URBAN AGRICULTURE

Singapore's 30/30 vision

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Less than 1% of land in the city-state of Singapore is used for agricultural food production. Over 90% of food is imported and, although Singapore has high purchasing power, food security has become a growing political priority since the 2008 global food price crisis. Singapore's government plans that 30% of food demand will be met by local agricultural production in the next decade — '30 by 30'. Jessica Ann Diehl from the University of Singapore and colleagues overview the political strategy to enable greater self-reliance in food production within the urban system of Singapore, and investigate its impact on land use.

The political bodies and policies involved in Singapore's evolution to a high-tech, high-yield, land-limited food producer are comprehensively overviewed through document analysis and interviews with decision makers. The Food Security Roadmap strategy of 2012, led by the Agri-Food and Veterinary Authority with multi-stakeholder representation of economic, enterprise, science, technology and security interests, was key to developing a focus on local food production. There has since been intensified focus on productivity, efficient land use and redefinition of agricultural land use. The Singapore Food Agency was established in 2019 and

Singapore's Agri-Food Innovation Park is planned for 2021. What emerges from the policy analysis is collaborative, coordinated determination — the authors note that as a single-party democracy, Singapore has a history of success in setting and achieving policy targets related to food.

The policy analysis is supported by geographic information systems data. Agricultural land use increased from 1.04% to 1.25% between 2008 and 2014 — the timeframe within which the Food Security Roadmap strategy was developed. In 2019, agricultural land use declined to 0.78%. Shifts in land use that belie this include the development of the Agri-Food Innovation Park and urban farms situated on land zoned for commercial, residential and reserve sites — rooftops, for example. The authors conclude that land-use changes for agriculture match the direction of policy.

The work of Diehl and colleagues, with its wealth of interdisciplinary qualitative and quantitative analysis, highlights how coordination of information, interests and strength of political will are key determinants of change in urban food systems.

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