



Enabling More People to Eat Well

Harnessing our culinary innovation and technical expertise to provide better, more nutritious food from sustainable sources to improve the health and wellbeing of our communities and ecosystems.

Our Primary Stakeholders

- Customers
- Local Communities
- Shareholders

United Nations' Sustainable Development Goals





PCEO & Board

Statement

Make Balanced Diets Accessible

A balanced diet is essential in promoting overall health. Poor eating habits have been identified as one of the greatest threats to public health worldwide¹. The problem, according to researchers, is not only what we are eating, but also what we choose not to eat.

When it comes to reducing the risks of obesity and undernutrition caused by poor diets², the food industry plays an important role in encouraging and enabling healthy, balanced eating. At SATS, our mission is clear: to make healthy food both accessible and affordable.

In FY2019-20, SATS produced over 165 million meals for our aviation and non-aviation customers. In our kitchens, we continue to use fresh, responsibly sourced ingredients while expanding our search for alternative proteins to meet a growing demand for healthier meal options with a lower impact on the environment. With our expertise in large-batch production of balanced and nutritious meals, our wide distribution network and our goal of enabling more people to eat well, we help to make healthy and balanced diets available to our customers and communities.



- 1. GBD 2017 Diet Collaborators, 'Health effects of dietary risks in 195 countries, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017', The Lancet, 393 (2019), p. 1961.
- The Economist Intelligence Unit, 'Tackling obesity in ASEAN: Prevalence, impact, and guidance on interventions', (2017), p. 1.

Make Balanced Diets Accessible



Providing quality nutrition to all whom we serve

To ensure nutritious meals for all our customers, SATS works closely with our business and government partners to tailor healthy food options that appeal to each specific customer group.

Inflight catering

Our chefs are working in collaboration with our airline partners to put an end to one-size-fits-all inflight meals that have long been the norm in the aviation industry. This year, we have developed three allergen-friendly meals and have launched one with Singapore Airlines (SIA) in an ambient-tray format. In addition to increasing the proportion of healthy ingredients in meals, we are also working towards offering a greater variety of plant-based options, incentivising passengers to make healthier eating choices.

Institutional catering

Through our institutional catering arm, SATS provides quality nutrition to hospitals, corporate canteens and cafeterias, schools and preschools, and the Singapore Armed Forces (SAF). Our catering services to the schools are certified under the Healthier Dining Programme, where we serve wholesome, balanced meals to students that are prepared with healthier ingredients such as whole grains, healthier cooking oil and lower-calorie meals.

Good nutrition is essential to support children's healthy growth and development. To that end, establishing healthy eating habits in their formative years is fundamental. In addition to providing our young customers with nutritious school meals curated by our team of awardwinning chefs, we actively support schools' efforts to promote healthy eating habits.

In March 2020, SATS organised a healthy bento-making workshop for Primary One students from Blangah Rise Primary School. The students were introduced to the components of a healthy and balanced meal, and then taught to prepare their own Rainbow Bentos filled with colourful vegetables. Our recipe was subsequently shared with the parents, enabling them to re-create the healthy bento meal at home with their children during the Circuit Breaker period, when citizens and residents were required to stay home except for essential activities as part of a nationwide response to the COVID-19 pandemic.

At the same time, with a growing silver generation, we want to provide much-needed nourishment to vulnerable elderly, who need the nutrition to support their health and wellness. Recognising the importance of this, our Innovation and Product Development team is developing a new range of puréed meals for those with swallowing difficulties in hospitals. Through innovation, our culinary expertise and the use of the latest food technology, we aim to elevate the development of texture-modified foods (TMF) by designing high-quality meals that are nutritious and palatable to the elderly so as to encourage intake and reduce the risk of malnutrition.

