

1. Main Messages

Trade liberalization alone does not bring the world significantly closer to meeting the SDG2 and SDG13 targets.

Combined with yield improvements and dietary changes, trade liberalisation helps to improve food availability, affordability and stability.

The EU biodiversity target of expanding fallow land **reduces crop production and increases crop prices** but also contributes to climate change mitigation. Global trade liberalisation increases the **production of milk and dairy products** in the EU and can reduce the negative economic effects of environmental policies (i.e., fallow land expansion).

2. Research Scope & Methodology

This study models the economic, social, and environmental impacts of trade liberalisation using:

- **Aglink-Cosimo:** A global agricultural market model assessing trade policy impacts on food availability, prices, and emissions.
- **AGMEMOD:** A detailed EU-focused model evaluating trade effects on agricultural production and emissions.
- Three trade liberalisation scenarios: (A) tariff and non-tariff barrier reductions, (B) productivity improvements, and (C) dietary shifts.
- **Sector-specific emissions estimates** using IPCC methodologies to quantify climate impacts.

3. Key Findings: Evidence Supporting Policy Discussions

3.1. Trade Liberalisation and Food Security (SDG 2)

- **Trade liberalisation generally lowers food prices** in high-income countries (HICs), increasing food availability.
- Low-income countries (LICs) may face food security risks as world price increases make imports more expensive.
- Trade shifts lead to higher meat and dairy consumption in LICs and lower in high-income countries, with mixed nutritional impacts.

Implication: Policymakers must consider complementary policies to mitigate food insecurity risks in vulnerable regions.

PROJECT BRIEF 10:

17 | APRIL | 2025

TRADE LIBERALISATION AND ITS IMPACT ON SDGS 2 & 13

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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101000551



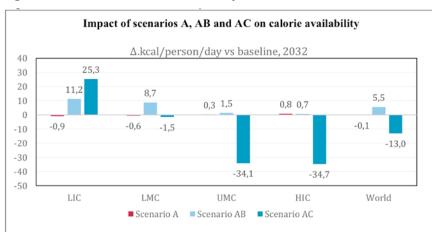
3.2. Environmental Consequences of Trade Liberalisation (SDG 13)

- **Global agricultural GHG emissions increase slightly,** mainly from livestock expansion in HICs.
- Productivity-driven scenarios reduce land-use expansion and mitigate emissions, but **trade alone does not ensure sustainability.**
- Dietary shifts (reduced meat consumption in HICs, increased in LICs) lower emissions but **require additional policies to be effective.**

Implication: Sustainability-focused trade agreements should include mitigation measures for emissions and land use changes.

Figure 10.1 shows results of caloric availability in more detail, while Figure 10.2 depicts production changes in different countries.

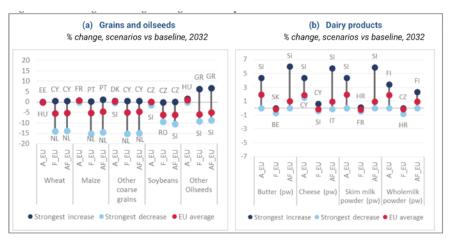
Figure 10.1: Effect on caloric availability



Note: LIC – Low-income countries; LMC – Lower-middle-income countries; UMC – Upper-middle-income countries; HIC – High-income countries.

Source: Authors' simulations, based on an extended version of the Aglink-Cosimo model and the OECD-FAO Agricultural Outlook 2023-2032 (OECD/FAO 2023).

Figure 10.2: Range of changes in agricultural production in EU Member States



Source: authors' calculations.



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4. Implications for EU Policy & Trade Governance

- Introduce trade safeguards for food-insecure regions.
- Ensure that EU trade agreements include food security impact assessments.
- Promote regional food production to mitigate trade-induced supply risks
- Integrate binding sustainability provisions in trade agreements.
- **Support low-emission** agricultural practices in partner countries.
- Align trade policy with the EU's Green Deal and climate objectives.
- Promote dietary shifts in trade policy to encourage sustainable food systems.
- **Incentivise plant-based diets** in high-income markets while ensuring nutritional balance.
- **Support alternative proteins** and sustainable livestock production in global trade.

5. Conclusion

This study highlights the trade-offs between food security and environmental sustainability under trade liberalisation scenarios.

Key takeaways:

- **Trade liberalisation must be complemented** by food security policies to protect vulnerable populations.
- **Environmental safeguards are necessary** to prevent unintended emissions increases.
- Sustainable dietary policies should be integrated into trade negotiations.

This Project Brief is based on **Deliverable 3.4.** of the TRADE4SD project.

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Trade4SD is a 4-year project devoted to research on a topic which is high on the domestic as well as multilateral, EU and bilateral trade policy agenda. The ambition of the project is to explore and foster the positive linkages between trade and sustainable development is to provide policy recommendations for the creation of new opportunities for agents involved in the global, regional and national agri-food value chains, and to define conditions for sustainable livelihoods of farm producers in the EU and developing partner countries. Trade is a central factor in shaping global, regional and local development. Increased trade, empowered by the growth of Global Value Chains (GVCs), has boosted productivity and incomes in many countries.