

The Role of Business in Transforming Food Systems



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The Role of Business in Transforming Food Systems

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A full list of acknowledgments can be found [here](#).

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Key Messages

Global food systems face unprecedented challenges

Food plays a crucial role in all our lives, not only in supporting our physical and mental health, but also the health of our environment, cultures and economies. While our food systems have evolved in an attempt to provide plentiful food at comparatively low prices.

1. This approach has largely relied on chemical agricultural inputs, monocropping and linear rather than circular models, resulting in environmental impacts, including:

- Food systems have a significant environmental footprint, occupying 50 per cent of habitable land, consuming 70 per cent of available fresh water, being responsible for 70 per cent of biodiversity loss and generating between 21 and 37 per cent of global greenhouse gas emissions.
- Seventy-seven per cent of agricultural land is used for meat production, with 13 per cent of global greenhouse gas emissions attributable to livestock production.
- The resilience of food systems is under growing threat from soil degradation, pollinator loss, water scarcity, extreme weather events and increased susceptibility to loss from pests and disease.
- The global population is expected to reach between 9 and 10 billion by 2050, resulting in the need for an additional 50 per cent more food calories to feed this growing and more affluent population.
- A third of all food produced globally is still lost or wasted at some point along the value chain, generating 8–10 per cent of global greenhouse gas emissions.

2. The opportunities for business in transforming food systems are substantial.

There is an exciting opportunity to transform existing food systems into regenerative food systems, which reduce greenhouse gas emissions and pollution, preserve and enhance the livelihoods of people working in the food systems, restore habitat and protect biodiversity.

Businesses have a crucial role to play in enabling this transformation, immaterial of their size or role within a food system. They can realize significant opportunities to deliver business value by making their supply chains and business models more resilient, protecting themselves from both chronic environmental change and systemic shocks, as well as cutting costs by reducing food loss and waste.

Transformation also provides a range of opportunities to create and leverage new business models and to build local prosperity.

3. The key areas of transformation that businesses can contribute to include:

- Support the transition to nature-positive production: To restore the ecosystems upon which humankind depends, while feeding a growing population, we need to rapidly accelerate the transition to agricultural practices that restore and regenerate nature. Farmers and land managers within food systems are ideally placed to deliver ecosystem service outcomes alongside the provision of food, benefiting a range of sectors and increasing community resilience. In a nature positive transformation, providing women and girls with tools and rights over land is needed so that they can become ecosystem champions within local communities in rural areas.

Action: Collaborate with partners across your supply chain and within the landscapes from which you source and operate, to accelerate the application of regenerative practices.

- Contribute to a shift towards more nutritious and plant-rich diets: By shifting the dietary balance towards more nutritious and plant-rich foods, the current environmental impacts of food production and the dietary health and well-being of individuals can be improved.

Action: Reformulate existing product portfolios and develop new product offerings to support a more balanced, plant-rich diet with a lower environmental footprint.

- Act to reduce food loss and waste: By focusing on reducing food loss and waste at every stage, from farm to fork, businesses can help reduce greenhouse gas emissions and use land, water and nutrients more efficiently when producing food.

Action: Adopt a company-wide target in line with Sustainable Development Goal (SDG) 12.3, measure and report food waste using the Food Waste Index, and develop and implement a strategy that targets food loss and waste hotspots, works collaboratively across supply chains to eliminate rather than shift waste, and empowers end consumers to reduce waste at home.

Although these transformations require significant effort by everyone, they provide a range of business opportunities to create and leverage new business models and build local prosperity, help cut costs by reducing food loss and waste and open up new markets.

About GEO for Business

The United Nations Environment Programme [UNEP] and its global partners are proud to offer this series of stimulating briefs about the environmental challenges and business opportunities that demand transformational change at a global scale. These business briefs are meant to communicate the science of the environment to a broad business audience and provide possible pathways and roadmaps that business can follow to address these environmental challenges. The audiences these briefs hope to reach include companies in the supply chains of major multinationals, multinationals themselves as well as small to medium-sized enterprises. The themes of the first six briefs include:

- [how to transform in a time of uncertainty](#),
- how to transform business models towards a fully circular model,
- how to achieve deep decarbonization through electrification,
- how to transform global food systems,
- how to build environmentally sustainable and resilient infrastructure,
- and the role finance needs to take in a transforming world.