To cater to the taste buds of the silver generation, we are focusing on local hawker dishes, developing healthier variations that meet the nutritional requirements of this group without compromising on the flavours of these local favourites. Some examples include chicken rice, nasi briyani, fish with black bean sauce, 'lor mai kai' (steamed glutinous rice with savoury ingredients), in addition to local desserts such as soybean pudding and black sesame paste.

By developing a wide selection of tasty and nutritious meal options, though puréed, we hope that this will encourage seniors with swallowing



difficulties to develop healthier appetites, avoid menu fatigue and help provide them with a sense of comfort through familiar and well-loved flavours.

In line with our aspirations to make a positive impact on the diet and health of our communities, we have also embarked on developing our first shelf-stable, locally inspired high-protein desserts. From boosting calorie and protein intake to optimising performance and building muscles, to simply fulfilling the desire to eat well, this innovative new range of desserts is designed to meet the needs and dietary preferences of a wider, increasingly health-conscious consumer market segment.

Make Balanced Diets Accessible

Advocating the use of alternative proteins for long-term sustainability

We recognise that the effects of climate change such as extreme weather conditions – severe droughts, floods and torrential rains, present increasing risks to the stability of our supply chains. Growing concern over the substantial carbon footprint and negative impact on biodiversity often associated with industrial agriculture and fishing industries have contributed to greater customer demand for less carbon-intensive food options.

To drive long-term sustainability and serve the needs of increasingly environmentally conscious customers, SATS has been investing in research and development to create innovative and sustainable food solutions, sourcing for alternative proteins and creating recipes that use plant-based ingredients.

In conjunction with Temasek and the Singapore Economic Development Board (EDB), SATS has been exploring food trends in Asia to identify sustainable food products. In November 2019, through our wholly owned subsidiary, Country Foods Pte. Ltd (Country Foods), SATS launched a wide range of plant-based proteins in Asia, comprising meat, seafood and dairy made from soy, peas, mung beans, shiitake mushroom stems, tomatoes and cashews.

A significant milestone in our sustainability journey, this taps on our culinary and technical expertise in food innovation and Country Foods' extensive sourcing and distribution network, to pave the way for new menu possibilities and more widespread availability of alternative proteins to meet growing demand.

Moving forward, SATS will continue to harness our resources and expertise to spearhead food innovation, enabling more people to eat well and eat sustainably.





Make Balanced Diets Accessible

Case Study 1.1

SATS' **Response to** COVID-19



Activating airline catering capabilities to support the surge in demand for non-aviation meals

Within the first few months of 2020, the global pandemic had caused air travel to grind to a halt, forcing airlines around the world to ground their fleets and aviation demand to fall by over 90%.

On the ground, however, there was a surge in demand for freshly cooked and ready-to-eat meals. This was evident at supermarkets as more people stayed home, at hospitals, which saw an onslaught of patients as healthcare workers worked overtime to battle the outbreak, and at migrant worker dormitories where thousands of workers were being quarantined following a series of outbreaks.

Faced with the urgent need to provide nourishment for essential workers and communities affected by the pandemic, we responded quickly. With two large-scale inflight catering centres that can produce up to 120,000 meals a day, state-of-theart food technologies and an agile, highly skilled team with a passion to serve, we knew that we had the responsibility and resources to make a difference.

By harnessing our aviation catering operations to produce non-aviation meals, we utilised our operational capacity and culinary expertise to



do what we do best - create tasty. balanced and nutritious meals that would help to build healthier communities. At the height of the crisis, we were producing 45,000 quality meals a day to meet demand. To serve the needs of the migrant worker communities, in particular, we used steam ovens in addition to our automated rice line, which can cook 600 kg of rice per hour and was running three shifts a day, in order to produce the quantity of rice that they required.

In addition, we have partnered with Temasek Foundation, SIA and community volunteers on the 'Food Support with Love' programme. An initiative by Temasek Foundation, the programme has contributed

more than 100,000 ready-toeat meals and 11.000 snacks to households in need. These contributions will benefit 2,800 households, including seniors living alone and low-income families, for up to four months.

