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Food security and sovereignty in Providence Rhode Island local food system

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Abstract

The urban, local food system in Providence Rhode Island has a network of urban gardens and farms throughout the city where food is grown for families and to sell at the many farmers markets. It also has a large food hub selling local food to restaurants, schools, hospitals and universities in the city and further afield. The Providence food system aims to develop the local economy through provision of local, sustainably produced food and to reduce food insecurity for the poorest communities in the city. However, it has been argued that while such systems remain embedded in a market-driven approach to development, significantly addressing food insecurity is problematic (Alkon et al., 2012; Edelman, 2014; Prost et al., 2018). How the Providence local food system addresses food security, both in terms of increasing food resilience against future climate related shocks and currently, for the poorest communities in the city, is discussed in this paper, which also engages with some of the problems faced by local farmers. This research is based on 21 interviews, comprising 32 people from all levels of Providence local food system. It was undertaken over four months in late 2019 through a New Zealand Fulbright Scholarship.

Keywords

food sovereignty, food system reform

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INTRODUCTION

This paper discusses some of the findings from a four-month Fulbright Scholarship research project in Providence, Rhode Island, undertaken in late 2019, in connection with Johnson and Wales University, Providence, RI and Fulbright New Zealand. The research studied the large and well-developed local food system in Providence, looking especially at how it addresses food security and sovereignty. For the purposes of this paper, a food system is considered to encompass "all the activities and actors in the production, transport, manufacturing, retailing, consumption and waste of food, and their impacts on nutrition, health and well-being, and the environment" (IPCC, 2019).

The definition for food security used here is "Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life" (World Food Summit, 1996). However, food security is also examined here from a social-ecological resilience perspective (Barthel, Folke & Colding, 2010; Barthel & Isendahl, 2012; Barthel, Parker & Ernston, 2013), a perspective which recognises the importance of urban food production as security against possible collapses in city food supply networks, for example due to oil price shocks or climate change impacts.

Food justice, with its focus on racial and economic inequities, emerged from urban America and has considerable overlaps with food sovereignty, which emerged from the global south (Alkon et al, 2012). Food sovereignty rather than food justice was chosen as a focus because it is generally considered to take a wider global as well as local, perspective and the following definition from La Via Campesina (2007) is used here: "Food sovereignty is the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems".

The Providence local food system has a three-fold aim: to grow food locally, to grow it sustainably and to increase food security and sovereignty, especially for poor communities. This is not an easy aim. Achieving a good balance between food growers getting a fair price for the organic or low chemical production food they sell and poor communities being able to access such food is not simple. One interviewee called this balance between economy, equity and the

environment "the sweet spot" and said: "Where we need attention right now, I think, is remembering that sweet spot". This paper discusses the local food system in Providence from the perspective of this "sweet spot", using a methodological approach based on the Phronetic Social Science of Flyvbjerg (2001). Phronetic social science is a values-based approach which leads the researcher to ask four questions:

- (1) Where are we going?
- (2) Who gains and who loses, and by which mechanisms of power?
- (3) Is this development desirable?
- (4) What, if anything, should we do about it? (Flyvbjerg, 2001).

This paper focuses on the first of these questions and asks: where is Providence local food system heading in terms of developing a local, organic/low chemical food system that highlights access and equity for the poorest communities?

LITERATURE

Food security

In the face of global environmental change and climate change, local food production is increasingly seen as important for urban food resilience (and therefore urban food security) as it reduces vulnerability to climatic, economic or transport shocks that may impact the global food system (Barthel, Parker and Ernston, 2013; Olsson et al, 2016). This is of increasing concern even in countries that have high food production as they may still import significant amounts. For example, according to an article in the New York Times (2018) the USA currently imports half of its fruit and a third of its vegetables. In addition, while California produces more fresh produce than any other state, it is currently predicted to be severely impacted by climate change (Pathak et al, 2018). Consequently, Northern states like Rhode Island may suffer food shortages due to climate change impacts on major food producing states and climate-related economic and transport shocks affecting food imports.

