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Sustainable Livelihoods for Food and Nutrition Security in Canada: A Conceptual Framework for Public Health Research, Policy, and Practice

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Sustainable Livelihoods for Food and Nutrition Security in Canada: A Conceptual Framework for Public Health Research, Policy, and Practice

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Current definitions of food insecurity center around the dominant themes of (1) individual and household food insecurity, stemming from a lack of access to resources needed to obtain adequate food; and (2) community food insecurity, which occurs when dominant food systems falls short in terms of social, economic, and environmental sustainability. These definitions do not sufficiently incorporate the concept of nutrition security or adequate nutritional status in terms of macro- and micronutrients, a state not achieved by most Canadians. We propose the Sustainable Livelihoods for Food and Nutrition Security Framework, which integrates food security and nutrition security to achieve public health nutrition goals.

KEYWORDS food security, nutrition security, sustainable livelihoods, public health

INTRODUCTION

Current definitions of food security center around 2 dominant themes—(1) individual and household food insecurity—stemming from a lack of access to resources (primarily financial) needed to obtain healthy, personally acceptable food¹–³—and (2) community food insecurity, which occurs when the dominant food systems falls short in terms of goals related

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to social, economic, and environmental sustainability.\textsuperscript{4–6} Conflict can exist between the achievement of individual and household food insecurity and community food security. Efforts to achieve the goals of community food security can result in an increased burden on low-income individuals through increased prices for local foods. At the same time, efforts to achieve individual and household food security usually do not address the broader range of issues required to achieve community security at a food systems level.

Though both constructs have implicit notions of a healthy diet as a distal outcome resulting from individual and household as well as community food security, neither construct explicitly acknowledges that households and individuals may not have the “knowledge and supportive health and environmental conditions to obtain adequate nutritional benefit from food,”\textsuperscript{7(p8)} even in situations of sufficient access through adequate physical and financial resources and more socially just food systems. The Food and Agriculture Organization has recognized this gap, and in an effort to focus attention on individual consumption of nutritious food recently adopted a definition of \textit{nutrition security} that “exists when all people at all times consume food of sufficient quantity and quality in terms of variety, diversity, nutrient content and safety to meet their dietary needs and food preferences for an active and healthy life, coupled with a sanitary environment, adequate health, education and care.”\textsuperscript{7(p7)} This definition is an important step in conceptualizing the nutritional implications of food security; however, it remains focused on vulnerable populations in underdeveloped settings. Many populations, including those in developed countries such as Canada, have adequate access to food supplies, sanitation, and care yet do not consume the recommended proportion and levels of macro- and micronutrients required to maintain nutritional status and health.\textsuperscript{8–12} The unprecedented high rates of obesity and nutrition-related chronic illness observed in wealthy countries, and increasing in low-income countries, suggests that some populations can achieve high levels of food security yet remain nutrition insecure.\textsuperscript{13} This is also evident within countries where poor dietary intakes (eg, very low fruit and vegetable/high fat, sugar, and salt consumption) and obesity are observed in subpopulations otherwise defined as food secure.\textsuperscript{10,14,15} Yet the issues of food security and nutrition security continue to be dealt with by the scholarly community and public health community as disconnected issues, theoretically and pragmatically. Given the lack of progress in addressing major nutrition concerns over recent decades, a new way of conceptualizing food and nutrition security is warranted.

Population health models, such as the population health promotion model used by the Public Health Agency of Canada, encompass a broad range of health determinants at multiple levels but do not explicitly identify food security or nutrition security as goals or outcomes.\textsuperscript{16} Food systems are incredibly complex, and several authors have developed conceptual
models to link the proximal and distal components of these diverse systems. Food system models tend to focus on the production aspects, whereas environmental models put emphasis on detrimental elements of production and promote sustainability.\textsuperscript{17–19} These models do not, however, emphasize food security at an individual or household level or define nutritional health as an explicit outcome, nor do they emphasize the sociocultural aspects of food and nutrition systems. Several authors have proposed models that encompass a broader set of food system relationships connecting production and consumption.\textsuperscript{20–22} These models do not, however, explicitly highlight nutrition security as a discrete concept, nor do they address the potential contradictions and complexities inherent in attempting to simultaneously achieve food and nutrition security at the population level.

