Artificial intelligence for food security

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AI, or artificial intelligence, is attracting great attention across many industries, even food production, according to research published in the *International Journal of Society Systems Science*.

Darrell Burrell of Florida Institute of Technology, in Fort Lee, Virginia, U.S., and colleagues point out that given the growing world population, which is expected to reach almost ten billion by 2050 there is an urgent need to develop properly sustainable agricultural practices and ensure food security at a much higher level than has ever been attempted in the past. This, they suggest, might only be possible with the rapid development of technologies such as AI.

With a global population of around 7.8 billion people in 2021, there are at least a billion people who suffer chronic hunger and malnutrition. This crisis is a result of inefficient food production and distribution systems, the team says and undeveloped agricultural land. We need a process improvement initiative to address this problem now, but also to create contingency for the growing population.

"These new technologies are creating the need for new educational and new awareness programs to inform and train farmers on the existence and utilities of these new advances," the team writes. Agricultural students and others need to be taught about robotics, computer science, cybersecurity, information security, and engineering, and other tools that will be needed to on farms of the future. They add that the technologies need to be opened up to parts of the world where food security is not guaranteed and people are chronically hungry too. Humanitarian aid and hunger aid must be apportioned to developing and underserved countries to help them advance food security and solve this global problem.

More information: Darrell Norman Burrell et al. Exploring technological management innovations that include artificial intelligence and other innovations in global food production, *International Journal of Society Systems Science* (2021). DOI: 10.1504/IJSSS.2020.112408

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