The current globalized food system has been described as a corporate, agricultural-industrial system and one which is heavily dependent on fossil fuels and agrichemicals (Alkon et al, 2012). In many places dominant farming approaches feeding the global food system have resulted in soil depletion, reduced soil health, polluted waterways and reduced biodiversity, while producing fertilizers, along with growing, refrigerating, storing, packaging and distributing food, produces up to one third of human-caused greenhouse gases (Allen, 2010; Altieri, 2009; Altieri & Toledo, 2011; IPCC, 2019). The global food system will need both to adapt to the changes resulting from climate change, and to mitigate its greenhouse gas production, which currently is expected to grow along with the growing human population (IPCC, 2019). Increasing concerns about the sustainability of the global food system along with its environmental and social costs, have led to growing interest in developing alternative, more local, and sustainable food systems.

The urban resilience conferred by local food systems is a combination of local food availability, land available to grow food, and urban communities holding social-ecological memory for food production (in other words the knowledge, skills and resources to grow food) (Barthel and Isendahl, 2013; Barthel, Folke and Colding, 2010). Diversity is also a key aspect of building resilience (Holling and Gunderson, 2002) and having a diversity of food production options and of people and groups involved in local food systems can build resilience for reorganisation and renewal after disruptive change (Folke, Colding and Berkes, 2003; Barthel and Isendahl, 2013).

Food sovereignty

As well as posing threats to global ecosystems, the dominant food system also poses threats to human health, particularly the health of poorer communities. While large numbers of

people are too poor to buy adequate food, many others are facing crises of obesity-induced health problems such as diabetes and heart failure, due to only being able to access cheap, energy dense-food, which is significantly lacking in required nutrients (Popkin and Reardon, 2018). This is the result of increasing inequalities in terms of food access and heavy dependence of the global system on chemical inputs in available food (Alkon et al., 2012). Patel (2012) also points out this is due to not enshrining the right to food in national human rights legislation, saying: "The distribution mechanisms within the food system that ration food on the basis of ability to pay have produced the paradox of a billion hungry during a time when there are more than 1.5 billion overweight".

Urban, local food systems offer the potential for increased opportunities for poorer communities, often with high percentages of immigrant and minority cultures, to grow and access healthier, locally grown, culturally appropriate food; many developing urban food systems place high priority on such opportunities. However, local food systems can be severely constrained by a global system which has eroded small-scale farming (Alkon et al, 2012) and has resulted in unhealthy food options (high calorific, nutrient-poor food) being cheaper than healthy options (Kern et al, 2017). In addition, several studies point out how local food systems are developing within social and economic structures based on market-competition and the need to be entrepreneurial; consequently, food sold may be too expensive for poor communities to afford (Alkon et al, 2012; Allen, 2010). Allen (2010) says such initiatives cannot solve the problem of inequity, and maybe the best solution is to consider food as a human right. It appears that without significant change to the current dominant economic and food system, local food systems will continue to be constrained. As de Souza (2019) says: "From a policy perspective it is clear that what is needed to end hunger is a radical transformation of the food system, increased entitlements and increased opportunities for people to provide food for themselves" (de Souza, 2019).

METHODS

Initially a period of desktop research and discussions with relevant professors from Johnson and Wales assisted in navigating the local food system and deciding on potential interviewees. Initial interview selection criteria led to connections with organisations and individuals from a range of governance levels, from policy makers to individual farmers and community gardeners. Next interviews focused on as many other people and organisations from those different levels as was possible during the time period. While key organisations were all interviewed, some others were not, due to a lack of time or lack of interviewee response. Twenty-one interviews were undertaken, all face to face apart from two. Several of the interviews were with groups of people from one organisation. Some interviewees had roles within different organisations. Table 1 lists interviewees in terms of their roles in the local food system. Informal conversations during multiple visits to farms, gardens and farmers markets in and around Providence, also attending the First Nation Development Institute Food Sovereignty Summit in Green Bay in September 2019 and a Providence symposium "Reseeding the City" in October 2019 contributed to building understanding for this research.

