Sustainability

Context

Considering the urgent need to act to prevent and limit global heating, there is increasing pressure on the food sector to play a role. The global food system is a significant contributor to annual greenhouse gas emissions (GHG), with estimates ranging from between 21-37%,[160] up to 23-42% of global GHG.[161] Without swift and robust action, current trends indicate that planetary heating and its environmental impacts will worsen. Environmental health and human health are inextricably linked, with climate change posing a threat to crop yields, dietary diversity, and nutrient bioavailability, among other key factors. It is therefore important for stakeholders to adopt a food system approach that can ensure positive outcomes for both nutrition and climate, to ensure sustainable solutions for the supply of healthy food.[162]

Global heating is by definition an international issue, requiring comprehensive action by all stakeholders. Nonetheless, action at the national (and sub-national) level is crucial for driving concrete progress. In 2021, India emitted 3.9 billion MT of carbon dioxide equivalent (GtCO2e), making it the world's third-largest emitter of greenhouse gases, behind China and the U.S.[163] The Indian agriculture sector alone is responsible for 741.9 million tonnes of GHG emissions, without considering the additional emissions created by processing, transport, and waste down the value chain.[164]

Private sector actors have a key role to play in aligning with Paris Agreement goals of limiting climate change well below 2 degrees, preferably in line with a 1.5C trajectory. Additionally, proactive voluntary action by companies in this area sets them ahead of potential future regulatory action in this space, while helping to mitigate the risks that climate change poses to their own business. Companies can reduce their greenhouse gas emissions across multiple levels, which are commonly referred to as Scope 1, 2, and 3:

- Scope 1 emissions refers to the emissions produced from sources that an organization owns or controls directly, such as vehicles or processing plants;
- Scope 2 emissions are those caused indirectly by a company, relating to the energy used by the company for their operations, such as the energy to power warehouses or manufacturing processes;
- Scope 3 refers to emissions that the company is indirectly responsible for across its value chain, including waste disposal, transportation, investments, and commuting, among others. Due to covering the wider value chain, it is unsurprising that Scope 3 constitutes the vast majority of food manufacturers' emissions, with recent estimates calculating Scope 3 emissions being 90-95% of overall emissions.[165]

Another area in which companies can drive more sustainable practices and improve access to nutrition is through reducing food loss and waste. The major contributors to this phenomenon include: processing waste, lack of cold-storage facilities, contamination, improper packaging, transportation losses, and excess inventory from poor forecasts.[166] Food that is discarded results in the processes involved in its production, including growing, transportation, processing and handling all being wasted. Food waste is responsible for about half of global GHG emissions from the food system, and 8-10% of total global GHGs.[167] Furthermore, FLW is detrimental to food security, and action by companies in this area can therefore support their efforts to drive greater accessibility of nutritious products across the population.[168,169]

In addition to acting on GHG (scope 1,2,3) emissions and FLW, a key area for companies to act is reducing plastic use, and transitioning to sustainable forms of packaging. On July 1, 2022, the Indian government enacted a ban on single-use plastics, which accounted for 43% of plastic waste generated in India. Each year, India generates 15 million tons of plastic waste, but at present only one fourth is recycled.[170] In addition to the ban on single-use plastics, in September 2021, the Confederation of Indian Industry (CII) and WWF India launched the India Plastics Pact, a collaborative initiative across business, government, and NGOs to reduce plastic waste. This includes ambitious 2030 targets to: identify and take measures to address unnecessary or problematic plastic packaging, make plastic packaging 100% reusable or recyclable, 50% of plastic packaging to be effectively recycled, and 25% average recycled content across all plastic packaging.[171]

Methodology

Indicators for this assessment are adapted from the World Benchmarking Alliance's (WBA) Food and Agriculture Benchmark. Further information can be found here: Methodology for the 2023 Food and Agriculture Benchmark (worldbenchmarkingalliance.org). For the purposes of this Index, this category is unscored and for information only.

Key Findings

- Multinational companies often have data and targets at the global level, but in most cases not for India specifically.
- Scope 1, 2, and especially 3 emission reduction, and food loss & waste (FLW) do not appear to be on the radar of most food companies, and those that do show only limited activity in India.
- Plastic use reduction and transitioning to sustainable forms of packaging appears to be the most active area for companies, with almost all companies demonstrating evidence of targets or activities in this space. This likely reflects the need for companies to comply with Indian plastic waste regulations.
- There is considerable variation in how companies conceptualize and define 'more sustainable packaging'. More robust definitions and criteria are needed to ensure meaningful corporate progress in this area.