To show our appreciation for the dedication and hard work of healthcare workers at Singapore General Hospital, we also partnered with DBS Bank to provide them with 1,000 meals over two days. Separately, we worked with the Immigration and **Checkpoint Authority of Singapore** to serve meals to the lorry drivers providing essential services at the Singapore-Malaysia Causeway.



Tackle Food and Packaging Waste

By 2050, the amount of global waste generated is expected to increase by 70% from current levels, if left without urgent intervention measures³. In Singapore, in the last 40 years alone, the amount of waste disposed has increased sevenfold⁴.

Last year, the Singapore government rolled out a Zero Waste Masterplan, which includes targets and measures to reduce food and packaging waste. Within the food industry, the need to decrease the amount of food and packaging discarded remains a vital issue. At SATS, combating food waste is a longstanding priority and this year, we will also be stepping up our efforts to reduce packaging waste and develop more sustainable packaging across our operations.

^{3.} Kaza, Silpa, Yao, Lisa C., Bhada-Tata, Perinaz, Van Woerden, Frank, What a Waste 2.0 : A Global Snapshot of Solid Waste Management to 2050. (Washington, DC: World Bank, 2018), p. 3.

^{4.} Ministry of the Environment and Water Resources, 'Zero Waste Masterplan'.

Tackle Food and Packaging Waste



Enhancing food waste management with technology

Earlier, a trial was implemented using a digital food waste management system in our production kitchens to identify the main sources of waste, and areas for improvement along the production chain. Building on this effort, we will work with specialists to institute a food waste data analytics system that uses artificial intelligence (AI) and camera sensors to accurately measure the volumes of our food waste streams in all SATS kitchens.

Working out solutions through collaboration with partners

Part of the food waste generated within our operations stems from overproduction due to the unpredictability of incoming orders and incomplete order information from airlines, as a result of last-minute changes in passenger loads or flight delays. To close this gap, we are working with our logistic partners, such as DHL, to enhance demand planning, as well as develop a system of reverse logistics where unused goods can be transported back to SATS to be reused or disposed of.

Spearheading the development of sustainable packaging

The indiscriminate production and consumption of single-use plastics has become a global public concern. In response, governments worldwide have introduced regulations to curb usage. At the same time, the aviation industry, led by the International Air Transport Association (IATA), is actively looking into decreasing reliance on single-use plastics through efforts to reduce, reuse and recycle cabin waste.

At SATS, the use of packaging is important in order to preserve freshness and maintain the hygiene of our food products. Food packaging does not, however, have to be made of plastic. As part of our journey towards achieving greater sustainability across our business, we are advocating for and supporting plastic-free initiatives within our network, proactively investing in the development of more sustainable food packaging as an alternative to plastic and encouraging a shift in mindset among our staff.



Supporting efforts to go plastic-free in Bengaluru

In October 2019, we issued a ban on single-use plastics across the facility of Air India SATS (AISATS) in Bengaluru, India, in support of Bengaluru's goal to become a plastic-free zone. As part of our efforts to set the benchmark for sustainable operations, we replaced disposable plastic shrink wraps with reusable nylon nets, which are used to cover cargo skids upon acceptance. This enables safe and efficient handling of cargo during x-ray screenings and storage at the AISATS COOLPORT (Bengaluru) facility. Through this initiative, AISATS has achieved substantial cost savings of INR 2.34 million (approximately USD 31,200) per annum.

Investing in technology and innovation to create sustainable solutions

SATS is committed to reducing our reliance on the use of plastics, investing in new technology and innovation to develop sustainable packaging solutions. We recently acquired aviation food innovator Monty's Bakehouse, with whom we will partner to develop sustainable and recyclable food packaging solutions that reduce waste and logistical complexities.

