

Food, agriculture and climate at COP28 – and beyond

Briefing

14 November 2023

Anthony Cox

Ken Ash

Main findings or recommendations

- 1 COP28 will see a welcome focus on food systems and agriculture** with the United Arab Emirates (UAE) Presidency pressing governments to commit to integrating food and agriculture more effectively into their national climate agendas. This brief highlights priority areas in moving from political declarations to concrete action.
- 2 Agricultural policies that distort farm production decisions and trade flows and can have a negative effect on both climate and the broader environment should be phased out.** Alternative measures should be introduced to support innovation and sustainable practices across the food supply chain.
- 3 The private sector can play a greater role in delivering better food, agriculture, climate, and environment outcomes.** The widespread adoption of regenerative agriculture will not be possible without strong collaboration across the public and private sectors and civil society.
- 4 Building on progress at COP28, there will be a need to accelerate multilateral efforts to drive a comprehensive modernisation of current food and agriculture policies.** This should include improving the awareness and understanding of available information; investing in internationally comparable metrics to assess impacts; and building a coalition of stakeholders in support of evidence-based reform – preferably at the WTO.

Food systems and agriculture at COP28

As governments engage in final preparations for COP28 in Dubai, the United Arab Emirates (UAE) Presidency continues to prioritize its Food Systems and Agriculture Agenda. The aim to have governments at COP28 commit to integrating sustainable agriculture in their national climate agendas is welcome, timely and essential.¹ The complex linkages between food, agriculture and climate have received scant attention in previous sessions of the COP, even though agriculture, forestry, and land use change represent (by most estimates) 25 to 30% of greenhouse gas (GHG) emissions globally². At the same time, the food and agriculture sector is both an important source of climate mitigation and integral to achieving a range of other environmental goals, such as protection of natural resources, and social goals, from global food security and poverty alleviation to health and well-being.

Also welcome is the COP28 Presidency's call for businesses, farm groups, and other stakeholders to support widespread adoption of regenerative agriculture – understood to mean farming practises that not only 'do no harm' but also 'do good'.³ This means not just protecting but revitalizing soil, water, and biodiversity resources mitigating climate change by reducing GHG emissions and by increasing carbon sequestration, making farms more productive and resilient, sustaining farm family livelihoods, and improving overall social and economic well-being in rural communities.

Political declarations next month in Dubai would represent an important initial step. But moving from declarations of intent to concrete action will also require a comprehensive modernisation of current food and agriculture policies. A much closer examination of the role of agriculture support policies in driving transformational change in the sector is essential. Thus far, such a focus seems to be lacking in the series of events planned to support this Agenda prior to, during, and following COP28.⁴

Tackling agricultural subsidies must be a priority

Modernising the extensive array of food and agriculture policies in place today will not happen overnight. But aligning food, agriculture, climate, and environment policies needs to be prioritized alongside integrating agriculture in national climate agendas and enabling global adoption of regenerative agriculture. While COP is not the major forum through which such a realignment can be driven, it can make a critically important contribution to the complex international effort required to achieve the needed policy realignment.

Given their nature, scope, and apparent impact, simply layering new policy measures on top of existing food and agriculture policies will not be sufficient. Current support policies that distort farm production decisions and trade flows and can have a negative impact on climate and the environment should be phased out. Alternative policies that instead support the transition towards sustainable, productive and resilient global food systems, and improved public-private collaboration should be introduced.

¹ See <https://www.cop28.com/en/news/2023/09/food-climate-newyork>

² Intergovernmental Panel on Climate Change (2022). Climate Change and Land: AN IPCC Special Report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems. Summary for Policymakers. Geneva. January.

³ Note that while the concept is widely used, there is no universally agreed definition for "regenerative agriculture", .

⁴ See <https://www.cop28.com/en/food-and-water-events> .

There is extensive literature examining the relationship between food and agriculture policies and their production, trade, climate, and environmental outcomes.⁵ This literature has long underscored the fact that agricultural support is high, increasing, and production as well as trade distorting. The World Trade Organization (WTO) and the Organisation for Economic Cooperation and Development (OECD) provide a great deal of valuable information on domestic support to agriculture, though for different purposes and using different methodologies.

The WTO data, compiled under the global trade rule framework to enhance transparency and compliance, indicate that the most trade distorting subsidies to agriculture totalled over USD 80 billion in 2016 (the latest year that comprehensive WTO data are available).⁶ This includes support linked to input use and output quantities as well as regulatory measures that support domestic prices at levels higher than international prices. An additional almost USD 500 billion was provided to less distorting forms of support.

The OECD data cover 54 countries and 75% of global agricultural value-added and are based on an economic framework intended to enable analysis of the incidence and likely impact of actual policies in place.⁷ The latest support estimates show that an average of USD 851 billion was transferred to producers each year during the 3-year period to 2022. Over 50% of that support was delivered via the most production and trade distorting policy instruments.

