

# FOLU Report Growing Better: Ten Critical Transitions to Transform Food and Land Use

## Summary brief for business

The Food and Land Use Coalition (FOLU) Report 'Growing Better: Ten Critical Transitions to Transform Food and Land Use' sets out the need for action now in order to turn the food and land use system around over the next decade.

The report is focused on ten critical transitions based on advanced scenario modelling that will deliver health, environmental and inclusion benefits. It is targeted at governments because rapid, deep and systemic change is not possible without government intervention. It recognizes the vital role of business to support this ambitious agenda, highlighting case studies from WBCSD members, of business innovations and interventions that are already signalling the change we want to see.

Business will need to step up now; the risk of inaction will likely result in stranded assets and pressure on current business model profitability, akin to the challenges encountered toward the decarbonization of the economy.

If the transitions are achieved, total economic gains to society could reach an estimated USD \$5.7 trillion a year by 2030 and USD \$10.5 trillion a year by 2050. Additional results will include higher agricultural productivity, reduced food loss and waste and changing diets, which will enable up to 1.2 billion hectares of land currently used for agriculture to be restored to nature.

This creates potential for massive regeneration over the coming decades, sequestering carbon at scale, bringing nature back to life and strengthening indigenous communities across the world.

### WANT TO LEARN MORE?

Participate in the reception '*Securing our Future: People, Food and Nature solving the Planetary Emergency*' on 22 September 2019 in New York City. This event is being co-organized by FOLU, the World Economic Forum (WEF), Conservation International (CI), National Geographic, UNDP and Nature4Climate.

There will be country launches of the report in Australia, China, Columbia, Ethiopia, India, Indonesia and the UK from October to December.

For more information contact [Alison Cairns](#).

WBCSD is a co-founder of FOLU alongside EAT, SYSTEMIQ, WRI, GAIN, AGRA, SDSN, IIASA.

**WBCSD will launch a 'CEO Guide to Food System Transformation' on World Food Day 16 October 2019** which outlines pathways for business solutions that align with the 10 critical transitions from the FOLU report.

### Headlines you need to know from the report

- Agriculture, forestry and fishing now account for just under 3.5% of the global economy, while food and land use systems as a whole account for around 10%. In low-income countries, the agricultural sector on average accounts for around 25% of GDP, 40% of net exports and over 60% of employment.
- At least 80% of the world population depends on imports for some food and nutrition needs. Just four crops (wheat, rice, corn and potatoes) account for around 60% of calories consumed by humans. Production of these crops is concentrated in particular regions and in just a handful of countries.

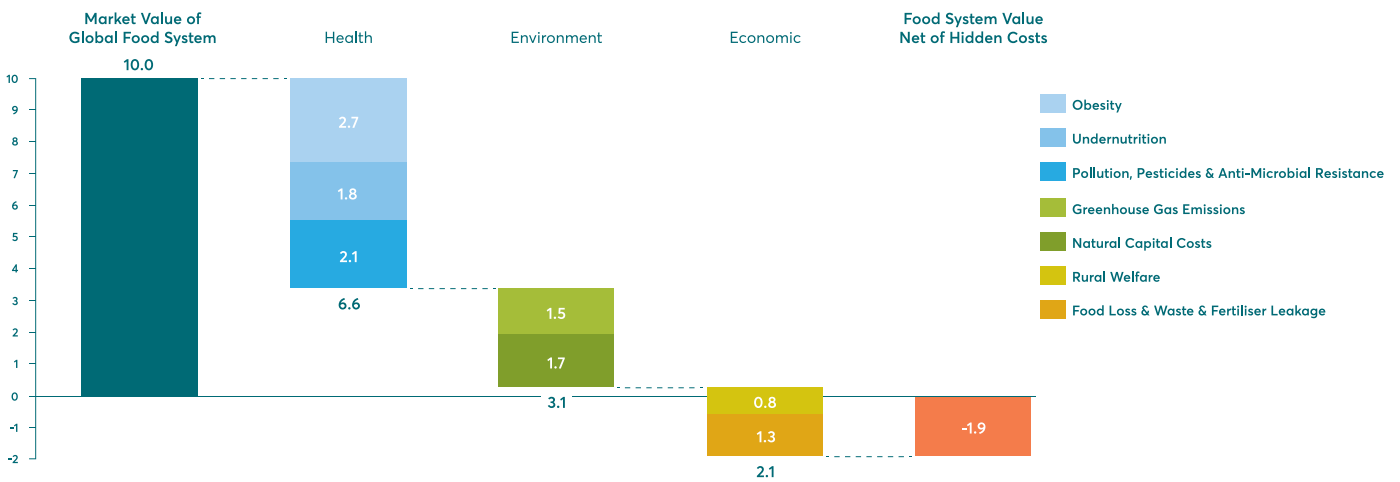
- Food and land use systems contain large hidden costs:
  - **Environment:** Up to 30% of GHG emissions.
  - **Public health:** More than 820 million people regularly go hungry while more than 2 billion people are overweight. On current trends, half of the world's population will suffer from malnutrition and related health damage by 2030.