Monty's Bakehouse is a pioneer in sustainable cabin packaging and recycling, and a member of the Airline Sustainability Forum and representative on the Advisory Committee for the Global Tourism Plastics Initiative led by the UN Environment Programme & UNWTO in collaboration with the Ellen MacArthur Foundation. Leveraging Monty's Bakehouse's expertise in sustainable food packaging, we have set a target of achieving 100% sustainable food packaging by 2030 in all operations controlled by SATS.

Developing Packaging Solutions in a Low-touch Economy

In anticipation of the changing face of travel in a post-COVID world, Monty's Bakehouse and SATS are developing a range of product and packaging solutions to support the airline industry in creating a safer and more sustainable journey for passengers.

Guided by early research and insights, client feedback and industry regulations, these low-touch solutions cater for scaled-down meal services across all regions. The intent is to minimise interaction between cabin crew and passengers. With expected reduction in manning levels, the preference is to move towards single-tray meal service with all food components sealed and individually packed for hygiene, and to support various service and distribution models.

Airlines are offered the flexibility to select from a wide range of carefully curated product combinations including Monty's Bakehouse's extended range of new hot handheld snacks and entrees that come in secure and environmentally conscious packaging to provide passengers with choice and peace of mind.

Bento Box



Paper Bag



Runner-loaded Basket



Tackle Food and Packaging Waste

Case Study 1.2

Trial of Zero-waste Ecosystem Solution

In November 2019, SATS partnered the Singapore Institute of Technology (SIT) to conduct a three-week trial programme at one of SIT's campus canteens, iEat Café, which turns food and food packaging waste into fertiliser.

Developed by TRIA, a Singapore-based company that develops sustainable food packaging, the Bio24 programme (https://triabio24.com) is a zero-waste ecosystem solution that turns single-use foodware, packaging, and food waste into farm-ready fertiliser. By replacing the plastics used in single-use foodware with a plant-based material called NEUTRIA, foodservice waste can be streamlined into a single organic waste stream.

This can then be digested by TRIA's patented biodigester, which turns the waste into fertiliser within 24 hours.

The main objective of the trial was to better understand the digestibility of food and packaging waste materials as well as the viability of operational adoption. In addition to iEat Café's operations, about 600 kg of food waste was collected from SATS Inflight Catering Centre (SICC) 1 and successfully digested into compost in order to test the quality of the resultant digestate. By the end of the trial period, iEat Café managed to achieve zero waste on 91.5% of their foodservice by-products by turning food and packaging waste into nutrient-rich compost.



Food waste collected from SICC1



Resultant compost



Rotable waste section where diners have to empty their food waste first before dropping the rotables



Bio24 brown bin with introductory banner. All waste including food waste was disposed of into the bin



Mix of TRIA foodware



Dispensing of digestate after the 24-hour process

Tackle Food and Packaging Waste



Advocating sustainable behaviour among our employees

Sustainability is a holistic approach that determines the way we operate as a business and the choices we make as individuals. To build a corporate culture that promotes sustainability through behavioural change, we regularly communicate our sustainability pillars to our employees through many different platforms to encourage the rethinking of individual consumption patterns in our daily lives.

To promote this shift in mindset and serve as a source of inspiration, SATS has started an initiative to feature 'sustainability champions', individuals who display sustainable and responsible behaviour.

One such champion featured in our internal newsletter was Meng Leyin, a coordinator of our closed-loop plastics recycling programme with Plaslife. Since its inception in September 2019, the programme has enabled SATS to recycle 3,910 kg of our plastic waste materials into new plastic bags and trash bags which were purchased and reused in our production kitchens. Leyin made it her personal mission to ensure the programme's success, going above and beyond her responsibilities to collect plastic samples from the kitchens and encourage colleagues and cleaners to sort the plastics for recycling.

Closed-loop recycling is a process in which post-consumer/commercial waste, such as plastic cling wrap is collected, recycled and used to make new products.