Whether looking at WTO or OECD data, the essential story is the same; domestic support for agriculture is high, increasing, and highly concentrated in just a handful of countries. Much of this support relies on policy instruments that distort production and trade and can be environmentally harmful. Today, there is little constraint on governments providing trade-distorting and environmentally harmful support to agriculture. Without changes to multilateral rules, there will be even less constraint in the future.

Most current agricultural support can have a negative impact on climate and the environment

The ambition and drive behind the COP28 Food Systems and Agriculture Agenda reflects the widespread agreement in the literature on how agricultural subsidies can impact the climate and the environment. Essentially, support that is linked to input use or to production decisions changes the economic incentives of farmers in ways that often have unintended climate and environmental consequences.⁸

For example, input and output subsidies encourage the increased use of inputs and more intensive stocking rates and cropping practices. This can lead to higher GHG emissions, over-use of pesticides, and increased run-off into adjacent lands and waterways. Production and price support encourages extensification of production systems and changes in land-use, impacting carbon sinks, bringing fragile land or pasture into crop production, increasing land degradation, and endangering biodiversity. Production-linked support can also encourage bringing

⁵ For a broad review of the literature see Institute for International Trade (2022), *Desktop Analysis of Agricultural Subsidies and Environmental Impacts*. Working Paper 10. 7 September. <https://iit.adelaide.edu.au/ua/media/1975/wp10-desktop-analysis-ash-and-cox-final-1.pdf>

⁶ WTO, Agriculture Information Management System (AGIMS), World Trade Organization, <https://agims.wto.org/en/DomesticSupport/SearchResults>

⁷ OECD (2023), *Agriculture Policy Monitoring and Evaluation*, OECD Publishing, Paris <https://doi.org/10.1787/b14de474-en>

⁸ DeBoe, G. (2020), *Impacts of agricultural policies on productivity and sustainability performance in agriculture: A literature review*, OECD Food, Agriculture and Fisheries Papers, No. 141, OECD Publishing, Paris. <https://doi.org/10.1787/6bc916e7-en>

new land into production, increasing deforestation, decreasing carbon sinks and natural habitats, and increasing soil erosion.

Of course, agricultural support can have positive impacts on climate and the environment, for example by targeting emission reductions, carbon storage, land restoration, efficient water use, and habitat provision. There are enormous benefits to increased spending on agricultural research and development and new technology adaptation and diffusion - including digital tools and analytics - not only in terms of improved climate and environmental outcomes but also with respect to enhanced productivity and food security, globally. However, according to OECD data, over the past 3 years on average less than USD 10 billion of support targeted the provision of environmental public goods, a small fraction of the total amount of support devoted to other forms of support.

Over the past few years empirical research has broadened to examine the global impacts of agricultural support reform on global GHG emissions. Recent studies have demonstrated that the global results of agricultural policy reform, generally as described above, are unambiguously positive for GHG emission reductions, but with significant variation across countries.⁹ The latest studies also constructed an illustrative scenario whereby savings from support reductions were repurposed to innovation measures that enable substantial GHG emission reductions.¹⁰

There is broad agreement that at the global level much of the support to agriculture today can have negative impacts on land, water, and biodiversity. Estimates of the magnitude of environmentally harmful subsidies (EHS) range from USD 345 billion to 520 billion per year.¹¹ National and international discussions on reform of EHS have focused on the magnitude of the costs of inaction, and strategies for reform, but there has been limited reform to date.

There is less research, and less agreement, on the likely regional and local impacts of current and alternative agriculture policies on land, water, and biodiversity. More micro-level analysis is needed to clarify not just the likely negative impacts, but also the expected positive impacts of well-targeted support policies.

To contribute to sustainable progress, COP28 cannot ignore the inter-linked and systemic nature of current, and alternative, food, agriculture, climate, and environmental policies.

A greater role for the private sector in delivering better outcomes

The COP28 Action Agenda on Regenerative Landscapes recognizes that delivering transformational solutions to build secure, sustainable, productive, and resilient global food systems will not be possible without the public and private sectors working closely together.¹² Such collaboration is critical for overcoming current barriers to farmers in both developed and developing countries having access to the full range of tools for driving sustainable agricultural productivity growth. The recent *Global Agriculture Productivity* report showcases real world examples where positive outcomes on productivity, climate and livelihoods emerge from cooperation on

⁹ FAO, UNDP, and UNEP (2021), A multibillion-dollar opportunity: Repurposing agricultural support to transform food systems, Rome, FAO <https://doi.org/10.4060/cb6562en>.

¹⁰ Gautam, M, Laborde, D, Mamun, A, Martin, W, Pineiro, V, & Vos, R (2022), Repurposing agricultural policies and support: Options to transform agriculture and food systems to better serve the health of people, economies, and the planet, World Bank, Washington, DC. <http://hdl.handle.net/10986/36875>.