Therefore, to conceptualize and address population health nutrition issues in resource-rich countries in a more holistic fashion that addresses all components of the food system, it is critical to integrate the concepts of nutrition and food security into a common framework through a structured exploration of their similarities and contradictions. We propose that one way to reconcile these contradictions is to consolidate food security and nutrition security through the lens of “sustainable livelihoods,”\textsuperscript{23–25} which allows for a more comprehensive analysis of the conditions required to achieve food and nutrition security. The proposed framework has the potential to be used in research and applied settings at the micro (individual and household) and macro (community, regional, policy) levels to assess a broad scope of antecedents for food and nutrition security, and evaluate policies, programs, and initiatives. The new framework is called “Sustainable Livelihoods for Food and Nutrition Security” (SLFNS).

THE SUSTAINABLE LIVELIHOODS APPROACH

Sustainable livelihoods was a concept first proposed in 1987 by the World Commission on Environment and Development as an integrated concept, serving the objectives of equity and sustainability, and giving voice to the poor by allowing their participation in constructing the contextual factors that define their circumstances.\textsuperscript{25} The livelihood strategy approach seeks to understand the factors underlying people’s choices of livelihood strategies; to reinforce the positive aspects, which promote choice and flexibility; and to mitigate the negative influences or constraints.\textsuperscript{26} Achieving a sustainable livelihood involves 2 key dimensions: equity and sustainability. \textit{Equity} refers to a fair distribution of (\textit{a}) capabilities (what a person is capable of doing and being); (\textit{b}) assets (tangible resources such as food, money; and intangible resources such as knowledge and social networks); and (\textit{c}) opportunities. People can achieve greater equity in their livelihoods by developing capabilities (eg, education, training) and acquiring assets (eg, adequate
housing; means of transportation; arable land), which in turn increases their opportunities. Sustainability is a function of how assets and capabilities are used, maintained, and enhanced to preserve livelihoods. In addition, a sustainable livelihood asks us to consider how our activities today will impact future generations. People do not live their lives in isolation, however.

Livelihoods are framed by the external social, economic, and physical environments in which people exist. This is referred to as the vulnerability context, which is created, maintained, and transformed through structures and policies that directly and indirectly affect people’s ability to acquire assets and develop capabilities. The vulnerability context is maintained and transformed by processes (eg, policies, laws, culture) acting through structures in government, civil society, and the private sector. These processes and structures become operationalized through strategic and practical interventions, leading to enhanced livelihood outcomes. Examples include formal and informal education and community-based programs aimed at enhancing capacity of individuals to prepare healthy foods.

The sustainable livelihoods approach (SLA) began as a means to address poverty in developing country contexts and has been utilized extensively in global southern settings. SLAs have been examined and evaluated extensively and, despite some acknowledged limitations (eg, may not pay enough attention to power inequalities), continue to be utilized throughout the world by major development organizations such as the Asian Development Bank and UKAID. The principles of sustainable livelihoods can also be useful for understanding vulnerability in other geographic contexts, including developing countries such as Canada where food insecurity exists and large segments of the population, across sociodemographic groups, are vulnerable to high rates of obesity and nutrition-related comorbidities. Sustainable livelihoods allows for an examination of the definitions, contexts, and assumptions behind food and nutrition security. This examination is incredibly important given the rapid transition to the complex globalized food system of the 21st century, composed of an increasing array of ultraprocessed foods from which contemporary diets are constructed. This examination does not suggest that reducing income disparities cease to be a focus of population health promotion. It is imperative that income adequacy be the main focus of efforts to address food security, because nutrition security cannot be achieved without food security. However, addressing income disparities in isolation from other strategies that address nutrition insecurity is unlikely to result in a healthy diet, given the overall poor dietary patterns seen in Canada across income groups and around the globe (in Ecuador, obesity is increasing fastest among non-poor children). The proposed framework seeks to integrate food and nutrition security as a more holistic focal point for understanding and addressing the major public health nutrition issues of our time.
As discussed in the previous section, the sustainable livelihoods approach provides a pragmatic framework for examining the fundamental elements of food and nutrition security. These elements are incorporated into the SLFNS framework shown in Figure 1. The key concepts and elements are described below.
Assets

At the core of a sustainable food and nutrition livelihood approach is the need for a mix of assets, categorized according to the type of capital they provide—financial, natural, human, social, and physical, explained in detail below. It is through the development and accumulation of these assets that individuals, households, and communities can develop their capacity to meet their food and nutrition security needs on an ongoing basis. In accordance with the sustainable livelihoods approach, those with abundant assets are more likely to make positive livelihood choices, and attainment of certain assets can mitigate a shortfall in others. The scope of SLFNS assets outlined below provides a range of opportunities for individuals, families, and communities to pursue in order to maximize their achievement of food and nutrition security.

