

Accelerating the 10 Critical Transitions: Positive Tipping Points for Food and Land Use Systems Transformation

Key Messages

Overview/boilerplate

The Report <u>Accelerating the 10 Critical Transitions: Positive Tipping Points for Food and Land</u> <u>Use Systems Transformation</u> by the Food and Land Use Coalition and the University of Exeter's Global Systems Institute, presents a new framework for triggering the economic, political, technological and socio-ecological changes that lead to positive, outsized ripple effects within food and land use systems.

Topline messages

- The ways we produce and consume food and use our land cost USD \$12 trillion per year in damage to people and the planet. Unless food and land use systems are transformed in the next ten years, both the Sustainable Development Goals and the Paris Agreement targets will be out of reach. Change is needed now more than ever as we rebuild the economy in the wake of COVID-19.
- Our food and land use systems are responsible for more than a quarter of global greenhouse gas emissions; an estimated 2 billion people are malnourished, suffering from some form of hunger and/or overweight and obesity, and this situation has worsened with the COVID 19 pandemic; and one third of all food produced in the world is lost or wasted.
- But there is hope. It is possible to bring climate change under control, protect nature, improve food security, improve health, and strengthen rural economies while unlocking \$4.5 trillion USD a year in new business opportunities. The world is at a critical turning point with rising awareness of the need for change within our food and land use systems and we are seeing progress on several fronts.
 - In 2020, for example, USD \$527 million was invested into alternative proteins in Europe, more than quadrupling investment flows in 2019.
- Accelerating the 10 Critical Transitions: Positive Tipping Points for Food and Land Use Systems Transformation presents a new framework for triggering the economic, political, technological and socio-ecological changes that lead to positive, outsized ripple effects within food and land use systems. This is referred to as "positive tipping points".
- The framework shows how different actors from policymakers to producers and companies to citizens can generate positive change in our food and land use systems. This framework describes interventions these actors can take to trigger a set of reinforcing feedbacks loops, which in turn unlock the conditions needed to achieve the desired outcome.
- The University of Exeter's Global Systems Institute has looked at how this framework can be applied to the energy sector – where we have begun to see how targeted policy interventions can trigger wider systemic change. For example, the rapid growth in solar markets has been supported by social trends accelerating a positive tipping point in adoption.



- Using the framework, the report shows how policymakers can trigger tipping points across three critical transition areas: Healthy Diets and Diversified Protein Supply, *Productive and Regenerative agriculture, and Protecting and Restoring Nature*, in different geographical locations, including the EU and India.
- For example, the current booming European market for plant-based alternatives to meat is not yet being matched by a significant reduction in meat consumption. But with more than 25% of Europeans now considering themselves "flexitarian", vegetarian or vegan, a few critical interventions could help tip the scales, benefitting both people and the planet.
- The report also says we could trigger tipping points by considering the protection and restoration of nature in decision-making, including through subsidy reforms and carbon pricing.
- In India, increased public and private investment to promote sustainable agriculture could trigger 'reinforcing feedback loops' that could lead to a tipping point.
- Policymakers have a critical role in creating an enabling environment for change, but we should all feel empowered to act. Launched halfway into the 2021 Super Year, the framework and the report provide a message of optimism and a source of empowerment that our actions can make a big difference in delivering a better future for all. But we need to start working towards these positive outcomes now.
- FOLU, the University of Exeter's Global Systems Institute together with ETH Zürich plan to further refine and test this framework over the next 24 months by applying it to other case studies and critical transition areas in the context of food and land use systems.

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