

# CLIMATE CRISIS IS A THREAT TO FOOD SYSTEMS

## ACTION ON BOTH FRONTS MUST ALIGN

For decades, agricultural research and development have worked to tackle global hunger. Concerningly, however, the climate crisis is threatening the substantial progress made on this front. In July 2021, the United Nations (UN) reported that hunger shot up in 2020, both absolute and in proportional terms, outpacing population growth: some 9.9 percent of all people are estimated to have been undernourished in 2020, up from 8.4 percent in 2019.<sup>1</sup>

In addition, figures from the same year revealed an estimated 149 million children under five are stunted, an estimated 45 million wasted, and 38.9 million overweight or obese. Along with this, 45 percent of deaths among children under five are linked to undernutrition.<sup>2,3</sup> Creating food systems that are able to feed the growing global population is clearly critically important, but it's not enough to feed people – we need to make sure these systems are sustainable as well.<sup>4</sup>

Cross-cutting vulnerabilities have become a deeply ingrained feature of our food systems. It is clear that climate change will impact food security and nutrition, as well as human and planetary health in the coming decades<sup>5</sup> while short-term climatic impacts will continue to disrupt food systems directly and immediately.<sup>6,7</sup> Climate and food systems are in a reciprocal relationship, which means climate shocks impact food systems and vice versa. Climate-related disasters such as floods and wildfires, which appear to be becoming more common, are a major threat to the stability of global, national, and local food systems. On the other hand, unsustainable food systems are known to cause deforestation and soil degradation and to contribute to global warming, with food production responsible for 21-37 percent of global greenhouse gas emissions.<sup>8</sup> It's not enough to look at these issues separately; they need to be addressed together.

It is clear that sustainable food systems are key to creating more resilient communities and maintaining peace and security. Unsustainable food systems are vulnerable and cannot cope with sudden shocks. In addition, food system failures can lead to crises – including food crises, malnutrition, and loss of biodiversity and ecosystems. Conversely, crises such as these then create greater susceptibility to other exogenous shocks such as conflicts and displacement, which also drive vulnerabilities and inequality. Many crises are thus rooted in food system failures and climate shocks and stresses play a key role in this. For this reason, climate action is critical. This includes attempts to strengthen adaptation in food systems and their capacity to anticipate and manage climate risks (see Figure 1).

### Action on climate change & food systems must align

**Two key events take place in 2021 – the UNFSS and COP26. Both events could produce mutually reinforcing commitments and action at the intersection between climate and food challenges.**

1 FAO, IFAD, UNICEF, WFP and WHO. 2021. The State of Food Security and Nutrition in the World 2021. Transforming food systems for food security, improved nutrition and affordable healthy diets for all. Rome: Food and Agriculture Organization of the United Nations. Available at: <https://doi.org/10.4060/cb4474en>

2 Ibid.

3 WHO. 2021. Malnutrition. WHO Fact Sheet. Available at: <https://www.who.int/news-room/fact-sheets/detail/malnutrition>

4 IFAD. 2020. United Nations Food Systems Summit 2021: IFAD's engagement and key messages. IFAD quick reference series. Rome, Italy: International Fund for Agricultural Development (IFAD). Available at: <https://www.ifad.org/en/web/knowledge/-/publication/united-nations-food-systemssummit-2021-ifad-s-engagement-and-key-messages>

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7 Fanzo J, Davis C, McLaren R, Choufani J. 2018. The effect of climate change across food systems: Implications for nutrition outcomes. *Global Food Security* 18:12–19. Available at: <https://doi.org/10.1016/j.gfs.2018.06.001>

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2021 is a milestone year for food systems and climate action. Two key UN events are taking place: The United Nations Food Systems Summit (UNFSS) and the 26th session of the Conference of the Parties (COP26) to the UN Framework Convention on Climate Change (UNFCCC). COP26 is of particular importance as governments, for the first time since the Paris Agreement, are expected to agree on concrete commitments and greater ambitions to limit global warming to 1.5°C. Unfortunately, food systems are marginally represented at COP26 and so is climate at the UNFSS. The lack of integration between the two conferences is a cause for concern across the scientific community and policymakers. There is, however, great potential for collaboration and many of the stated goals between the two conferences are extremely aligned (Figure 2).

COP26 aims to secure global net zero by 2050 and keep the temperature of the planet under control by limiting its increase to 1.5 degrees. Countries will be expected to bring their own blueprints laying out specific and concrete plans to meet net-zero targets. Protecting communities and natural habitats, through adaptation, is also a key goal of the conference. It also aims to scale up climate finance by at least US\$100 billion per year by 2020 to address the needs of developing countries.