Ideally, assets will work synergistically and in a compensatory manner whereby one or more assets in short supply can be bolstered by others in abundance. In some cases, however, the assets may not be mutually beneficial. For example, increasing access to low-cost, highly processed foods from government-subsidized, high-input food crops and livestock that travel thousands of kilometers will not increase the sustainability of the overall food supply. The goal of SLFNS is to focus attention on a systems approach in a holistic manner, by highlighting objectives in relation to capability, equity, and sustainability, while attempting to configure assets in a way that minimizes their conflicts.23

Financial assets

Financial assets consist of monetary resources for food and food-related infrastructure (e.g., housing, kitchen, equipment, transportation). In Canada, almost 9% of Canadians were low income according to the 2011 census, though this rate was substantially higher in subgroups including off-reserve Aboriginals (17.3%), lone parents (19.7%), and people with disabilities (23.5%).37 In 2012, 12.6% of the population reported being food insecure; this increased to 70% of those relying on government income assistance.38 This food insecurity persists despite the relatively low average food costs as a percentage of income (in 2012, percentage of income spent on food ranged from 8.1% in the highest income quintile to 14.1% in the lowest income quintile.39 An exception to this is Canada’s north, where high transportation costs and limited competition have resulted in extremely high food prices and very high rates of food and nutrition insecurity.40–42 These are compounded by very high costs of housing and energy.

Natural assets

Natural assets include clean water and soil, genetic diversity, a reliable climate for producing food, and sustainable access to traditional land-based
foods, free from environmental contaminants. There is mounting evidence that dominant industrial food production practices can have less than beneficial effects on the Earth’s environment. The dominance of high-input agriculture methods, combined with production and global distribution of high-sugar/fat/salt packaged, processed foods that can travel long distances without spoiling is leaving our food supply vulnerable to shocks and processes that may not be sustainable. These include monoculture crops becoming increasingly susceptible to disease; desertification of agriculture lands; reliance on nonrenewable fossil fuels to produce artificial fertilizer; producing more animals for a growing meat-consuming population, resulting in the threat of zoonotic diseases; and increased risk of infectious and food-borne disease outbreaks (eg, listeria) due to highly centralized production and distribution.

**Human assets**

Human assets required for food and nutrition security include knowledge and skills, motivation and interest, and self-efficacy. Producing, planning for, acquiring, and transforming basic and minimally processed food ingredients into safe, edible, palatable, and healthy food requires confidence, knowledge, and a set of skills, both tacit and explicit (eg, nutrition, food safety, menu planning, production, purchasing, storage, and preparation). These skills have traditionally been taught informally (in the home) and formally (through the school system). A recent study by Engler-Stringer suggests that domestic food skills are a significant buffer against food insecurity. However, opportunities for food and nutrition skill development have decreased. Changing roles for women, who traditionally (and continue to) perform the bulk of domestic food work, have reduced the amount of time available for food preparation and mentoring. At the same time, food skills instruction in the school system has been reduced, due to competition from more academic subjects and perceptions of “home economics” as outdated, gendered, and irrelevant. These food and nutrition “literacy behaviors” do not revolve solely around cooking but include the ability to interface with an increasingly complex food system; for example, understanding how to compare and select optimally nutritious foods in favor of the array of prepared convenience foods in the market.

**Social assets**

Relationships and social networks are critical for sharing food, food-related knowledge and skills, and important food traditions that make up individual and group food cultures. These can be centered on one’s ethnocultural background, religious beliefs and affiliation, social milieu (eg, adolescents), health experiences/beliefs (eg, celiac disease, vegetarianism), and/or
family background. Sustainable food cultures are created, reinforced, and propagated through social networks and can benefit immediate and future generations in many ways, including social, cultural, and health realms.

Evidence suggests, however, that there has been a decrease in food mentoring in recent years. Many food cultures have been disrupted through the proliferation of fast, processed convenience foods that can be devoid of important signifiers attached to food cultures and traditions. For example, domestic food skills are not passed down to the same extent that they were in the past. This has resulted in a loss of cultural food knowledge; for example, First Nations, Métis, and Inuit communities have had their traditional foodways disrupted through colonization, the residential school experience, and decreased access to traditional lands. Many families do not eat together on a regular basis, a trend that has been identified as a risk factor for poor nutrition security–related outcomes. Development of knowledge and skills is not only necessary in the household realm but critically important in organizations providing food as part of their core service.

