the Company has been achieved by using the capital approach. In terms of waste reduction, Great Giant Food has succeeded in reducing pollution by utilizing pineapple skin waste and cassava waste resulting from production activities. Manure produced from cattle farms provides benefits to generate cost savings in compost raw material source, which is then used to nurture the soil of fruit plantations. The initiative against food loss has also significantly reduced waste disposed of in landfills by utilizing it for alternative purposes through an upcycling process. On the external side, the circular economy system has a real impact on increasing community well-being through empowerment and partnerships. It also contribute to carrying out nutrition interventions for children with products that are nutritious and influence the growth and development of the children being observed. With the ongoing integrated business activities, GGF has also provided employment opportunities for around 30,000 employees, which can indirectly reduce economic inequality and accelerate economic growth in our areas.

In the future, they will continue to innovate to create new opportunities from each value chain, for example, for banana bulk or pineapple fiber. Governance, technology, and resource allocation are challenges to continue providing sustainability as the business grows. In addition, GGF also feels the need for support from all stakeholders to provide more comprehensive benefits from implementing the circular economy.

Learn more about Great Giant Foods [here](#)

Food System Transformation Series



Great Giant Foods Circularity



The assessment results show that the impact of implementing a circular economy in the Company has been massively achieved by using the capital approach. In the future, we will continue to innovate to create new opportunities from each value chain. Governance, technology, and resource allocation are challenges to continue providing sustainability as the business grows

GGF has incorporated several circular economy practices into its operations. The operations of each GGF business unit are carried out based on a sustainable integrated farming model that applies the three main principles of a circular economy; minimizing waste, maintaining the optimal use of products and materials, and regenerating natural systems.

Impact

Key project impacts :

1. Avoiding waste discarded in landfills. Our project has achieved an 84% reduction of food loss that ends up in landfill
2. Generate value creation of up to 57 Bio/year from food loss, including creating value creation for SMEs of 1.6 bio/year
3. Netfoam waste is converted into plastic angle, which generates an added value of up to 0.7 Bio/year

What next?

We measure the level of value creation from each business model based on a circular economy principle. The dominant impact generated is waste or by-products from production. We mapped the types of waste and identified the opportunities for innovation that could be generated. Opportunities are assessed by conducting a preliminary analysis, study cost-benefit analysis, and field trials.

Why?



What?



How?



The scope of this capital assessment is carried out in all integrated Great Giant Foods business unit operations in Central Lampung Regency, Indonesia. This capital valuation approach focuses on projects the Company has implemented and maintained by identifying the upstream and downstream value chain. The measured impact of the project is the creation of new value for the business, society, and related stakeholders.

Assess

In this assessment, we re-identified the impacts and opportunities of waste management starting in 2019

Commit

Business circularity is becoming one of our Sustainability Commitment with a target setting for reducing food loss and increasing value creation from waste

Transform

1. Running operational excellence
2. Generate new business
3. Minimizing environmental impact
4. Improving people's livelihoods

Disclose

We have disclosed our company's performance, project/initiatives, and target through Sustainability Report