¹¹ Matthews, A. and K. Karousakis (2022), Identifying and Assessing Subsidies and Other Incentives Harmful to Biodiversity: A comparative review of existing national-level assessments and insights for good practice" OECD Environment Working Papers No. 206, OECD Publishing, Paris. <https://dx.doi.org/10.1787/3e9118d3-en>

¹² See <https://www.cop28.com/en/news/2023/09/food-climate-newyork#:~:text=The%20COP28%20Action%20Agenda%20on%20Regenerative%20Landscapes%20is%20a%20flagship,the%20transition%20to%20regenerative%20agriculture.>

innovative farming techniques, advanced technology adoption, including digital applications, improved infrastructure, and equitable access to resources.¹³

The COP28 discussions and outcomes can support international efforts to strengthen such co-operation. The 2022 Business at OECD *Peace for Food* report notes that sustainability, addressing climate change and protecting the natural resource base is increasingly seen as core business and essential to long-term viability at all stages of the food supply chain. It highlights several key priorities:

- ▶ Improving global agriculture productivity, both by reducing the productivity gap between developing and developed countries (through adoption of available technologies and know-how) and by extending the technology frontier (through increased R&D and international cooperation on science and technology).
- ▶ Bringing to small farms the same information that is available to large farms, to improve their sustainability, productivity, and ongoing profitability.
- ▶ Aligning food, agriculture, and climate policies, domestically and internationally, both to reduce the costs of doing business within and across borders and to encourage new private investment.
- ▶ Further developing and applying digital tools and data analytics across the food supply chain to enable these priorities to be realized, leaving no one behind.¹⁴

Looking beyond COP28

What does all this mean for COP28 and beyond?

Food and agriculture production is a biological process that will always impact climate, land, water, and biodiversity. Policies can make those impacts less negative and more positive, and much is already known about which policies can be expected to improve, and to worsen, the climate and the environmental performance of the sector.

COP28 can play a key role in helping to reinvigorate the long stalled multilateral drive to change the ways in which agricultural support is provided. Revitalising efforts to develop an innovative approach to addressing agricultural support at the WTO is essential if the international community is to successfully pursue global goals on climate change, food security, public health, and poverty alleviation. COP28 can add to the pressure to do just that.

There is arguably more information already available on agricultural support and its production and trade effects than for any other sector, and much progress has been made recently to clarify climate and other environmental impacts. Successful policy reform in a sector as sensitive as agriculture requires more than just good data, however; it requires coalition building. An inclusive and evidence-based networking initiative that incorporates active public engagement and global coalition building would greatly support multilateral efforts to achieve the needed reforms, including at the WTO.

Such an approach, building on the conclusions of COP28, should encompass three elements:

- ▶ Improving awareness and understanding of available information and analysis while also filling strategically important knowledge gaps;

¹³ GAP Initiative at Virginia Tech, 2023 Global Agriculture Productivity (GAP) Report. Available at <https://globalagriculturalproductivity.org/2023-gap-report/>

¹⁴ Business at OECD (2022), *Peace for Food: Synthesis Report*, Paris, France. Available at <https://25159535.fs1.hubspotusercontent-eu1.net/hubfs/25159535/website/documents/pdf/Food%20and%20Agriculture/Peace%20for%20Food%20Synthesis%20Report.pdf>

- ▶ Investing in internationally comparable metrics and methods to assess the impacts of public policies and business strategies on climate and environmental performance across the full suite of both negative and positive impacts, globally and locally; and
- ▶ Building a coalition of stakeholders in support of an evidence-based discourse and a modern package of agriculture policies that would work better for people and the planet.

While it is never easy to integrate varying perspectives and interests, this is exactly what is needed to support better outcomes across food, agriculture climate and the environment. Now is a good time for governments, international and regional organisations, the private sector, academic institutions, and non-governmental and civil society organisations to turn away from their individual special interests and embrace the shared interests and mutual benefits of working together to support a healthy planet and population.

IMPRINT

Contact

Anthony Cox
Senior Policy Advisor
Ecologic Institute
Pfalzburger Straße 43/44
10717 Berlin
E-Mail: ajcoxparis@gmail.com

Date

06.11.2023

Suggested citation

Cox, Anthony and Ken Ash (2023): Food, Agriculture and Climate at COP28 – and Beyond. Ecologic Institute, Berlin.

This briefing was prepared as part of the lead-up to COP28 and builds on a 2022 report prepared by the authors reviewing the available literature on the impacts of production and trade-distorting domestic support in agriculture on climate and the environment (Institute for International Trade (2022), *Desktop Analysis of Agricultural Subsidies and Environmental Impacts*. Working Paper 10. 7 September.)

Anthony Cox is a Senior Policy Advisor at Ecologic Institute and is formerly Deputy Director of Environment at the OECD. Ken Ash is a Visiting Fellow at the Institute for International Trade based at the University of Adelaide, Australia, and is formerly Director of Trade and Agriculture at the OECD.