Feeding oneself and significant others, even a diet including processed convenience foods, also takes time. However, most North Americans spend half the amount of time preparing food daily compared to 30 years ago. Time is one of the major factors identified as a barrier to healthy eating. Indeed, lack of time for family food preparation and shared family meals is a major source of stress for women, in particular those who work outside the home. Lack of time has resulted in uptake of fast and prepared convenience foods. Many people no longer take time to eat lunch or regular meals, and many schools have reduced time for eating lunch to as little as 20 minutes.

In addition, social norms suggest that domestic food work is female-gendered, mundane, and competes with other life activities, including employment, childcare, and social activities. Unlike other mundane domestic tasks, feeding oneself and one’s family cannot be abandoned (as in ironing or mending clothing) and must be done on a daily basis. Food and nutrition security requires positive social norms with respect to healthy eating and food work; however, domestic food is voluntary labor that (as mentioned above) is largely done by women, invisible, and unrewarded financially or socially. The “emancipation” of women out of the kitchen and into the workforce did not result in an influx of male partners into the kitchen in equal numbers. Though men have increased their hours spent on domestic tasks, the majority of these are still performed by women. Food and cooking can, however, be “outsourced” and, to a large degree, this is what has been accomplished through the processed food industry. This trend, however, has resulted in a dietary pattern contributing to high rates of overweight and obesity and chronic diseases.
Finally, social support networks, particularly charitable food provision, also have an impact on food insecurity in developed nations such as Canada. Many low-income individuals and households rely on food banks and other charitable food sources. However, charitable food provision has been documented in several studies to make a minimal contribution to nutrition security due to the dependence on donations and the general low nutrient density. In recent years, some charitable food organizations have diversified their programming to develop capabilities to improve food and nutrition security.

**Physical assets**

Producing, planning, preparing, storing, and consuming a healthy diet require access to adequate housing, as well as an adequate food infrastructure (kitchen, appliances, utensils). Simply being housed does not imply adequate infrastructure. Quality of housing in Canada varies greatly; individuals may reside in low-rental hotel rooms or rooming house suites where food infrastructure may consist of a mere microwave oven.

Geographic access to adequate markets providing healthy, affordable foods is also important. Evidence suggests that some low-income neighborhoods do not have adequate retail food outlets to meet population needs (“food deserts”). Transportation is equally important. Not owning a car or having a friend, relative, or other social support who can drive, particularly for those experiencing mobility issues, poses a significant barrier to accessing healthy food. These situations may result in purchasing foods from convenience stores that tend to lack healthier options. In Canada’s north, many remote communities have fewer healthy food options available than in southern communities. Options such as locally sourced wild foods may also be restricted due to lack of availability or fear of contamination.

Access and availability of healthy food is also important outside the home. Individuals who purchase and consume meals during work or school hours may be dependent on foods available through cafeterias, restaurants, convenience stores, and vending machines. Food purchased through these venues may be of poor nutritional quality, affording little opportunity to choose healthy options such as fruits, vegetables, and whole grains. Though some school districts have implemented “healthy food policies” aimed at improving the nutrition profile of foods served and sold at school, these policies frequently lack enforcement mechanisms, do not address cost of foods, and do not link policies to food and nutrition curricula. This is compounded by the 20 000+ new food products introduced into the North American market annually. Despite the illusion of choice, the majority of these new foods are ultraprocessed and of low nutrient density (ie, high in sugar, fat, and salt). More than half these new products consist of candy, gum, snacks, and beverages; 14% are prepared meals, entrees, and processed meats; and only 5% are fruits and vegetables.
Equity

*Equity* can be described as fair access to assets and full participation in the processes and structures required to achieve positive food and nutrition security outcomes. Equal opportunity to access assets is created through processes and structures such as education, including food skills education, and adequate access to a safe, affordable, healthy food supply (e.g., adequately stocked grocery stores; transportation; healthy foodservice in educational institutions).

Capabilities

*Capability* refers to being able to produce, acquire, and use nutritious food for healthy, sustainable living. Being capable with respect to food and nutrition security can be defined as having the knowledge, and the ability to act on that knowledge, in order to produce, obtain, store, and/or prepare healthy food in a manner that is deemed socially and culturally acceptable. Self-efficacy is a key element of capability in terms of choosing and performing valued activities (e.g., identifying, selecting, and preparing nutritious foods in a personally acceptable and sustainable manner). Additionally, SLFNS capabilities include the ability to find and secure livelihood strategies (e.g., learning about nutrition, food planning and preparation, and means of accessing assets, as illustrated below). These strategies are particularly relevant during times of stress and crisis for an individual/family or in a community (e.g., loss of a community grocery store; a sudden or chronic health event; loss of a household nutrition caregiver through death or divorce).

