

Article title	Role of fertilisers for climate-resilient agriculture
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Abstract	<p>With the world's population growing to nearly 10 billion by 2050, food production must increase by up to 70%. However, the future food supply depends on our ability to expand agricultural production whilst confronting climate change.</p> <p>Fertilisers drive agricultural intensification, feeding more than half the world's population. Their use slows deforestation, a major source of greenhouse gases, and prevents land degradation and declining crop yields resulting from the depletion of soils' nutrients, organic matter, and carbon. Despite these benefits, overuse of fertilisers leads to a number of negative environmental consequences, including eutrophication, ground water contamination, and soil acidity. Additionally, losses associated with nitrogen-based fertilisers are a major contributor to greenhouse gas emissions from agriculture.</p> <p>Both chemical and organic fertilisers impact upon the release of greenhouse gases into the atmosphere, increasing or decreasing emissions depending on how they are used. This study assesses their impact and analyses fertiliser management practices and products, such as enhanced efficiency fertilisers, balanced fertiliser formulations, and microbes (biofertilisation), that increase food production and mitigate climate change.</p>
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