Case Study 1.3

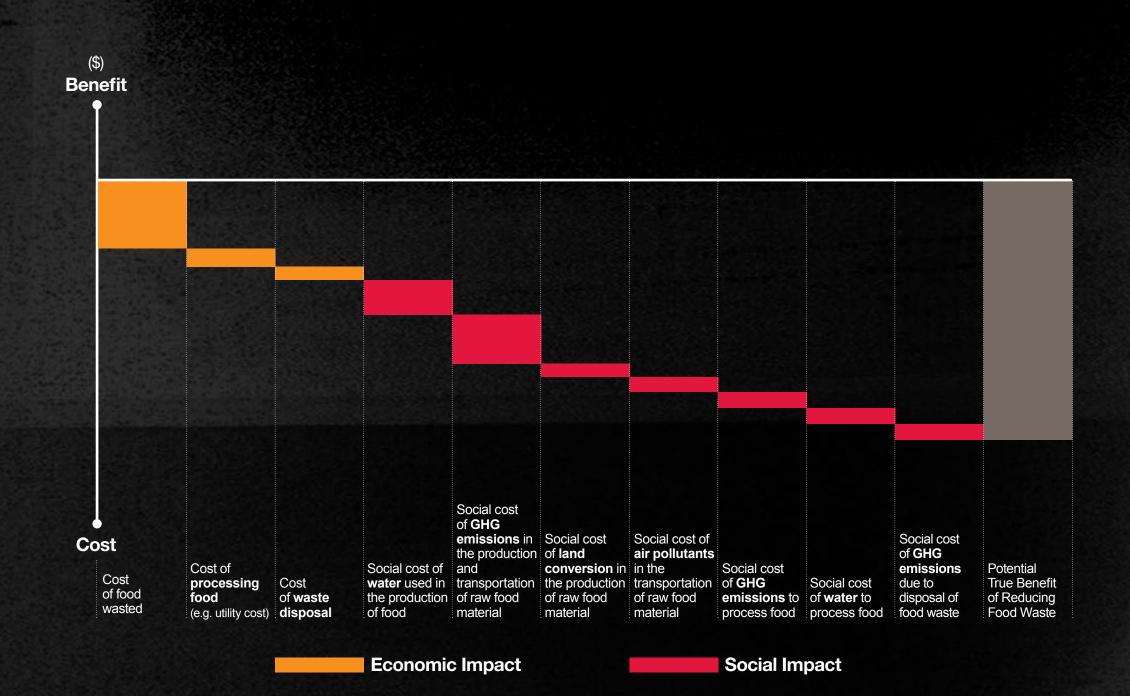
Measuring the True Impact of Food Waste

In 2019, SATS engaged KPMG to conduct a true impact study of SATS' sustainability initiatives, including food waste measurement to reduce food waste. Using KPMG's True Value methodology, the study aims to assign monetary values to the social and environmental impact created by our sustainability initiatives, allowing these impact to be effectively integrated into business decisions alongside conventional financial considerations.

The true cost of our food waste will be calculated by taking into account both the economic impact, such as cost of food wasted, utility and waste disposal, as well as social impact throughout different stages of the value chain. Social impact refer to the social cost of water consumption, greenhouse gas (GHG) and pollutant emissions at different stages of the value chain, including growing, producing, transporting and processing the food.