Sustainability

Sustainable livelihoods, by definition, meets the needs of the present generation without compromising the ability of future generations to meet their own needs.¹⁰⁸ This entails the reconciliation of environmental, economic, and social demands and highlights the need for a more systems-based approach to food and nutrition security. According to Chambers and Conway, sustainability is a function of how assets and capabilities are utilized, maintained, and enhanced to preserve livelihoods.²³

Excessive consumption, population growth, and economic disparities all threaten the sustainability of our food system. Further, there is considerable evidence that some contemporary food production methods are unsustainable in the long term.⁴⁹,¹⁰⁹ These include certain livestock production practices; excessive use of pesticides, herbicides, and nitrogen-based fertilizers; and large-scale centralized food production. These methods have significant potential to promote zoonotic diseases and widespread foodborne disease outbreaks, degrade ecosystems, affect climate, and in some cases undermine social equity (e.g., marginal returns for some producers; corporate concentration and control).⁴⁴,⁴⁸
The production and marketing of food is a significant part of the world economy, yet multinational agrifood corporations reap the majority of financial benefit from the current food system at the expense of workers, smaller producers, retailers, and consumers.\textsuperscript{110,111}

SLFNS promotes greater sustainability in the food system through a more equitable distribution of power, resources, and decision making among all participants in the food system. SLFNS promotes food production that includes small, local producers and minimizes the harmful effects of food production on the Earth’s resources. SLFNS also promotes planning policies to protect agricultural lands. SLFNS also encompasses social sustainability, including the passing on of critical food and nutrition cultural knowledge, skills, and traditions as a legacy for future generations. Many traditional cultural foodways have been severely disrupted by the adoption of a highly processed, commodified Western diet in recent decades.\textsuperscript{41,78,79,112} This acutely affects indigenous groups who have reduced or no access to traditional foods, along with other demographic groups, who have undergone a rapid nutrition transition to a homogeneous, processed diet.\textsuperscript{113}

The food and nutrition security assets outlined above constitute the core part of the SLFNS framework, which links capability, equity, and sustainability. The framework provides a heuristic model for conceptualizing the combination of assets and contextual elements required to move toward a sustainable livelihoods approach to food and nutrition security.

At the same time, it is important to note that no single asset will necessarily result in improved food and nutrition security, and often not all assets will be acquired. Rather, a greater combination of assets will increase the likelihood of acquiring greater capabilities, equity, and sustainability. For example, increasing access to fruits and vegetables in a low-income population may not translate into increased consumption of fruits and vegetables in the diet.\textsuperscript{14,114} This may be due to a lack of human capital in relation to knowledge and skill of preparation and storage, inadequate food preparation infrastructure, or a bias against these foods in terms of being unpalatable.\textsuperscript{14} Similarly, providing recipes for fruits and vegetables to middle-income families may not translate into increased consumption of fruits and vegetables, due to a perceived lack of time for preparation or undervaluing fruits and vegetables as good-tasting, healthy food choices.

Vulnerability Context

The vulnerability context represents the external environment that influences the acquisition and development of food and nutrition security assets and capabilities. It includes shocks and trends, which can act as barriers or facilitators to realizing food and nutrition assets. Shocks can harm or destroy assets; for example, loss of income or homelessness can reduce access to healthy food, and the loss of a nutrition caregiver due to death or
entry into the workforce can erode social support and food culture. Trends highlight recent events that have an important influence on asset acquisition and development. For example, the proliferation of ultraprocessed convenience foods in the marketplace has led to a nutritionally unbalanced food supply, excessive food waste, and a reduction in food knowledge and skills. 84,107,113,115

Transforming Structures and Processes

Structures, including government, civil society, and private sector organizations, and processes, including laws, policies, and culture, can mediate the effects of the vulnerability context on the ability to acquire food and nutrition assets. It is possible to examine food and nutrition assets in terms of the vulnerability context, along with the structures and processes affecting it. For example, there is abundant access to branded fast food on many university campuses, while access to healthy, affordable food is limited. This is facilitated by policies that favor large foodservice providers maximizing profits and a culture that promotes consuming take-away food outside the home. In order to affect potential change in this system it is essential to understand the structures and processes that maintain it.