Table 1. Local Food Stakeholder Interviewees¹

Organisation	Role	Number
		interviewed
Rhode Island Food Policy	Developed Rhode Island (RI) Food Strategy.	
Council (RIFPC)	Focused on equity and economic development of	Three
	local food system.	
Grant Makers Council of	State-wide philanthropy network bringing non-	One
Rhode Island	profits and funders together.	
North Rhode Island	Management of Snake Den Farm where beginner	One
Conservation District	farmers lease land within a State Park.	
(NRICD)	Connected to Land Access Working Group that	
	aims to match prospective farmers with	
	available land.	
Rhode Island Community	Gives out food to alleviate hunger, educational	One
Food Bank	programs, job training programs, small farms	
	where volunteers grow fresh produce for the	
V 1.1 7 1. 7	food bank.	
Health Equity Zone	Department of Health led initiative, community-	Two
Initiative	driven, place-based, works with local	
	communities to develop health outcomes	
	identified by community members.	m)
Southside Community	Non-profit owns and manages community	Three
Land Trust (SCLT)	gardens and farms, training, resourcing urban	
	farms and gardens, organic, focus on immigrant	
Farm Fresh Rhode Island	and poor communities.	Six
	Non-profit food hub between farmers and local	SIX
(FFRI)	buyers using Market Mobile app, farmers markets, Bonus Bucks scheme, commercial	
	kitchen, local food café, trains young people in	
	food system skills.	
Sankofa Initiative	Non-profit housing initiative, community	One
	gardens, urban farms, farmers market in racially	one
	diverse and poor area of the city.	
African Alliance Rhode	Non-profit advocation for African communities,	Two
Island	community garden, African women farm at	
	Snake Den, production and sale of culturally	
	appropriate food.	
Groundwork	Non-profit, trains young people, composting	Three
	outlet, community gardens, land remediation for	
	the city.	
Urban Greens	Co-operative local food outlet.	One
Narragansett Food	Narragansett tribe community food growing and	Two
Sovereignty Initiative	gathering.	
Farmers	Urban farms and on city outskirts.	Four
Gardeners	Two community gardeners and observation of	Two
	SCLT meeting with immigrant gardeners.	

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 $^{^{1}}$ websites for the groups in Table 1 may be found in the bibliography

RESULTS

The Providence local food system²

Each aspect of a local food system is represented in Providence: a diversity of growers, several commercial kitchens where local food is processed, a large distribution center, a range of selling options, and organizations making compost, reclaiming polluted urban land for gardens and gleaning left over food from farms to process it. The large, developing Providence local food system began over thirty years ago when Southside Community Land Trust (SCLT) began developing urban gardens for poor and immigrant communities to grow organic, culturally appropriate food in the Southside of the city (SCLT, n.d.). This is one of the poorest and most racially diverse areas, which is largely classed as a food desert. Using a land trust model, SCLT buys land, builds raised beds with healthy soil and leases these at a low price while providing tools, seeds, training and other resources to the gardeners, who may also grow food to sell at farmers markets. SCLT also has land it leases to new farmers and in late 2019 was awarded \$600,000 from a USDA grant to help support beginner farmers, particularly those from socially disadvantaged groups (SCLT, 2019). Currently SCLT supports over 6,000 people growing food.

A large, established non-profit, which consequently attracts substantial funding, SCLT also channels funding into smaller non-profits such as Groundwork, who help with training young growers and undertake land reclamation contracts, so that food may be produced on the many areas of industrially polluted land within the city. As well as SCLT gardens, there are community gardens in parks, gardens connected to schools and churches and gardens run by organizations like Sankofa and African Alliance Rhode Island (see Table 1) with a focus on specific communities.

For many years SCLT has also worked to build state policies supporting local food as a member, along with other non-profits and local growers, of the "Urban Agriculture Task Force". They worked to build support for a local food system in communities and with policymakers, finding translators so immigrant growers could have their say in consultation processes and inviting the Mayor to see what was happening on the ground in the gardens and urban farms (Brown & Bush, 2018). The success of their efforts is apparent as Providence is now designated a food capital and has a food policy council, developed in 2011 and consisting of a diverse range of local food stakeholders (see Table 1).

Farm Fresh Rhode Island (FFRI), another large non-profit, runs the large winter's farmers market and many summer farmers markets (FFRI, n.d.). The local food distribution hub of FFRI (named "Market Mobile") has sold almost \$19 million of local food for farmers and other producers since it began in 2009, with over \$2 million sold in 2018. More than 100 food producers use it and over 300 restaurants, schools and other customers buy food with the app that "Market Mobile" uses. Sellers can post a profile of their history and business on the app, so customers can choose to buy not only because of the produce but also because of producer values and methods of production. FFRI also runs an on-line local food guide, showing the locations and times of operation of farmers markets, CSA stalls, farm stands, restaurants and other businesses which focus on local food (FFRI local food guide, n.d.). The organization has recently been awarded a large grant for the city to build a new food hub, consisting of the distribution center, commercial kitchen and a range of food outlet businesses.