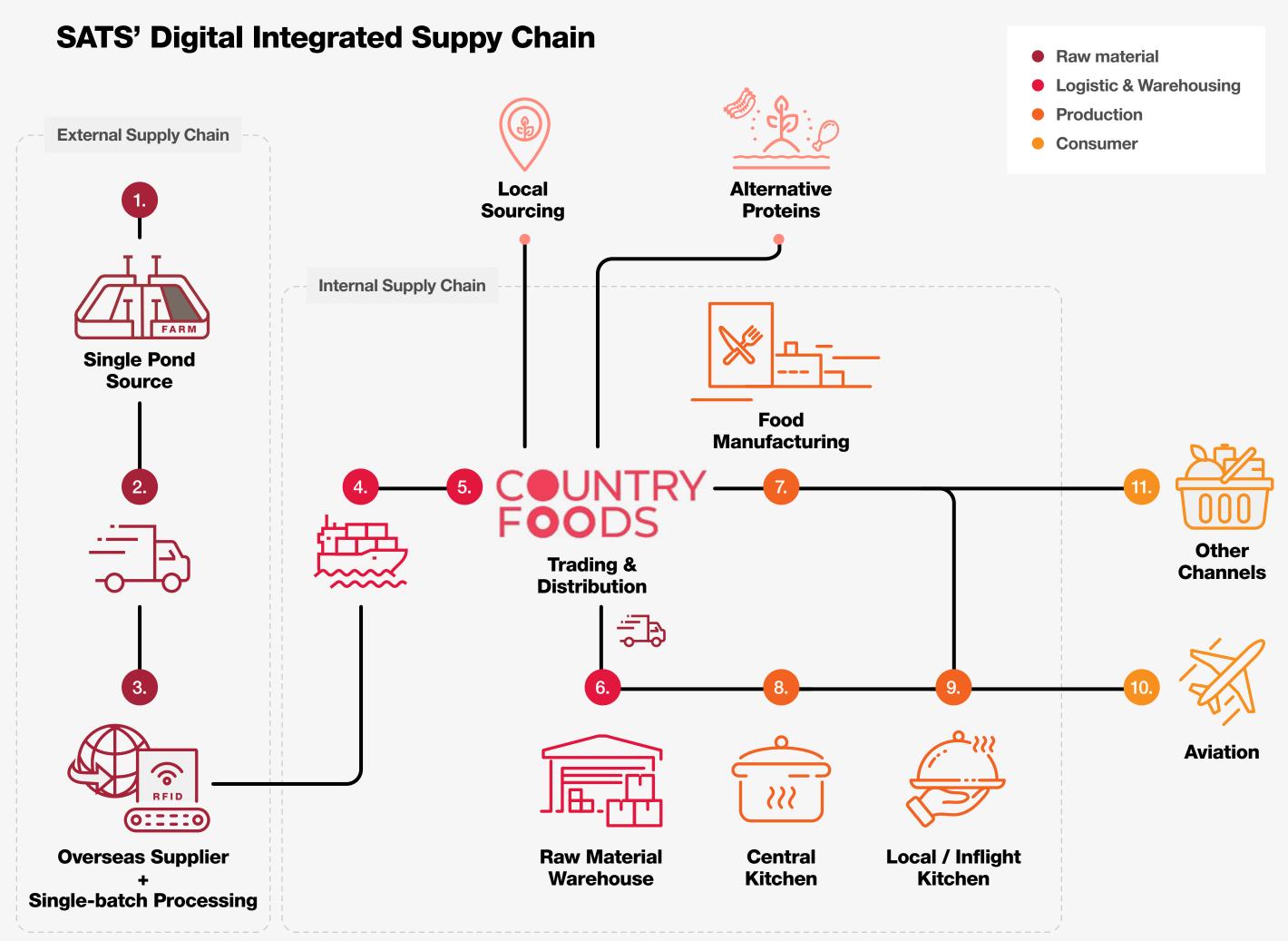
Findings from this study will serve as a baseline for SATS to inform potential initiatives to reduce the impact of our food waste and to prioritise key waste categories requiring intervention. By analysing the varying impact of different types of food waste instead of measuring only the tonnage of food wasted, we will obtain a more comprehensive and holistic view of key issues and areas of opportunity.

The study and its findings will also serve as valuable communication tools to engage key stakeholders, such as our suppliers, customers and employees, on the collective impact of food waste and where we can make a real difference.