- **Inclusion:** More than two-thirds of the world's 740 million poor live in the countryside. Where smallholders participate in the market, they often get minimal returns: for example, coffee farmers earn around 1% of the retail value of a latte sold on high streets across the world.
- **These hidden costs amount to almost USD \$12 trillion a year today.** If current trends in malnutrition, global warming,

ecosystem degradation and biodiversity loss continue, these costs could rise to more than USD \$16 trillion a year by 2050.

- But the transformation of food and land use systems is the best deal on the planet: it would deliver an economic gain to society of USD \$ 5.7 trillion by 2030, as a result of reduced hidden costs. This represents a return ratio of 15:1. Moreover, it opens up an annual business opportunity of USD \$ 4.5 trillion per year by 2030.

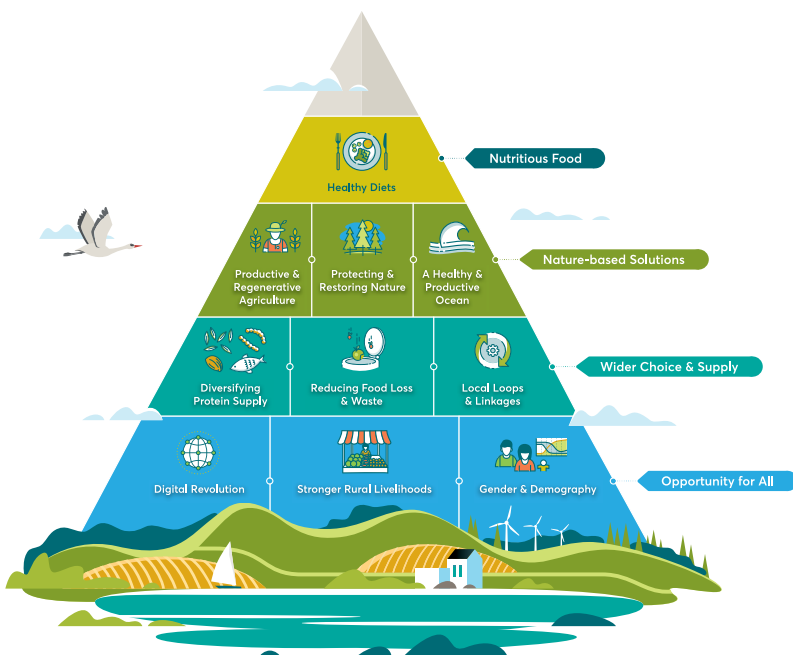
**Figure 1: The "hidden costs" of global food and land use systems sum to USD \$12 trillion, compared to a market value of the global food system of USD \$10 trillion.**



Source: SYSTEMIQ, Food and Land Use Coalition, 2019

The report outlines ten critical transitions to transform the food system. If delivered, we will achieve:

**Figure 2: Food and Land Use Transformation Pyramid**



Source: SYSTEMIQ, Food and Land Use Coalition, 2019

**Environmental benefits**

Food and land use systems contributing over a third of mitigation [13 Gt] needed for the 1.5°C climate pathway, halting biodiversity loss and restoring ocean fish stocks.

**Human health benefits**

Zero under-nutrition well before 2050 combined with a halving of the disease burden associated with over-nutrition; 80% reduction in food system air pollution.

**More inclusive development**

Boost the growth of the bottom 20% and increase the number of decent jobs in rural areas; a secure future for indigenous communities across the world.