The UNFSS aims to raise global awareness and encourage commitments towards healthier, more sustainable, and equitable food systems in an effort to achieve the SDGs by 2030. It brings together stakeholders from science, business, policy, and public health, as well as farmers, indigenous people, youth organizations, consumer groups, environmental activists, and many more. It started out with five “Action Tracks” (ATs) guiding pathways to achieve food system transformation while delivering progress on all 17 SDGs. These are: 1) Ensure access to safe and nutritious food for all; 2) Shift to sustainable consumption patterns; 3) Boost nature-positive production; 4) Advance equitable livelihoods; and 5) Build resilience to vulnerabilities, shocks, and stress.

Source:

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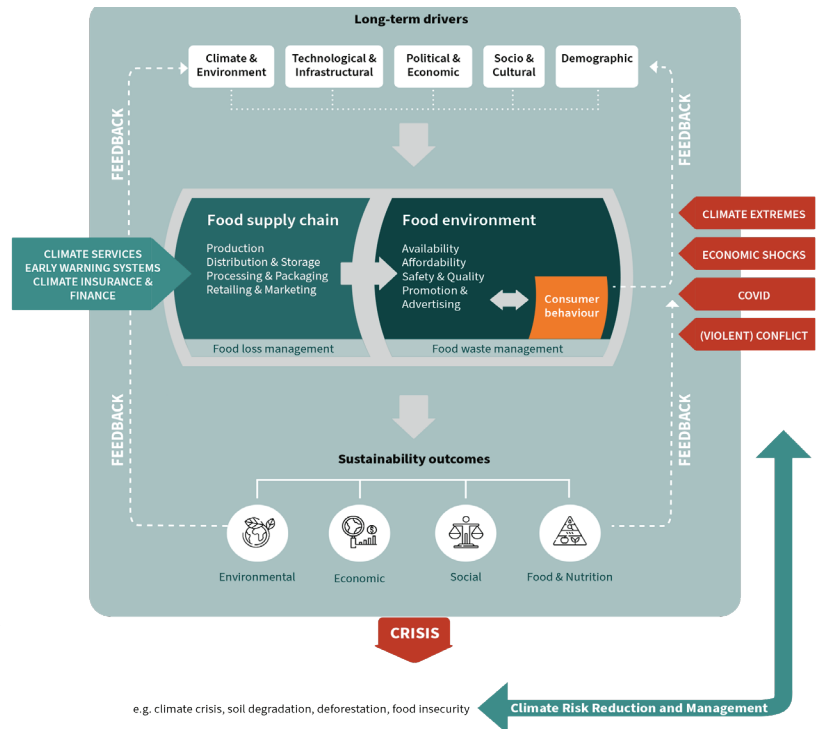


Figure 1. The role of climate in food system failures and how climate risk reduction and management strategies can help build resilience

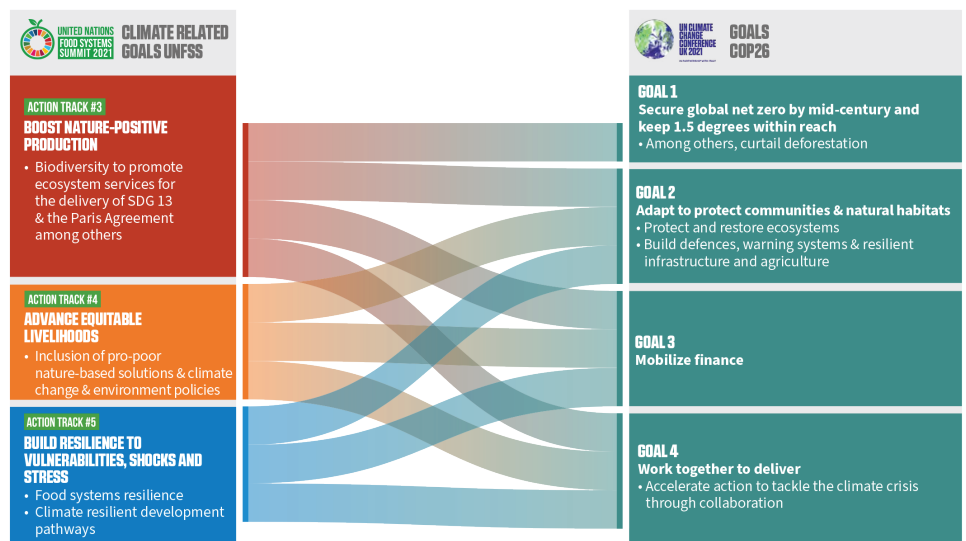


Figure 2. UNFSS and COP26 goals on climate action and entry points for alignment