Ensure Supply Chain is Sustainable

SATS maintains an extensive and complex supplier network with more than 3,700 suppliers globally. Our suppliers range from local farms to multinational companies. As a major customer and partner, we have the opportunity to raise the bar for sustainability by establishing sustainable practices and production methods while encouraging the businesses we work with to do the same.



Ensure Supply Chain is Sustainable

Building a supply chain that is beneficial to all

We firmly believe that a sustainable supply chain is one that not only benefits our customers and our business' long-term viability, but also supports our suppliers' livelihoods and protects the environment.

Supporting sustainable sources and local suppliers

In line with our sustainability goals, we are committed to increasing our use of sustainable ingredients that comply with regional and industry standards. Since 2017, SATS has been certified according to sustainable sourcing standards such as the Marine Stewardship Council (MSC) consumer-facing organisation (CFO) Multi-site Chain of Custody (CoC) standard (MSC-C-55971) and the Aquaculture Stewardship Council (ASC) CFO Multi-site CoC standard (ASC-C-01503).

This year, we have added Chilean Seabass to the list of MSC-certified fish that are featured in our menu, which already includes MSC- and ASC-certified Hoki, Atlantic cod and Ling fish. For recipes that require the use of beef, we procure five-star grass-fed beef tenderloin produced under the 'True Aussie Beef' label, which is identified by the highest safety standards and quality, sustainable farming and processing methods and a clean trace from farm to fork.

At the same time, we continue to support local businesses and suppliers, sourcing locally for fresh ingredients to create tasty and nutritious meals for our customers. These include locally farmed Barramundi and 60% of our liquid eggs. SATS is also working with local farms to develop sustainable vegetable supplies, produced using vertical farming methods. By supporting local suppliers, we contribute to the communities in which we operate while reducing our operational carbon footprint. In Singapore, about 90% of our procurement was spent on local suppliers⁵.

In addition, SATS is part of the national working group led by Singapore Food Agency (SFA) in the development of 'Clean and Green Standards' for local urban vegetable farms. The working group comprises leading industry players, relevant government agencies and academic plant-health experts. Targeted for launch by the end of 2020, the Clean and Green Standards aim to provide guidance on the certification of urban farms with sustainable production systems. Certified farms potentially benefit from stronger branding of their produce, facilitating market access and enhancing their overall competitiveness.

With our involvement in this initiative and as a major buyer, SATS can help our suppliers, who are local vegetable farmers, to attain Singapore sustainability certification with equally high standards as an alternative to international certifications, which can be costly to apply for and maintain. This not only helps to enhance the branding of local producers, it also encourages the adoption of sustainable practices and paves the way for the industry to offer a wider range of quality sustainable products to businesses and consumers.

Moving forward, we aspire to achieve 100% of high-risk products that are traceable to origin and 100% fish and palm oil originated from sustainable sources, by 2030.

Upholding our Supplier Code of Conduct

To help drive sustainability and advocate for greater responsibility across the industry, we have made sustainable practices a core component of our Supplier Code of Conduct⁶. In addition to specific product and service qualifications, we require our business partners to demonstrate regulatory compliance, business ethics, and accountability to the environment and their employees.

Enhancing visibility and traceability along the supply chain

SATS has invested in a Digital Integrated Supply Chain (DISC) to build our capability in realising full traceability, centralised procurement and distribution. DISC enables data-driven decision making, and thus enhances demand and procurement planning as well as production efficiency. With improved batch traceability and quality assurance integration, DISC assures our customers of the origins of their meals. In addition, the robust supply chain allows quick identification and remediation of root causes of defective products, improving the level of service recovery and product quality that we offer to our customers.

To enhance DISC for airlines, we have collaborated with DHL Supply Chain, a global leader in third-party logistics, to create turnkey solutions that enable airlines to optimise their supply chain for catering, merchandise and supplies across their flight networks. Combining the strengths of both parties, the partnership will create solutions that encompass demand planning, menu customisation and planning, supply chain consultancy and reverse logistics. As a result, we are better able to offer improved inventory planning and forecasting to our airline customers, allowing them to augment the passenger experience with a wider range of F&B offerings and amenities.

