

PRESENTATION SNAPSHOT

Development of a food security indicator framework in British Columbia



Barbara Seed^a

B. Seed Consulting

Melanie Kurrein^{b*}

British Columbia Centre for Disease Control, Provincial Health Services Authority

Presentation Abstract

Food security is complex in both content and governance, making it difficult to measure and monitor. In 2016, the Population and Public Health Program of the British Columbia Centre for Disease Control, Provincial Health Services Authority, sought to identify or construct an evidence-based conceptual framework to guide the systematic selection of food security indicators for British Columbia (BC), Canada.

A systemized scan of the literature found no existing conceptual frameworks specific to food security indicators appropriate to the Global North. The most relevant indicator frameworks for food security in the literature were environmental health indicator frameworks. These formed the foundation for the conceptual framework for food security indicators in BC. The framework is a matrix that combines an adaptation of the environmental health casual network (i.e., determinants–current state–impact–response) with food security elements (i.e., (i) individual and household food insecurity; (ii) food systems, and (iii) capacity). Use of this framework can enable program planners and policy-makers to be clear about where and how they are attempting to assess, influence, and monitor food security. It also illustrates interconnectedness between indicators.

The creation of this framework has laid the foundation for the development of a set of indicators for BC

^a Barbara Seed is a Registered Dietitian with a PhD in food policy. In her work and volunteer capacities, Barbara has straddled many sectors: government, civil society, and academia. She recently led the development of the first dietary guidelines in Qatar, which are among the first in the world to include sustainability principles; she continues to publish and lecture on this topic. Barbara worked on the food security indicator framework with the Provincial Health Services Authority in her current capacity as a consultant in food and nutrition policy. She can be contacted at barbara.seed@city.ac.uk.

^{b*} *Corresponding author:* Melanie Kurrein is the provincial manager of food security with the Population and Public Health Team with the British Columbia (BC) Centre for Disease Control, Provincial Health Services Authority (PHSA). She is a Registered Dietitian with a master's degree in socio-cultural studies of food and has worked in food security for over 17 years at local and provincial levels. In her current position, Melanie works closely with the regional health authorities, the First Nations Health Authority, and the Ministry of Health to facilitate provincial collaboration and coordination of activities to inform food security policy and initiatives across the province. Melanie is the project lead for the food security indicators project and can be contacted at melanie.kurrein@bccdc.ca.

Submitted December 12, 2018 / Published online July 24, 2019

Citation: Seed, B., & Kurrein, M. (2019). Development of a food security indicator framework in British Columbia [Presentation snapshot]. *Journal of Agriculture, Food Systems, and Community Development*, 9(Suppl. 1), 249–250.
<https://doi.org/10.5304/jafscd.2019.091.025>

Copyright © 2019 by the Authors. Published by the Lyson Center for Civic Agriculture and Food Systems. Open access under CC-BY license.

Public Health. Its wide scope allows for the potential of various sectors to populate the framework with indicators and thus create a comprehensive assessment of food security in BC.

Keywords: Casual Network; Conceptual Model; Environmental Health; Food Security; Indicators; Indicator Framework; Public Health

Key Points

- PHSA sought a systematic, evidence-based approach to indicator selection.
- While food security frameworks are abundant, no food security indicator frameworks appropriate to the Global North were identified.
- The most relevant indicator frameworks for food security identified in the literature were environmental health indicator frameworks; thus, the BC framework is adapted from these models.
- The framework illustrates causal relationships and interconnectedness between indicators.
- The framework can enable program planners and policy-makers to be clear about where and how they are attempting to assess, influence, and monitor food security.

Selected Resources

Gentry-Shields, J., & Bartram, J. (2014). Human health and the water environment: Using the DPSEEA framework to identify the driving forces of disease. *Science of the Total Environment*, 468–469, 306–314.

<https://doi.org/10.1016/j.scitotenv.2013.08.052>

Hambling, T., Weinstein, P., & Slaney, D. (2011). A review of frameworks for developing environmental health indicators for climate change and health. *International Journal of Environmental Research and Public Health*, 8(7), 2854–2875. <https://doi.org/10.3390/ijerph8072854>

Yee, S. H., Bradley, P., Fisher, W. S., Perreault, S. D., Quakenboss, J., Johnson, E. D., . . . Murphy, P. A. (2012). Integrating human health and environmental health into the DPSIR framework: A tool to identify research opportunities for sustainable and healthy communities. *EcoHealth*, 9(4), 411–426.

<https://doi.org/10.1007/s10393-012-0805-3>