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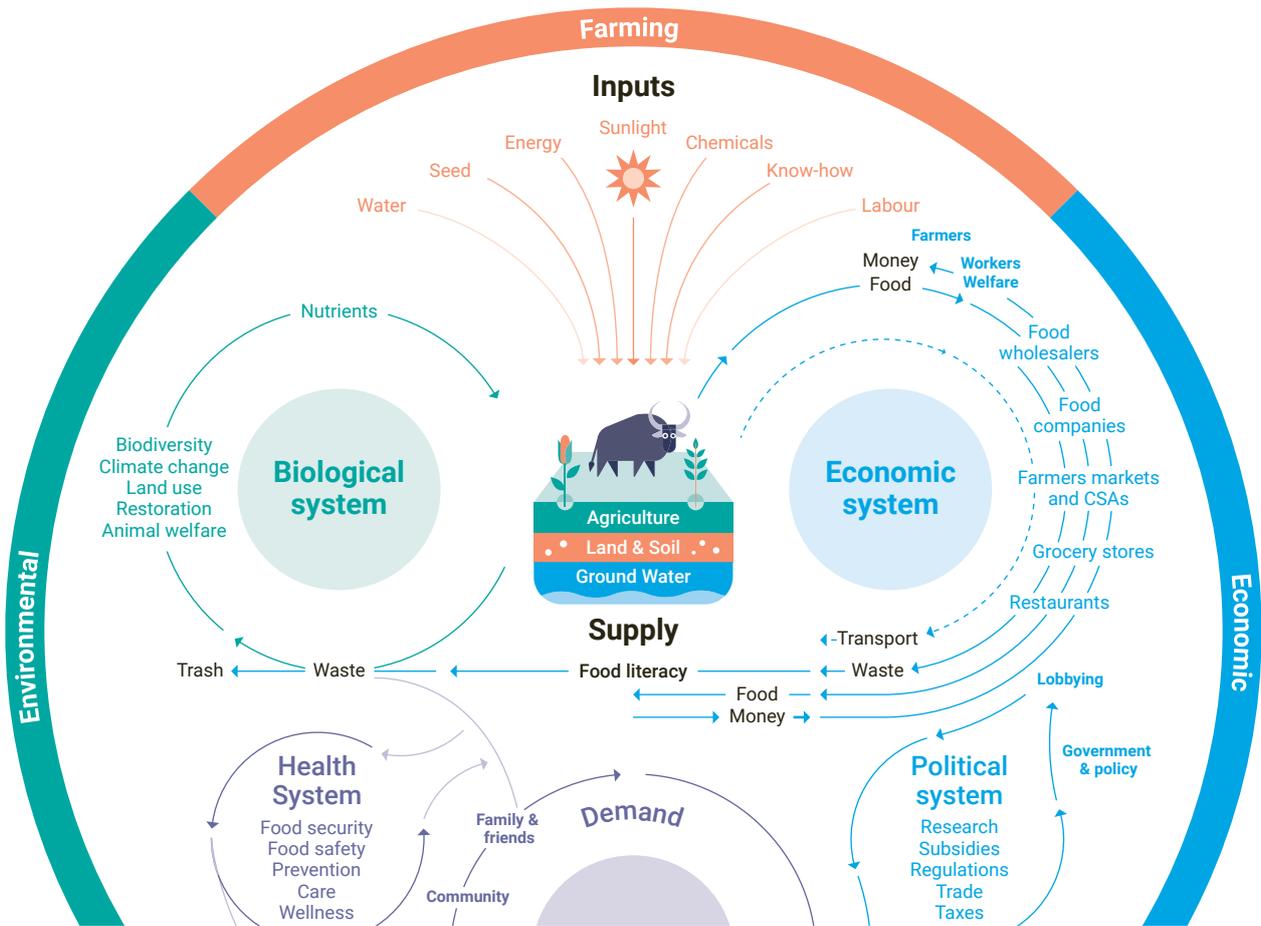
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1. The global food system is complex and interconnected

The global food system comprises all the key elements and actors from farming, forestry and fishing (including inputs), through to consumption and disposal. It has multiple interdependencies with

(and impacts on) other systems, including: biological, economic, political, social and health (Figure 1).

Figure 1: Schematic of the global food system



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