



The agriculture and food sectors were finally addressed at the December 2023 COP28 event. These industries have historically largely been absent from United Nations (UN) climate summits despite the fact that they drive one-third of global greenhouse gas emissions and that essential food systems are particularly vulnerable to climate change. The Dubai event recognized that agriculture and food systems and security need to be focal points of the climate effort.

NOTABLE OUTCOMES INCLUDE:

- The endorsement of the [COP28 UAE Declaration on Sustainable Agriculture, Resilient Food Systems, and Climate Action](#) by 159 nations. The Declaration commits to scaling up adaptation and resilience for farmers, fishers, and food producers, to promoting food security and nutrition, and to supporting workers in maintaining inclusive, decent work. It calls for integrated management of water, higher productivity in conjunction with fewer harmful impacts, reductions in food loss and waste, and more of a focus on sustainable aquatic 'blue foods'. The intent is also to boost all forms of finance in food systems. While the Declaration is not legally binding, it does send a powerful message regarding the link between agriculture, food, and climate.
- The first-ever [Global Stocktake](#) included food as a critical component in the response to climate change, citing a need for climate-resilient food and agriculture production; however, references to these sectors were focused on adaptation and there was no explicit reference in the mitigation section.
- The Alliance of Champions for Food Systems Transformation (ACF) was announced, with Norway, Brazil, Sierra Leone, Rwanda, and Cambodia setting a 'north star' for the implementation of sustainable food systems along [ten priority intervention areas](#).
- The Food and Agriculture Organization of the UN (FAO) released [a roadmap](#) for transforming food systems to limit global temperature rise to 1.5 degrees, similar to the Energy Information Administration (EIA) roadmap for the energy sector. It includes boosting yields, reducing GHG emissions and food loss and waste, and shifting diets away from meat.
- Non-state players, e.g., companies, cities, farmers, committed to act on food systems, notably [sourcing sustainably produced commodities](#) from 160 million hectares of land.
- More financial support was promised, from sources such as the UAE, Bezos Earth Fund, Bill and Melinda Gates Foundation. Food sector-based climate solutions currently receive only 3% of public climate finance.

While COP28 did not go as far as many sustainability advocates would have liked on the agriculture and food front, the sense on the ground was that food systems were higher profile than ever. The omission of food system transformation and emissions from the final Stocktake mitigation text was one of the biggest criticisms, including acknowledgement of the link between food systems and fossil fuels, and the need to reduce dependence on both the latter and ag subsidies.

Another concern was the overrepresentation of corporate interests and big agriculture lobbyists (three times more agribusinesses were present vs. the last year). Major corporates announced numerous initiatives, e.g., Danone, Nestle, General Mills, and Kraft's Dairy Methane Action Alliance, the First Movers Coalition for Food, and procurement commitments to de-risk investment in more sustainable food systems. The intentions and interests of some industry groups was called into question, e.g., there was a session titled, "How Animal Sourced Food Nourishes the World in Times of Climate Change". Fund announcements included the UAE's \$30b Alterra fund devoted to emerging markets-focused climate funds, and Climate Fund Managers GAIA blended debt vehicle, which was created by FinDev Canada and Mitsubishi UFJ Financial Group (MUFG), and which seeks \$1.5b to support climate adaptation investments in ag, water, and infra.

Overall, COP28's ag and food agenda will be challenging to pull off, as there is not yet an agreed framework to measure, monitor, and validate investment in regenerative ag and sustainable food systems, and it will take years to develop one. It also remains to be seen whether countries will reform their policy and subsidy regimes to deliver on commitments, whether signatories to the Declaration will incorporate food and land use into their next Nationally Determined Contributions (NDCs) and whether updated ones will drive measurable progress. Outside of the public sector, will companies stick to their sustainable sourcing promises and will these be under the same level of scrutiny as net zero commitments? And will private sector capital find financially attractive opportunities, or will the majority of resolutions and pledges necessarily rely on philanthropy? Equilibrium believes the jury is still out as to whether COP28 truly represents a crossroads in the world's approach to agriculture and food systems.

EQ IMPLICATIONS

Equilibrium's investment strategies – both in controlled environment food production and carbon transition infrastructure – play well into the COP28 focus on adaptation and resilience, as does a combined Sustainable Agriculture Infrastructure mandate.

- Investments in controlled environment agriculture (CEA) and aquaculture allow for needed productivity improvements, as highlighted in the Declaration and FAO roadmap, while minimizing impacts on natural resources, namely land and oceans.
- Such investments are also critical to Declaration commitments to food safety and security, and frequently facilitate better year-round working conditions.
- A focus on improved water management supports a sustainable investment business case for greenhouses, which use 90 percent less water than would be required for field production.
- Explicitly calling out the benefits of aquatic 'blue foods' not only addresses numerous UN Sustainable Development Goals (SDGs) such as Zero Hunger, Good Health and Well-Being, Economic Growth, Responsible Consumption, and Life Below Water, it also underpins the attractiveness of an aquaculture investment strategy.
- With the FAO roadmap explicitly recommending a dietary shift away from meat, alternative proteins - which remains within Equilibrium's investment mandate – will see increased attention.
- Less of a focus on the link between agriculture and fossil fuels takes the spotlight off the energy use associated with controlled environment food production but it will be important to continue to work to lower carbon footprints.
- Waste-to-energy projects like those found in Equilibrium's energy basins will be critical in reducing greenhouse gas emissions and, more generally, agriculture and food waste.
- The need for a framework by which to measure progress toward all of the agriculture and food-related COP28 goals could be met by Equilibrium-supported standard-setters like Leading Harvest and the Resource Innovation Institute (RII), which have leveraged Equilibrium's experience in defining metrics for sustainably sourced food.
- Generally speaking, more public and private capital is expected to flow into food-based climate solutions, which should benefit companies that have been pioneering sustainable agriculture and food production and built significant proprietary IP around value chain opportunities and pitfalls.

REFERENCES

World Resources Institute (WRI), UN Food & Agriculture Organization (FAO), Reuters, Global Alliance for the Future of Food, Food Tank, International Panel of Experts on Sustainable Food Systems (IPES – Food), Ode Partners