**Food security**

Stable or lower real food prices for nutritious, healthy food on a global basis, notwithstanding ongoing population growth and increased climate-related risk to food supply.

## The ten critical transitions from the report:

- 1. Promoting healthy diets:** Overall there is a focus on quality of calories not only quantity and there is also recognition of regional and cultural preferences, which business needs to be responsive to. Quality foods include vegetables, nuts, leafy greens, seeds, beans, pulses, fruits and whole grains. Increased protein consumption from fish and plants whereas animal protein consumption will need to decrease in most regions.
- 2. Scaling production and regenerative agriculture:** A broad definition is used that includes a set of practices that regenerate soil, that reduce but do not necessarily eliminate synthetic fertilizers and pesticides, and that go beyond the reduction of negative impacts to ensure that agriculture has a positive environmental effect.
- 3. Protecting and restoring forests and other natural ecosystems:** Need a radical reduction on tropical deforestation from 2020 onwards to achieve at least a 75% drop by 2025 and a near complete halt by 2030. Forest degradation needs to be cut at similar rates. Around 300 million hectares of tropical forests need to be restored by 2030. This will reduce annual net GHG emissions by more than 5 gigatons of CO<sub>2</sub> by 2030 and more than 8 gigatons by 2050, which is consistent with limiting global warming to 1.5-degrees Celsius and will yield a social benefit of USD \$800 billion a year.
- 4. Securing a healthy and productive ocean:** A healthy diet for over 9 billion people will require about 85–90 million metric tonnes of edible-weight ocean protein annually by 2050. Today, the world produces half of that amount and yet global fisheries are at high risk. Aquaculture, when done right, can produce protein with much lower carbon and land footprints than the typical mix of land-grown meats.
- 5. Investing in alternative proteins:** Over the next decade, three categories of alternative proteins can be scaled up: plant-based protein; proteins from insects, algae and worms; and proteins grown in the laboratory or “clean meat”. Consumers will not see these changes in business-to-business protein supply for feed, making it feasible that alternative proteins will significantly alter the economics of livestock and dairy production without any major challenges to consumer preferences.
- 6. Reducing food loss and waste (FLW):** By weight, approximately one-third of all food produced is lost or wasted. By calories, FLW is estimated to be 24%. The direct economic losses associated with FLW are estimated at USD \$1.25 trillion. By early 2019, countries that are home to 49% of the world's population had set targets for reducing loss and/or waste in line with SDG 12.3.
- 7. Building circular and local food systems:** By 2050, 68% of the global population is expected to live in cities and urban dwellers will eat 80% of food consumed. Local urban food economies today are highly linear and in general highly inefficient. Cities generate 2.8 billion tonnes a year of organic waste which ends up in waterbodies or landfills rather than being captured for nutrient recovery that can be looped back into local food systems. Where food waste and nutrients cannot be looped back into the food cycle, they can be repurposed and sold into other systems.
- 8. Harnessing the digital revolution:** A digital revolution is unfolding across food and land use systems and from end to end of their value chains. For example, new technologies make it possible to monitor land use from afar, to trace changes in forest boundaries and to spot deliberate deforestation immediately. Digital precision agriculture tools can lead to significant reductions in input requirements while maintaining yields by integrating data across whole crop production systems.
- 9. Delivering stronger rural livelihoods:** Underlying all ten critical transitions is a vision of rural areas transformed into thriving communities of opportunity which adapt to new challenges, protect and regenerate natural capital and invest in a better future. Many of the opportunities that can support stronger rural livelihoods will come from the other critical transformations.
- 10. Accelerating the demographic transition:** Women have a central role in food production and in decisions concerning nutrition, health and family planning. Women make up 43% of the global agricultural workforce. However, female farmers receive only 10% of total aid for agriculture, forestry and fishing and as little as 5% of all agricultural extension services. Ensuring women have equal opportunities to participate in and benefit from all the Critical Transitions is therefore a prerequisite for sustainable food and land use systems transformation.

## CREATING THE ENABLING ENVIRONMENT FOR CHANGE

**The report makes it clear that for rapid, deep and systemic transformation to happen, decisive government intervention is vital and business should stand ready to voice its support for a high level of ambition.**

The report recommends governments develop a compelling vision for food and land use systems, and clear, ambitious 2030 and 2050 targets,

but this should be shaped through inclusive, multi-stakeholder engagement and business must contribute.