In 2019, SATS gained full ownership of our food distribution joint venture, Country Foods, enabling us to centralise procurement and distribution to improve food safety, quality and production efficiency. With this, we can accelerate end-to-end traceability of raw materials for our customers, and deploy data analytics to achieve greater efficiency and quality, while reducing food waste.



- 'Local suppliers' are defined as direct (Tier 1) suppliers that are in the same country as the location of operation.
- 6. SATS' Supplier Code of Conduct is available here.

Ensure Supply Chain is Sustainable

Case Study 1.4

SATS' Response to COVID-19



Photo Credits: Ministry of Trade and Industry

Building supply chain resilience and maintaining trade routes for essential supplies

As the spread of the coronavirus swept across the world, new restrictions and regulations to contain the numbers of infected cases resulted in widespread disruption to international supply chains, contributing to shortages in essential supplies such as food and medical products.

Being a leading gateway services provider in the region, we have a duty to keep supply chains open and connected through the key aviation hubs that we operate. By preventing major disruptions to cargo movement, we helped to ensure that our customers and communities would continue to have access to critical supplies during a time of need, while also protecting and supporting our industry. At the same time, we have also been working to diversify our sourcing network and strengthen Singapore's food supply resilience through close collaboration with SFA.

Our ongoing efforts to build supply chain resilience and strong capabilities in food sourcing, cargo and cold chain operations have enabled us to successfully secure essential proteins such as meat, fish and eggs, as well as medical supplies. In doing so, shelves were kept full to meet the daily needs of the public and essential workers, so that they can focus on helping others get through the crisis.

With the massive suspension of passenger flights, there has been an acute loss of bellyhold cargo capacity and more than half of global airfreight capacity. Yet, the spike in demand for important supplies needed to withstand the effects of a global pandemic, which had to be transported as airfreight cargo, meant that something had to be done.

Working closely with our airline partners, our teams responded readily, working round the clock to provide much-needed support and assistance in converting passenger aircraft into cargo-only flights. In addition to the backbreaking work of lifting cargo through passenger aisles and strapping them securely into passenger seats, we had to develop new safety procedures and guidelines in order for operations to be coordinated and carried out safely and efficiently.



Uphold Food Safety

Food safety is of utmost importance to SATS. Our customers' health and well-being depend on the high quality of the food that we produce, as does our reputation.

Holding ourselves to high standards of food safety

We manage our kitchens in accordance with stringent international guidelines and food safety regulations, including International Flight Services Association's World Food Safety Guidelines, Singapore Food Regulations, SFA's food safety standards, HACCP regulations and the ISO 22000 Food Safety Management System. During the reporting period, SATS continues to maintain high standards of health and safety, recording no significant incidents of noncompliance with regulations resulting in a fine, penalty or warning. In our Food Solutions business, all our products and processes adhere to the ISO 22000 Food Safety Management System, which assesses improvement in health and safety aspects annually.

We are committed to continually improving our level of food quality and safety. We are enhancing food safety policy and standards for our local entities and foreign joint ventures and associates, and embarking on a digitalisation program to enable e-audit, where data is captured digitally for analysis and improvement actions. By 2021, we will upgrade our current ISO 22000:2005 to ISO 22000:2018. The ISO 22000:2018 provides guidelines to strengthen objectives to drive improvement, improve risk management and facilitate better communication of food safety policy.

Providing quality assurance with digitalisation

Key stages in our production process that ensure food safety are known as Critical Control Points (CCP). Our digitalised CCP allows us to monitor CCP in real time, and automatically alerts operations staff in the event of any deviations.

This process significantly reduces human error, enhances data traceability and provides us with a paper-free way to archive records.