Detailed findings

Do companies have India-specific Scope 1,2, and 3 targets and reporting?

Seven companies (PepsiCo India, Hindustan Unilever, Coca-Cola India, Marico, ITC, Mondelēz India, Nestlé India) make reference to Scope emission targets. The form and scope of these targets provided by companies varied in a number of key ways:

- Some targets set percentage emission reductions from a baseline year, while others set a future commitment to achieve net zero.

- Some targets commit to absolute emission reductions, while others commit to relative emission reductions.
- Some targets are set for scope 1 & 2, while others are set for scope 3. Some companies also use an end-to-end target covering all three scope levels. While end-to-end targets are useful for gaining a total view of the company's emissions, it would also be beneficial to have scope-specific targets, that offer a greater level of detail.
- Some targets are set at the global level, while others are India-specific.

Some multinational companies referred to targets at the global level, in some cases stating and reporting that these were also applicable to India specifically. Only ITC and Marico showed evidence of India-specific targets. While it is understandable that companies who operate in multiple countries may set targets that cover their global operations, for effective monitoring and progress, it is important that companies set targets and measure emissions at the national level, in each market they operate in. This is especially the case for major economies such as India.

Company scope emission targets

Company name	Scope	Baseline year	Target year	Target level/% decrease	India specific/ Global
PepsiCo India	1,2	2015	2030	Reduce by 75% from direct operations	Global
	3	2015	2030	Reduce by 40% across value chain	Global
	1,2,3	n/a	2040	Achieve net-zero	Global
Hindustan Unilever	1,2	2015	2025	Reduce scope 1 and 2 emissions by 70%	Global
	1,2	2015	2030	Reduce scope 1 and 2 emissions by 100%	Global
	1,2,3	n/a	2039	Achieve net zero emissions across scope 1,2,3	Global
Coca-Cola India	1,2,3	2015	2030	Reduce absolute emissions by 25%	Global
	1,2,3	n/a	2050	Achieve net zero emissions	Global
Marico	1,2	2013	2030	Reduce scope 1 and 2 emissions by 93%, and offset remaining 7% through sequestration and carbon offset	India specific
	1,2	2013	2022	Reduce absolute GHG emission intensity by 75%	India Specific
	1,2,3	n/a	2040	Achieve net zero emissions in global operations	Global
	1,2,3	n/a	2030	Achieve net zero emissions in India operations	India specific
ITC	1,2	2018-19	2030	Achieve 50% reduction in specific GHG emissions	India specific
Mondelēz India	1,2,3	2018	2025	Reducing absolute end-to-end greenhouse gas emissions by 10%	Global
	1,2,3	n/a	2050	Achieve net zero across full value chain	Global
Nestlé India	1,2,3	2018	2050	Achieve net zero	Global
	1,2,3	2018	2025	Reduce emissions by 20%	Global
	1,2,3	2018	2030	Reduce emissions by 50%	Global

Unilever, Adani Wilmar, ITC, and Nestlé reported India-specific changes in their scope 1 and 2 emissions. Of these, Hindustan Unilever, Adani Wilmar and Nestlé India showed evidence of quantitative reductions for its Scope 1 and/or 2 emissions from the previous year. However, some companies who did not show a reduction from the previous year did show a longer-term decrease in emissions.

While a number of companies provided evidence of Scope 3 emission targets and quantitative reductions at the global level, no companies demonstrated evidence of India-specific targets or quantitative reductions for Scope 3 emissions.

Are companies' scope 1,2 and 3 GHG emissions aligned with a 1.5°C trajectory?

To limit the effects of climate change, the Paris Agreement (adopted in 2015) set a long-term goal to keep mean global temperature increases to well below 2°C above pre-industrial levels, and preferably below 1.5°C. To stay below 1.5°C, a 50% reduction in emissions would be required by 2030. Given the outsize role companies play in contributing to global heating, it is important that they set 1.5°C targets for their operations. To track company action in this area, the Science Based Target initiative (SBTi) have a dashboard showing which companies have set science-based targets. For assessing companies following WBA's approach (see box on Methodology), only companies who were identified on this dashboard were eligible to be identified as in line with a 1.5°C trajectory.

