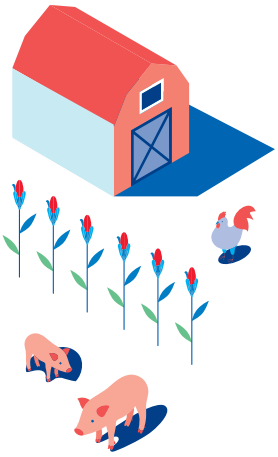
Transforming food systems

UN environment programme

100 million farmers and 1 billion consumers for climate and nature friendly food systems. UNEP proposes a global initiative to kick-start a carbon-neutral and nature-positive agriculture and food sector. It will benefit climate change mitigation by reducing emissions from the food sector and store carbon by changing crop residue, cover crop, and tilling practices in ways that increase the carbon retained in plants and soils. It will also increase resilience of farmers and the adaptation of food systems to climate change by enhancing soil health, increasing water retention and reducing soil erosion, while improving farmer livelihoods by valuing the ecosystem services they provide. Finally, the initiative will benefit biodiversity, restore ecosystems, improve quality and reliability of freshwater and reduce nutrient runoff into coastal waters. A multi-stakeholder, multi-sectoral group of organisations from the the public and private sectors and the UN are regularly convening to identify collective design principles and align on regional priorities (targeting three in Year 1). The initiative has been submitted as a Game Changer for the Food System Summit process, and the group is identifying milestones to be delivered in this context and beyond.



Key messages

- Food Systems must deliver on environment, livelihoods and nutrition. To provide affordable and healthy food to a population estimated to reach **10 billion people by 2050**, it is imperative that our agricultural systems are transformed, so they restore and regenerate rather than degrade land, soils and biodiversity.
- In 2021, the UN Secretary-General will convene a Food Systems Summit to launch bold new actions for progress on all 17 Sustainable Development Goals, each of which relies to some degree on healthier, more sustainable, and equitable food systems. At the same time, the Rio Conventions are reaching critical milestones that can support outcomes of the Summit. The proposed initiative will contribute to **achieving more sustainable food systems while at the same time helping countries and businesses in achieving their commitments.**
- Food systems must become a net positive contributor to climate change mitigation, resilience, nature and pollution. Using the digital hub of the UN Decade on Ecosystem Restoration, and other tools and partnerships, the initiative will drive shared ambition, identify and align efforts and drive innovation to:
  - **Shift to a food system which mitigates climate change and restores nature** (regenerative agriculture, carbon-farming, co-benefits)
  - **Catalyze a global, scalable transition to incentivize 100 million farmers** to adopt practices to sustainably manage and restore the land and natural environment, while empowering 1 billion consumers with the understanding and access to end-products of these efforts.
  - **Facilitate collective action to deliver on net-zero commitments** and maximize related co-benefits (carbon+) that support food systems outcomes for healthy people and a healthy planet.

Key data

- The global food system accounts for around **15 per cent of total anthropogenic emissions** and is a key driver of climate change.
- **Animal agriculture** contributes disproportionately to this total, accounting for **16.5 per cent of greenhouse gas (GHG) emissions** – methane accounts for 44 per cent of this number and nitrous oxide for 53 per cent. Animal agriculture now occupies 78% of agricultural land globally.
- Agriculture is an identified threat to **24,000 of the 28,000 species at risk of extinction.**
- **Natural ecosystems have declined by around 50 per cent** relative to their earliest estimated states.
- Cropping or **animal husbandry occupies 50 per cent of the world's land** that is not desert.
- From 1980 to 2000, **42 million hectares of tropical forest in Latin America were lost to cattle ranching,** while 6 million hectares were lost to palm oil plantations in Southeast Asia.

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