Strategies and Practical Interventions

Strategic and practical interventions to improve food and nutrition security are not prescriptive but consider the context of people’s chosen livelihood strategies and reinforce the positive aspects through promoting opportunities and mitigating constraints. 26 Interventions to improve food and nutrition security must work at both practical levels (directly with affected individuals, families and communities) and strategic levels (to affect structures and processes). Examples of interventions include integrating food and nutrition into existing and new community-based programs that support families; scaled-up school-based food and nutrition education that is gender neutral; and provision of subsidized healthy foods in day cares and schools. The goal of all interventions is to increase access to assets and opportunities, in order to build capabilities, equity, and sustainability through participatory approaches.

Livelihood Strategies

Livelihood strategies are the range and combination of activities and choices that people make to achieve their food and nutrition security livelihood goals. Strategies will vary by individual, family, and community and over time but could include prioritizing food preparation as a family-focused activity; researching and integrating cultural foods into family meals; supporting a
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Food and nutrition security outcomes help us understand the output of a configuration of factors within the SLFNS framework. They also help identify and create indicators or provide an organizing framework for existing indicators, which can be used to plan and assess the impact of strategic and practical interventions. As the Department for International Development (DFID) states, using outcomes as opposed to objectives focuses attention on action and progress toward achievements. Outcomes for food and nutrition security can include the consumption of healthier foods, reduction of nutritional vulnerability, more positive attitudes toward food preparation, retention of cultural food knowledge, and more sustainable food production methods.

Application of the Sustainable Livelihoods for Food and Nutrition Security Framework

The SLFNS framework is people centered and participatory and allows those experiencing food and nutrition insecurity to identify their assets and gaps at individual and community levels. The following are examples of how it can be used:

- As a situational assessment tool to identify current assets, gaps, their vulnerability context, and operational structures and processes; for example, use with a family to identify contextual factors that are leading to a high consumption of unhealthy convenience foods and practical interventions.
- To plan, implement, and evaluate outcomes of interventions and strategies to improve food and nutrition security; for example, use to plan a school nutrition implementation and evaluation strategy.
- As an impact assessment tool to analyze asset development with reference to desirable and unintended outcomes or limited participation in interventions; for example, use with a community-based organization that has implemented a healthy eating program to determine whether the intervention addresses the vulnerability context of clients.
- To identify barriers and facilitators to transforming structures and processes; for example, use to assess whether a food price reduction strategy in a northern community will impact healthy eating.
Food and nutrition policy analysis; for example, use to assess the scope and potential for success of a government-sponsored obesity prevention strategy.

CONCLUSION

This article proposes a conceptual model for food and nutrition security that considers factors at multiple scales when attempting to understand how food and nutrition security happen. The proposed framework is an attempt to integrate the complexities of the modern food system into a concrete and pragmatic framework, which can be used for the planning and evaluation of individual interventions to regional/national-level policies and programs. The framework is important in that it highlights the need to look beyond food security, a necessary but not sufficient prerequisite of nutritional health, to nutrition security, which accounts for a broader set of required assets, capabilities, and contexts affecting whether people consume healthy diets.

Future work will entail operationalizing the framework to facilitate strategic and practical interventions. This requires testing it with different food and nutrition security scenarios and different populations to determine whether it meets their needs and understanding of food and nutrition security. The framework also requires the development of normative or practical applications such as individual counseling, food and nutrition program and policy development, and evaluation. These can be empirically researched in terms of effectiveness in facilitating the acquisition of assets, transformation of structures and processes, and development of strategic and practical interventions to improve food and nutrition security outcomes.

The SLFNS framework can be used by a range of stakeholders, including individuals, groups, organizations (governmental and nongovernmental), or communities. The framework takes a holistic approach in that it moves beyond just one or 2 dimensions of food and nutrition security to make sense of the multiple, interrelated facets. Therefore, though this framework is useful for those working with individuals living in poverty, it can be applied equally to a range of other challenges (eg, young adults living on their own, individuals with a chronic nutrition-related illness, communities undergoing a nutrition transition from traditional foodways to market foods, stressed middle-class families struggling with time poverty issues, organizations aiming to promote health and sustainability through their foodservices, policy/decision makers struggling to find ways to reduce chronic disease rates). The SLFNS framework is inherently interdisciplinary, so it will appeal to individuals from a variety of backgrounds.
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