Many of the policy recommendations made in the report will help business scale up solutions that are already being developed in individual companies or co-created in the pre-competitive space. For instance, governments should encourage the transition to healthy diets by issuing strong,

clear guidelines; increase investment in sustainable innovation to expand choice; introduce carbon pricing and repurpose agricultural subsidies and market support mechanisms to encourage all farmers to deliver a diversity of nutritious food and environmental benefits. Of course, actions happening on the ground will have to fit within local contexts, there is no one size fits all.

## What can business do?

**The report highlights a series of business actions individually or within the pre-competitive space where businesses can demonstrate leadership:**

- Establish science-based targets to make their strategies compatible with the SDGs, the Paris Agreement goals and global targets on ecosystems and biodiversity.
- Shift R&D and marketing resources into healthier food options.
- Establish full transparency and ban deforestation and other ecosystem conversion, land grabs and exploitation throughout supply chains. Businesses can require adherence to the same standards from all business partners and cut ties with suppliers that transgress.
- Shift commodity procurement strategies from buying on the spot market to investing in long-term sustainable supply from equitable partnerships. Companies need to show leadership to address inequalities in their value chains, whether individually or through agreed (and independently monitored) collective bargaining processes.
- Commit to voluntary food loss and waste targets across the value chain and engage their own e.g. 20 largest suppliers to do the same, with a shared goal of halving the amount by 2030.
- Support governments in adopting a comprehensive food and land use reform agenda.
- Pilot true cost accounting for food using for example methodologies developed by True Cost of Food Accounting or the approaches recommended by TEEBAgriFoods.

## The rapidly evolving need for business leadership

The next two years – through to September 2021 – provide global opportunities to set ambitious new directions in relation to the climate, nature, land use, the ocean and both food and nutrition security. This will take unprecedented collaboration across forums such as the G7 and G20 meetings, the UN General Assembly and UN Climate Action Summit, the UNFCCC, UNCBD, UNCCD, the World Bank and International Monetary Fund Annual Meetings, the Global Nutrition Summit and the Sustainable and Inclusive Food Systems Summit.

## Working together to deliver solutions

WBCSD is working with members on solutions areas to create and mobilize a collective voice of business and create solutions to deliver against these challenges through the [Climate & Energy Program](#) and the [Food & Nature Program](#) which includes the following projects:

[Climate Smart Agriculture](#), [FReSH](#), [Natural Climate Solutions](#), the [Soft Commodities Forum](#), [Water Smart Agriculture](#) and the sector projects [Forest Solutions Group](#) and [Global Agri business Alliance](#).

**Participate** in multi-stakeholder initiatives and business coalition like the [Business for Nature](#), and multi-stakeholder initiatives like the [Food and Land Use Coalition \(FOLU\)](#) and the [Food System Dialogues](#) that foster greater interaction to unlock new models of sustainable nutrition within planetary boundaries.

### Additional resources

**Download** the full FOLU report and summary [here](#).

This report is consistent with other key reports published over the last year. Please see the UN's [IPCC special report on Land](#), with business summary [here](#), the [EAT-Lancet Commission on Food, Planet, Health](#) with the business summary [here](#), the [World Resources Report: Creating a Sustainable Food Future](#), and the [FABLE Report: Pathways to Sustainable Land Use and Food Systems](#).

### About the World Business Council for Sustainable Development (WBCSD)

WBCSD is a global, CEO-led organization of over 200 leading businesses working together to accelerate the transition to a sustainable world. We help make our member companies more successful and sustainable by focusing on the maximum positive impact for shareholders, the environment and societies. Our member companies come from all business sectors and all major economies, representing a combined revenue of more than \$8.5 trillion and 19 million employees. Our Global Network of almost 70 national business councils gives our members unparalleled reach across the globe. WBCSD is uniquely positioned to work with member companies along and across value chains to deliver impactful business solutions to the most challenging sustainability issues. Together, we are the leading voice of business for sustainability: united by our vision of a world where more than nine billion people are all living well and within the boundaries of our planet, by 2050.

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