As well as enabling poor communities to grow food, Providence food system also enables these people to buy food at farmers markets through a scheme called "Bonus Bucks" (BB) which is run by FFRI and funded through a range of funders. This is a SNAP-matching program like

² See Table 1 for more information on the groups discussed here. Interview data will be discussed in the discussion section below.

several that are being run across America, it allows people on SNAP benefits to double their purchasing power when they use their EBT cards to buy fresh produce at farmers markets. In 2019, in Rhode Island, over 2,500 shoppers used BB to buy food and over \$140,000 reached low-income shoppers through the scheme. An initial, brief food price comparison was undertaken as part of this research project, comparing prices at the winters farmers market with prices from some of the key supermarkets and with a local food co-op. Table 2 shows the results of this.

Table 2 Fresh produce price comparison of different food markets in Providence, Rhode Island

Product price per pound	Average small org. farm market stalls	Average large org. farm market stalls	Average large non-org. farm market stalls	Urban Greens	Wholefoods Market	Stop and Shop	Shaws
Potatoes	\$1.80	\$2.80	\$2.25	\$1.10	\$1.33 (org.)	80c	99c
	BB 90c	BB \$1.40	BB \$1.12	(non-	79c (non-	(non-	(non-
				org)	org.)	org.)	org.)
Carrots	\$1.50	\$3.50	\$2.25	\$1.99	\$1.99 (org.)	80c	80c
	BB 75c	BB \$1.75	BB \$1.12	(org)	\$4.99 (non- org.)	(org.)	(org.)
Bag of	\$5.00	\$5.50	\$4.25	\$3.99	\$4.99 (org.)	\$3.49	\$3.95
greens	BB \$2.50	BB \$2.75	BB \$2.12	(org)		(org.)	(non- org.)
Onions	\$2.50	\$3.25	\$3.00	99c	\$1.33 (org.)	85c	99c
	BB \$1.25	BB \$1.87	BB 1.50	(non-	79c (non-	(non-	(non-
				org.)	org.)	org.)	org.)
Beets		\$3.60		\$1.29	\$1.99 (org.)	\$3.99	\$1.49
		BB \$1.80		(org.)		(org.)	(non-
							org).
Squash		\$3.00	\$2.50	\$1.29	\$1.99 (non-	\$1.99	99c
		BB \$1.50	BB \$1.25	(org.)	org.)	(org.) 99c	(non-
							org.)
						(non- org.)	
Apples			\$2.00	\$2.00		\$2.00	\$1.99
ppico			BB \$1.00	(non-		(org.)	(non-
			,	org.)		(8.)	org.)

Note: A range of common produce is priced at different outlets, with the Bonus Bucks (BB) price included in red for the market stall prices. *Stop and Shop* and *Shaws* are two supermarkets that have several shops around the city. *Wholefood Market* is the large Amazon-owned store, common across America, and *Urban Greens* is a local food co-op mentioned in Table 1.³

³ This initial survey would need a follow up extended survey, looking also at summer farmers markets and at different times of the year before firm conclusions can be made

Like most cities across America, Providence also has a large food bank providing for the approximately 20,000 food insecure in the city (estimated from statistics from RI Food Bank, 2019). Several small farms run by volunteers provide fresh produce for the food bank.

DISCUSSION

Many aspects of the Providence local food system confer food resilience and security to the city. The capacity of the two largest non-profits, SCLT and FFRI, to attract significant amounts of funding mean that this system is large, serves many people throughout the city and has been able to develop and supply a thriving local food procurement network. As a FFRI interviewee said "This year we're probably projecting about close to \$2.3 million in sales on behalf of farmers and food producers. I think this will be the first year that we go over about \$350,000 of that to colleges, universities, hospitals".

Multiple organizations are involved at each stage of the food system and this diversity means that if one fails, there are others playing the same or similar roles, thus the sustainability of the whole is not compromised. Also, people are learning the skills of reclaiming polluted land, making compost, growing, processing, distributing and selling food, which increases food security in the city (Barthel and Isendahl, 2013; Barthel et al, 2010). One vulnerability in the system is its continued dependency on external funding, although many of the non-profits also have revenue-generating options. However, the diversity of options for growing and selling local food throughout the city means most people live near to areas where healthy, local food can be grown and bought. Consequently, if economic shocks reduce funding possibilities and non-profits fold as a result, the network of skills, healthy land and farmers markets means the likelihood of re-organization and renewal is high (Barthel and Isendahl, 2013; Folke et al, 2003).

