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ISER Impact Story

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The Case for Urban Agriculture: Opportunities for sustainable development and community resilience

“The Greater Adelaide community recognises a correlation between growing food at home and reducing community vulnerability to climate change.”



As segments of the world’s population continue migrating to cities, people become increasingly disconnected from their food, both geographically and conceptually. Supply chains become longer and more fragile, and thence, more vulnerable to shocks and failure. In amongst a changing climate, we are also witnessing severe biodiversity and arable land loss and degradation, and pervasive inequity among the world’s population. Food production will need to double by 2050 to achieve global food security, using fewer inputs on less land. As we look toward the future, there is heightened recognition that a business-as-usual scenario will not be enough to achieve a sustainable future. Whilst our fragilities have been highlighted, so too have the resistance and resilience of the global community and systems.

Key organisations such as the Food Agriculture Organisation (FAO) of the United Nations (UN) have identified urban agriculture as a key strategy for sustainably achieving food security for the future. Urban food production can occur throughout the urban landscape, utilising private or public land to grow food for consumption, distribution, and/or sale. In the Global North, urban farming is more likely to occur within and amongst post-industrial landscapes, whereas undeveloped urban land is the primary locale in the Global South. In addition to providing nutrition and income opportunities, sensitive application of urban agriculture benefits people through (re)connection with their food supply, increased community engagement and resilience, and has pro-environmental outcomes including mitigation against the effects of climate change.

Through the financial support of ISER, PhD Candidate Hannah Thwaites was able to finalise a co-authored review (forthcoming) examining the role of urban agriculture in addressing the pressing challenge of sustainable development, bringing to light correlations between key areas and the UN Sustainable Development Goals – designed to guide action towards a sustainable and equitable future. Structured around the themes of People and Planet, the review contends that with most of the growth in human population projected to occur in cities, urban agriculture has a central role to play in achieving sustainable development aims, particularly in food security, urban sustainability, and circularity.

Under the guidance of Professor Tim Cavagnaro and Professor Melissa Nursey-Bray, Hannah's PhD research uses urban agriculture as a mechanism and an investigative lens to consider community resilience with its notions of building collective resilience – being resilient together not just in similar ways – to mobilise community members to survive and thrive in an environment characterised by change and uncertainty.

Hannah worked together with the City of Playford and the City of Onkaparinga to identify and connect with local communities of practice to explore initial insights from a recent survey conducted across the metropolitan region of Adelaide about the potential role of household urban agriculture (growing food at home) in building community resilience, within the context of a changing climate.

Focus group sessions were held with diverse communities of practice including Playford Greening and Landcare Group Inc, Lions Club of Elizabeth Playford, the Bhutanese Association of South Australia, and the Seaford Moana Community Disaster Resilience Group. These groups explored connections and barriers involved in growing food at home, and notions around whether urban agriculture can be used to facilitate stronger, more resilient communities. Early indications are that the focus groups discourse aligns with the survey results which highlight that a correlation between reducing community vulnerability to climate change and growing food at home is recognised by the Greater Adelaide community.

- More than half the world's human population lives in urban areas; a number projected to grow to two thirds by 2050.
- Food production will need to double by 2050 to achieve global food security.

ISER supported Hannah to conduct a community corroboration process to ensure her research accurately tells the story from the Greater Adelaide community's perspective.