

## **Executive Summary**

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### **Growing resilient: The potential of urban agriculture for improving food security during earthquake recovery**

Earthquakes are responsible for thousands of deaths and millions of dollars of damage every year. They are nearly impossible to predict accurately—making them extremely difficult for cities to plan for. While early response following an earthquake is crucial, there is less attention paid to the recovery phase, and many issues, including food security, continue to threaten human life and wellbeing in the weeks, months and sometimes years following an earthquake. This research explored how urban agriculture can help improve food security during the recovery from a large earthquake or other disaster event. Employing a case study approach to the City of Vancouver, a region prone to seismic activity, a strategic policy scan helped position the city within the realms of earthquake preparedness and food system resilience. The objective was to understand how the city approaches food systems planning, food security and local food production through urban agriculture and whether these considerations are integrated in their earthquake preparedness strategy.

The findings indicated that Vancouver has taken great strides in food system planning, but has yet to integrate the benefit of a strong, local food system in their earthquake preparedness plan. The impacts from a large earthquake can last for months and even years following the initial event. Food security can be an insidious challenge, as outside food and power supply lines are often disrupted during an earthquake. Emergency food rations are adequate for short-

term response; however, they have been found to lead to nutritional deficiencies over longer-periods, particularly for vulnerable populations. Local food production through urban agriculture has been found to function as a supplementary source for nutritious fruits and vegetables in the aftermath of earthquakes and emergencies. It is therefore essential that communities like Vancouver consider food security from a longer-term recovery angle in their earthquake preparedness strategy in order to increase resilience to earthquakes and other disaster events. Ultimately, this could lead to a more robust preparedness plan and will help safeguard urban agriculture as important local resources for a recovering community.

While this research focused specifically on the City of Vancouver, the findings are applicable to other seismically active regions around the world. Ensuring a strong food system is a key element of a resilient community and integrating considerations of local food production and food security into disaster management plans could be critical for recovery after a disruptive event.