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January 2021
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Future of food

Heating up: Asia's endemic food waste challenge

We explore the Asia consumer sector's exposure to food waste – a topic rising fast up the global sustainability agenda

Shrinking households, internet adoption, new tastes and strict policies are some of the trends forcing companies to adapt

We identify big picture implications, and provide examples of best practice, areas of risk and 15 engagement questions



This is a redacted version of the report published on 12-Jan-21. Please contact your HSBC representative or email AskResearch@hsbc.com for information.

Executive Summary

In 2019, just over a quarter of the global population – two billion people – experienced hunger or did not have regular access to enough nutritious food. Recent estimates suggest that the COVID-19 pandemic will have increased this number by 83-132 million people in 2020 (United Nations). As clarified in a recent report by the UN FAO, the world is far off-track for meeting Sustainable Development Goal targets to end hunger, food insecurity and all forms of malnutrition by 2030.

This is a redacted version of a 36-page report published on 19-Jan-21. The original report is a deep dive by our ESG and Asia Consumer & retails teams into the challenge that food waste presents for Asia. Please contact your HSBC representative or email AskResearch@hsbc.com for information.

Meanwhile, roughly one third of all food produced for human consumption (1.3bn tonnes) is wasted *each year*. And, without any changes to current food waste patterns, the world will need to produce 50% more food by 2050 to meet the demands of a growing population (UN). Under current diet patterns, this would lead to yet more biodiversity loss, rapidly rising greenhouse gas emissions, water use and soil and crop erosion, all of which are outcomes we cannot afford. Minimising food loss and waste, and improving distribution and efficiencies across the entire supply chain is vital if we want to meet rising global food demand. The world has now entered the final decade with which it can hope to meet the UN's Sustainable Development Goals, which include halving food waste per capita and ending hunger, malnutrition and food insecurity, as well as other climate and environmental goals.

Asia faces the extremes of food waste and loss, and food poverty...

This global issue demands a global response, but our report focuses specifically on food waste in Asia. Perhaps no region in the world experiences the contrast of the two extremes of food poverty and food waste quite like Asia does. The highest absolute number of hungry individuals are found in Asia. Meanwhile, food loss rates are greater in Central and Southern Asia than in any other region in the world (Chart 9). We believe Asia is thus at the nexus of efforts to improve food supply chain efficiencies and cut food waste.

...and endemic trends that cannot be ignored

Asia's significant demographic and urbanisation trends cannot be ignored. Shrinking households, rising female participation and the booming internet economy all have dramatic implications for food waste, including via more out of home consumption, altered portion sizing and a growing online grocery economy. An emerging middle class across China, Korea and India are driving trends seen to be consumerist and wasteful: as incomes rise, so too does the propensity to waste. Meanwhile, climate change exacerbated weather events continue to have impacts further up the supply chain: Flooding causing China's 2020 failed rice harvest damaged croplands and infrastructure to the tune of USD21bn. Prudent and sustainability-focused companies operating in the consumer sector must act now to avoid future ESG risks, in our view.

From carrot to stick

If Asia's future shifts aren't reason enough for the sector to act, the emergent policy agenda is sure to be. We believe Korea and China's policies on food waste are some of the most advanced in the region, and perhaps globally. In light of the pandemic, China launched a Clean Plate Campaign in August 2020 to target consumer level food waste. We find evidence to suggest this has changed how some companies operate, including around portion sizing, labelling and marketing. Meanwhile, Korea's extensive food waste data collection programme has recently been extended to businesses, putting pressure on waste reduction higher up the supply chain.

Evidence suggests that food waste is an ESG risk that has gained more attention of late, and will continue to do so as demographic and urbanisation trends continue across Asia. Thus, investors will increasingly have to incorporate these considerations into their investment decisions, in our view. However, this can be challenging. The issue of food waste presents risks across the "E", "S" and "G" of ESG risks, which can demand a response across the entire value chain. Further, as we discuss in this report, data on food waste is hard to find, and often not comparable across companies and countries. This can make quantitative analysis difficult.

Engagement questions for investors

Our report seeks to help investors with this challenge. First, we explore trends that are emerging across Asia, which we expect will shape the way consumers purchase and consume food in future. We break down the supply chain to find examples of best practice and areas of risk among consumer companies. This includes improvements in storage capacity and quality and strengthened supplier relationships and transportation networks at pre retail stages of the supply chain. At the distribution stage, dynamic pricing schemes and the use of data and technology are powerful tools that some consumer goods companies are beginning to adopt to minimise in-store and restaurant waste. We conclude this report with 15 engagement questions that we believe frame our entire analysis, and that investors can use to engage with companies on this important area of sustainability.

We published on ESG risks to the Asian consumer and retail sector as part of our ESG Integrated series in *ESG Integrated: Asia Consumer & Retail*, 10 August 2020. We explored food waste trends in European, CEEMEA and LatAm regions in *Future of food: Retailers tackle waste*, 9 September 2020 and *CEEMEA and LatAm Food Retail*, 24 September 2020.

Areas for investor engagement with companies along the supply chain


Source: HSBC

Engagement questions

Pre retail: sourcing, suppliers, infrastructure and transportation

Storage

- ◆ How has the company assisted suppliers with cold chain storage capacity and quality?

Sourcing

- ◆ Who are the company's main suppliers and how does the relationship work? (eg information about contingency planning with suppliers in the event of crop failure, supporting local sustainable farmers and their infrastructure/processes)

Transportation

- ◆ What materials are used to pack produce as it is transported to distribution sites?
- ◆ What is the average journey length/time for your fresh produce?

Data and technology

- ◆ What initiatives are in place that assist the company with optimisation of produce demand and supply in order to minimise food waste?
- ◆ What level of food waste data is provided and how is it verified? (e.g. is there third party verification, and is the data store level, or inclusive of manufacturing sites?)

Retail stores and restaurants

Dynamic pricing

- ◆ How does the company price products that are close to or at expiry (e.g. discount initiatives or dynamic pricing schemes)?
- ◆ What authority do store managers have for decisions about discounting products that are close to expiry/what efforts have been made to cut red tape in this area?

Distribution to communities

- ◆ What does the company do with in-store food surplus (e.g. donations to the local community via food banks, local charities or hospitality venues)?

Plastic and packaging

- ◆ How is plastic and packaging used to ensure freshness of produce?
- ◆ What sustainable alternatives are used in place of plastic?

End of life

- ◆ What information can be provided about the end of life of food surplus from hospitality/retailers?
- ◆ What information can be provided about the vendors that are used for food waste disposal from retail and hospitality sites?

Households and consumers

Operational

- ◆ Can you explain how your operations are designed to help consumers to minimise food waste (e.g. takeaway options and half portions – and equally watch out for operations that encourage waste such as free returns of fresh produce for appearance reasons)

Consumer education

- ◆ What changes have been made to produce labelling that relate to food waste (e.g. around best before dates and providing detailed produce information to consumers)

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