Future Fit Food and Agriculture: The financial implications of mitigating agriculture and land use change emissions for businesses (Report 2/2)

A report by the Food and Land Use Coalition, We Mean Business Coalition and the World Business Council for Sustainable Development, published on March 26, 2024

Key messages

Top line messages

- Companies are responsible for three quarters of greenhouse gas (GHG) emissions from food systems, driven mainly by agricultural production and land-use change in their value chains.
- Food and agriculture companies are increasingly using voluntary standards to develop climate and nature strategies. But the sector is failing to make sufficient progress, with food system emissions set to rise between now and 2030.
- Policymakers are more frequently mandating action from companies on climate and nature, using
 existing voluntary standards as the basis for new sustainability legislation.
- Analysis from this report estimates that, to mitigate 90% of agriculture and land-use change emissions
 in food sector value chains, food and agriculture companies should expect sector-wide costs and
 investments of approximately USD \$205 billion per year (2025-2030).
- While significant, these costs are manageable for the sector **as a whole as they represent less than**2% of total food sector revenues and come with co-benefits:
 - Approximately one fifth of these costs are actually investments in new and growing markets,
 which could lead to potential additional returns of up to USD \$190 billion per year by 2030
 - Some on-farm solutions provide savings of up to USD \$30 billion per year
 - They deliver other critical co-benefits, such as more resilient supply chains and helping to meet nature targets
- However, the burden of implementing these mitigation solutions does not fall equitably across value chains, nor will the benefits of implementation be shared by all.
- A critical challenge is that these costs are currently projected to land most heavily on farmers, who are the least able to pay despite being central to the sector's shift to net-zero
- Overcoming this inequity requires companies to reassess how they partner with actors in the value chain, particularly farmers, and how they engage with policymakers to incentivize and accelerate action.

Environmental and social context

- Food systems are major contributors to the climate and nature crises. They contribute approximately one third of total GHG emissions annually, are the largest drivers of biodiversity loss and account for approximately 70% of freshwater withdrawals globally.
- Emissions from food systems are projected to grow to 21 GtCO2e (gigatons of equivalent carbon dioxide) per year by 2030.
- No less than ~75% of this total (16 GtCO2e) sit within the value chains of food and agriculture companies and come mostly from agricultural production and associated land use change.
- While food systems are a primary driver of the climate crisis, they are increasingly recognized as critical to the solution. Land-based mitigation strategies can contribute over a third of the mitigation potential needed to achieve the Paris Agreement's goal to limit global warming to 1.5°C.

Regulatory and political context

- In the last five years, companies have increasingly made voluntary climate and nature commitments, using a growing number of standards and frameworks that help them set sustainability targets.
 - o For example: more than 400 companies in the Agriculture, Forestry and Other Land Use (AFOLU) sector have set, or committed to set, approved emissions reduction targets with the Science Based Targets initiative (SBTi) as of November 2023.

 Policymakers are increasingly considering and introducing legislation that mandates food and agriculture companies to set, deliver and report against more ambitious climate and nature strategies.

The financial case for companies to invest in the transformation of their value chains

- Analysis from this report estimates that, to mitigate up to 90% of their annual agricultural and landuse change emissions by 2030, food and agriculture companies should expect sector-wide costs of approximately USD \$205 billion per year (2025-2030).
- Such costs are significant, but manageable for the food sector as a whole, and in many cases, provide associated co-benefits:
 - USD \$205 billion per year represents less than 2% of the food sector's projected USD \$13 trillion average annual revenues for 2025-2030
 - One-fifth of the expected additional USD \$205 billion per year are investments in new and growing markets. These investments, estimated to be USD \$40 billion per year (average annual from 2025-2030), could lead to potential additional returns of USD \$190 billion per year by 2030.
 - Some on-farm solutions provide savings and/or increased yields worth up to USD \$30 billion per year.
 - They deliver other critical co-benefits, such as more resilient supply chains and helping to meet nature targets
- As new climate and nature policies are adopted by legislators to accelerate the food sector's transition to net zero, companies that adopt mitigation solutions early will likely face fewer disruptions and avoid financial penalties from non-compliance.

Recommendations for companies

In order to develop and implement credible climate and nature strategies, companies should urgently:

- Assess their emissions, including 'Scope 1' GHG emissions, which they directly own or control, as well
 as 'Scope 2' and 'Scope 3' emissions, which are indirect (e.g., from agricultural production and
 land-use change) but account for a significant proportion of their total emissions;
- Commit to transparent, time-bound, science-based targets;
- Transform how they and their suppliers produce commodities and products to minimize impact on climate and nature;
- Publicly disclose risks, impacts, dependencies and other relevant climate- and nature-related information;
- Work with farmers to alleviate some of the costs and risks that they face when implementing climate mitigation and nature protection solutions
- Collaborate with actors throughout the value chain to determine transition economics and arrive at a transparent, fair and equitable distribution of costs and benefits.
- Make more unified policy asks to government on what it can do to alleviate the costs for all and enable acceleration

Distribution of costs, savings and risks across the value chain

- Currently, farmers are responsible for implementing many of the on-farm and nature protection solutions outlined in Future Fit Food and Agriculture report 2. They carry most of the risks inherent in changing agricultural practices, including learning new skills and practices, and investing in and establishing new infrastructure.
- As it currently stands, they also see few benefits in taking these risks (benefits could include better contracts from big buyers, more income/revenues, better access to new markets).
- Of all the actors in the food sector, farmers are often the least able to pay for the changes that are needed. They usually operate on the smallest margins and profit the least from the global food system.
- This report outlines that, at up to 17% of revenues, the cost of mitigating only 30% of agricultural emissions for a large-scale beef farm in Brazil could trigger farm insolvency. By contrast, if companies further down the value chain absorb the cost of mitigating this 30% of agricultural emissions which count towards their Scope 3 emissions the costs represent a much smaller proportion of their

- revenues: 3% of revenues for an archetypal meat trader and less than 1% for an archetypal multinational food company.
- Therefore, companies in the food sector need to work directly with farmers and governments to
 understand the costs and benefits of the transition and create transparency on the relative ability of
 different actors to contribute to the costs and share in the benefits. Unless some of the costs and risks
 associated with the transition can be alleviated for farmers, companies will struggle to meet their
 own climate and nature commitments.

Calls to action for policymakers

Policymakers have a vital role to play in advancing the food and agriculture sector's transition to net zero. They should incentivize climate mitigation and make these costs more manageable by:

- Incentivizing sustainable practices and derisk the transition through agricultural subsidies
- Implementing carbon pricing mechanisms and emissions trading schemes
- Implementing payments for other ecosystem services (PES) schemes
- Aligning public procurement policies with sustainable, healthy foods

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