While a number of companies provided evidence to prove their emissions reduction activity was in line with a 1.5C trajectory, only PepsiCo, Unilever, and Nestlé were found to be recognized by SBTI as aligned with a 1.5C trajectory, and these were only recognized at the global level, rather than specifically for the India-specific division. Some other companies, namely: Coca-Cola and Mondelēz were found to be aligned with a less stringent 2.0C trajectory, or 'well below 2.0C'.

In what form do companies publicly report emission reductions?

It is important that companies provide clear evidence that they are reducing their Scope 1, 2, and 3 emissions from current levels. This should be quantitative evidence of absolute reductions, regardless of the company's plans for future business growth. However, a considerable number of companies reported on GHG reduction activity in terms of 'emissions intensity'. Emissions intensity targets should only be set if they clearly lead to an absolute emissions reduction. Companies should look to adopt stronger and more transparent metrics for measurement, that clearly demonstrate an absolute reduction in emissions relative to a baseline date and in line with 1.5C trajectory.

In addition to reporting on Scope 1, 2, and 3 emissions, it is also beneficial to have more granular data, including emissions data for sub-categories within these. This is especially relevant for Scope 3, and for listing the main categories of emissions sources. Marico and ITC were the only companies found to provide data on the emissions produced by various categories in its Scope 3 assessment, such as transportation of raw materials, products and wastes, employee commuting, business travel, third-party manufacturers, associate companies, etc.

Some companies also reported shifting to or investing in renewable energy sources. For instance, KMF Nandini, Mother Dairy, Agro Tech Foods, Coca Cola, Heritage Foods all stated that they have invested in solar energy technologies, such as to power parts of their manufacturing and production processes. In addition, companies mentioned supporting activities such as installing more energy efficient components in their manufacturing units. While these may indeed contribute to emissions reductions, companies should ensure that any such examples are also accompanied with quantitative data showing clear quantitative emission reductions over time, including from the previous year.

What approaches do companies have for preventing food loss and waste?

Companies provided a range of different approaches they are taking to reduce FLW. For example, Dabur stated that they introduced 'Waste Food Bio-Composters' and 'Vermicomposting' in manufacturing locations, Hindustan Unilever mentioned product innovation to extend shelf life and converting food waste into animal feed, and Coca Cola India and ITC mentioned partnering with farmers and suppliers to improve crop productivity and efficiency and reducing wastage at the distribution end. However, in a number of cases company approaches were lacking in concrete information on the extent of the activity, as well as quantitative information showing that they were measuring reductions in FLW.

The only companies to have India-specific targets to reduce FLW across their own operations were: PepsiCo, Hindustan Unilever, and ITC. Hindustan Unilever have a target to halve food waste generated in its operations by 2025 (versus 2019 baseline), and state that they use the Global Food Loss and Waste Standard to guide their methodology for accounting and reporting on food loss and waste in their manufacturing operations. Meanwhile, ITC state that they are aligned with the SDG 12.3 goal of reducing food loss and waste by 50% by 2030, and that they have an interim target to reduce food loss and waste intensity (waste per tonne of production) by 30% by 2027-28 (from 2018-19 baseline).

As with GHG emissions reporting, a number of multinationals only provided information at the global level, including data on total food waste generated in manufacturing sites, and percentage food waste reduction in manufacturing and distribution over time. While this is beneficial for providing an overview of the company's operations, India-specific information would have been preferable.

Do companies have clear, and consistent ways of defining more sustainable packaging?

Reducing plastic use and transitioning to sustainable alternatives are important actions companies should undertake to minimize their environmental impact, as well as reducing their reliance on non-renewable energy sources. However, there is no standard definition of 'sustainable packing', and companies provided a range of different ways of understanding and defining it.

This includes:

- Reducing quantity of plastic use
  - For instance, reducing the size or weight of packaging, removing trays or bags from packaging, using paper-based alternatives.
- Increased use of recycled and/or reusable packaging, and reduced use of virgin plastic
  - Some companies gave example of piloting reuse and refill stations, to support consumers in reusing packaging.
- Designing packaging to be recoverable, recyclable, or compostable/bio-degradable.
  - This may include: moving from PVC to PET for packaging
- Becoming 'plastic waste positive'/ 'plastic waste neutral' – collecting, processing and recycling more plastic than it sells each year.
  - Some companies mention to aiming for plastic waste neutrality or beyond, collecting and managing more waste than they produce (PepsiCO, Dabur, ITC, Coca Cola, Mother Sairy, Nestlé) . For instance, Dabur states they are 'plastic waste positive', collecting processing recycling more plastic waste than it sells in its product packaging in a year.

