

# The Role of Glasshouses in the Future of Food Supply

As global populations grow and urbanisation accelerates, the pressure on food systems is intensifying. Glasshouse farming — or controlled-environment agriculture — is emerging as a critical solution to ensuring reliable, sustainable food supply.

Unlike traditional open-field farming, glasshouses provide a stable environment where light, temperature, humidity, and water use can be precisely managed. This allows crops to be grown year-round, with higher yields and significantly reduced resource use. For example, glasshouse-grown vegetables often use up to 90% less water than conventional farming methods, while minimising exposure to pests and diseases.

Importantly, glasshouses also support food security by reducing reliance on seasonal cycles and mitigating the risks of climate change. As extreme weather events become more frequent, the ability to produce consistent, high-quality crops in a protected setting is increasingly valuable.

Looking ahead, innovation will continue to shape the sector. Advances in LED lighting, robotics, and data-driven monitoring are making glasshouse operations more efficient and cost-effective. As investment flows into this space, glasshouses are set to play a vital role in feeding cities sustainably and reliably.

