

Endangered rice: Key crop provides 25% of global calories, but rising temperatures threaten long-term viability

For much of the developing world, rice is a key to human survival. But at the same time, climate change is poised to create a negative feedback loop—making it harder and more intensive to grow the grain, even as the number of people in need of food security is expected to increase.

Production of rice is also responsible for 12 per cent of methane emissions globally, and 2.5 per cent of global human-induced greenhouse gas emissions. And the more the world warms, the worse things get for rice-growers.

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Not only are rice yields expected to decline as temperatures rise, but the increase in CO₂ in the atmosphere has also cut down on its nutritional content. A [2019 study](#) published in *Science* noted that higher CO₂ levels have resulted in a decline in protein, micronutrient, and vitamin content in rice strains—with potential health consequences for the 600 million people who get over half of their per capita dietary energy from rice.

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The reality of climate change... is that agriculture will be one of its first casualties. Both preventing and surviving a post-1.5-degree world may necessitate a transition from rice.

[**This is an excerpt. Read the original post here.**](#)