In view of such wide variation in perceptions of what constitutes sustainable packaging practices, it is important that companies demonstrate that their packaging choices are evidence-based and

correspond with clear quantitative sustainability outcomes from such actions, such as reductions in metric tonnes of virgin plastic used per year.

Recommendations for companies

- Companies are strongly encouraged to track their emissions in India, not only in Scopes 1 and 2, but also across their wider value chain (Scope 3).
- Companies are recommended to set clear targets to reduce GHG emissions across each of these Scopes that are aligned with the Paris Agreement's 1.5'C trajectory, and report quantitatively on progress. These targets (and reporting) should be for absolute reductions against a baseline, rather than relative emissions (i.e. 'emissions intensity').
- Companies are encouraged to work with their value chain partners to reduce both FLW and plastic use. This should go beyond requirements set out in mandatory waste management regulations.
- Companies are encouraged to ensure that their efforts to transition to sustainable forms of packaging in India are evidence-based, and correspond with clear quantitative sustainability outcomes.

References for Sustainability

[160] Daniela J. Schulman, Alexis H. Bateman, and Suzanne Greene, "Supply Chains (Scope 3) toward Sustainable Food Systems: An Analysis of Food & Beverage Processing Corporate Greenhouse Gas Emissions Disclosure," *Cleaner Production Letters* 1 (December 2021): 3, https://www.sciencedirect.com/science/article/pii/S2666791621000026.
[161] Kerry Stewart et.al, "Changes in Greenhouse Gas Emissions from Food Supply in the United Kingdom," *Journal of Cleaner Production* 410, no. 15 (July 15, 2023), https://www.sciencedirect.com/science/article/pii/S0959652623014312.
[162] Siemen van Berkum, Just Dengerink, and Ruerd Ruben, "The Food Systems Approach: Sustainable Solutions for a Sufficient Supply of Healthy Food" (Wageningen University, 2018), https://library.wur.nl/WebQuery/wurpubs/538076.
[163] Ian Tiseo, "Emissions in India - Statistics & Facts" (Statista, May 5, 2023), https://www.statista.com/topics/8881/emissions-in-india/#topicOverview.
[164] Hannah Ritchie and Max Roser, "India: CO2 Country Profile," *Our World in Data* (blog), 2020, https://ourworldindata.org/co2/country/india#total-greenhouse-gas-emissions-how-much-does-the-average-person-emit-where-do-emissions-come-from.
[165] Dean Best, "The Challenges Facing Food Manufacturers on Scope 3 Emissions," *Just Food*, February 11, 2022, https://www.just-food.com/features/the-challenges-facing-food-manufacturers-on-scope-3-emissions/?cf-view.
[166] Effie Papargyropoulou, "The Food Waste Hierarchy as a Framework for the Management of Food Surplus and Food Waste," *Journal of Cleaner Production* 76, no. 1 (August 1, 2014), https://www.sciencedirect.com/science/article/abs/pii/S0959652614003680.
[167] "Food Wastage Footprint & Climate Change" (Food and Agriculture Organization), accessed November 19, 2023, https://www.fao.org/3/bb144e/bb144e.pdf.
[168] "UNEP Food Waste Index Report 2021" (United Nations Environment Programme, March 4, 2021), https://www.unep.org/resources/report/unep-food-waste-index-report-2021.
[169] Marijke Kuiper and Hao David Cui, "Using Food Loss Reduction to Reach Food Security and Environmental Objectives – A Search for Promising Leverage Points," *Food Policy* 98 (January 2021), https://www.sciencedirect.com/science/article/pii/S0306919220301196.
[170] "PLASTIC WASTE MANAGEMENT," *UNDP India* (blog), 2023, https://www.undp.org/india/projects/plastic-waste-management.
[171] "India Plastics Pact," *India Plastics Pact* (blog), 2021, https://www.indiaplasticspact.org/.