

Centering farmers' perspectives in assessing the resilience of food farming in rapidly urbanizing regions

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By Jude Wait, Ph.D., Fellow, Western Center for Metropolitan Education and Research; Research Scholar, Ronin Institute



Alarmed by farmland conversion, growing food insecurity, and increasingly threatened resources, multi-stakeholder groups seek to

- improve access to fresh food and
- protect farmland's multiple benefits.



Purpose

→ To study farm-level resilience within the fragmented, sprawling, understudied Clark County of SW Washington, across the Columbia River from Portland.

→ To inform the allocation of scarce resources needed to sustain local food production.

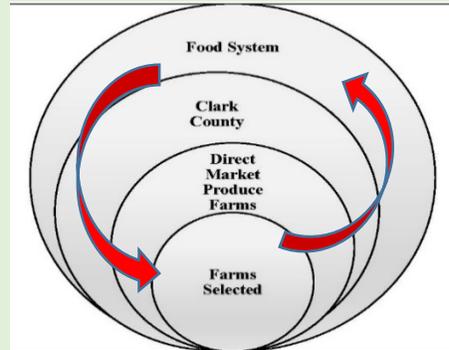
Research Questions (RQ):

1. Given vulnerabilities, what will be needed to retain and enhance local food production capacity for the long term?
2. What are useful indicators of agronomic, economic, environmental, and social resilience for food-producing farms in rapidly urbanizing contexts such as Clark County (in SW Washington)?

Data Collection and Analysis Methods

Transdisciplinary research is framed by agroecological resilience principles to study complex systems.

Nested Multi-level Case Study Design



From a list of 100 direct-to-consumer (DTC) market farms, 23 diverse farms, selling fruits, vegetables, and/or nuts were selected.

Primary data collection: semi-structured interviews and farming system assessments on 23 farms; two farmer-only roundtables; and participant observation in activities involving farmers (markets, workshops...).

A farm resilience assessment tool (FRAT)

framework with 29 indicators across agronomic, economic, environmental, and social realms was developed to gather, quantify, and analyze data from the study farms.

Analysis of public data compiled from multiple sources documented the high rate of farm turnover, a steady loss of agricultural capacity across all operational scales, and data insufficiencies.

Results

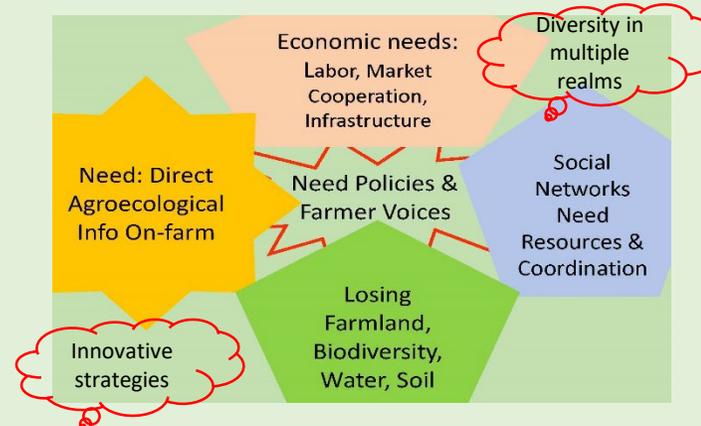
Secondary data revealed a 16% reduction in cropland acres in the County, 2012—2017. About 6,600 acres of productive land was converted to urban and/or suburban development, 2001—2016 [1].

Study farms implement a diversity of innovative agroecological and marketing strategies to help overcome risks—important factors for farm resilience and a sustainable local food movement. Despite scoring well by these criteria, 11 of the 23 study farms no longer produce food commercially.

Local farms, popular with consumers and networks, are only marginally resilient, at best [2].

This research found an urgent need to redesign local policies, public institutions, and support networks in accordance with stated farmer needs.

Farm Resilience Assessment Results



***Integrated Across Agroecological Resilience Themes**

Conclusions:

- Farmers “Love farming”
- Farmers can do everything right at the farm-level
- High turnover of farms at study, County, State levels
- County agriculture is vulnerable & under-supported;
- Limited land tenure, water access, protections
- Portland Metro urban agro-ecosystems are vitally connected as a city-region foodshed.

Next Steps

Collaborative action research → grassroots-solutions led by Communities of Color → equitable food-oriented development, aligned with food sovereignty goals → to advance agroecology, resilience, and food system justice in urban regions—such as the Portland-Vancouver Metro? You are welcome to get involved !

References

- [1] American Farmland Trust. (2020). Farms Under Threat: The State of the States: Agricultural Land Protection Scorecard Highlight Summary: Washington. farmlandinfo.org
- [2] Wait, J. A. (2021). Resilience of Food Farming in Rapidly Urbanizing Regions. (Ph.D. Dissertation). Washington State University, Vancouver.

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