A SCLT interviewee pointed out that "The roots of change for the food system in RI came from a community security model" and a Groundwork interviewee said, "Marginalized groups are represented here more than any other place I have been". During an observed SCLT meeting, recently arrived immigrants were provided with translators, free garden spaces and seeds. Their problems were listened to and solutions found. The focus on providing healthy foodgrowing spaces, especially in impoverished areas where immigrant numbers are high increases food sovereignty in the city. However, SCLT only provides growing spaces for about 6,000 out of the 20,000 food insecure people in Providence. While others garden in non-SCLT spaces, a considerable shortfall remains, and not all poor people have the time and energy to grow food. A member of a funding organization said regarding community gardens, "So I think it's incredibly valuable, but they are on very small scales so how many people are actually engaged?".

The Bonus Bucks scheme aims to increase access to farmers market produce to the poorest in the city, however as Table 2 shows (at least for the winter market) this scheme tends to make produce comparable in price to the supermarkets rather than cheaper. Many interviewees commented on the high prices of farmers markets, for example, one community gardener said, "When I go to a farmer's market often I see the yuppies there who can afford the organic", while a food bank employee said' "Things like having a food desert is a bigger issue than locally grown. If you have a supermarket in those areas, which has fresh produce at a reasonable price, that's going to do more than having it locally grown but at a higher price". Consequently, as poor people tend to buy cheaper, low nutrient food, rather than fresh produce from supermarkets (Kern et al, 2017; Popkin and Reardon, 2018), many are unlikely to buy fresh produce from farmers markets even with the Bonus Bucks scheme. The FFRI statistics suggest as much with only 2573 shoppers using Bonus Bucks in 2019, with an average Bonus Bucks top-up per person per annum of \$55 (calculated from the FFRI statistics presented in the results section).

However, farmers market prices are not creating high profits for small farmers, who need to make a living from their work. As Alkon et al. (2012) points out, many small farmers in America have left the business due to small returns. FFRI charges 18% to sell for farmers (FFRI

interviewee) considerably less than supermarkets (Bertie and Mulligan, 2016). One farmer on leased land on the edge of the city said, "The first few years I started farming, I calculated the first few years, the amount of labour hours I put in versus the net income and I was making \$2 an hour". A FFRI interviewee said, "I know that when we have a good day at a market, that's a good day for those folks who choose to have this lifestyle. It's extremely difficult to choose to do this as a business and to feed themselves and their families". At some of the summer markets immigrant farmers sell culturally appropriate food cheaply to people from their communities; one such farmer said he didn't make much from his market stall, but he was retired and enjoyed doing it, while another (non-immigrant) farmer said, "Opportunities for immigrant and refugee farmers to make good money seem much more limited to me". Few farmers farming on the SCLT farm on the outskirts of the city have managed to transition onto their own farms due to the expense of land and equipment and lack of land availability. One who had farmed there for several years still struggles to make a living despite access to shared equipment and land leased from SCLT at a comparatively low rate.

So, despite having a large, thriving, and diverse local food system, better than any currently operating in New Zealand, and despite city-wide focus on food access for poor and immigrant communities, the Providence food system appears still unable to significantly address food insecurity and sovereignty for these groups and small farmers often struggle to make a living. As Prost et al. (2018) and Alkon et al. (2012) point out, the global food system can outcompete local food providers, something local food activists may not fully recognize as they work hard to build healthy alternatives, constrained by working within the same competitive, entrepreneurial system (Alkon et al, 2012; Allen, 2004; Prost et al., 2018). One FFRI interviewee said, "you have to run a non-profit like a business to stay in business" and "What we have to do as a community of practitioners that are trying to operate these alternative systems to large corporate structures, we've had to learn how to be efficient like they are." Yet some disagree with this approach, for example an interviewee from Groundwork who said "All the social entrepreneurship programs, the city is really encouraging that, I mean the world we live in is encouraging that, and I don't necessarily think that's the right way to go. I think it's going to end up with a lot of precarity for a lot of people."

CONCLUSION

The Providence local food system is clearly heading in a positive direction in terms of building food resilience for the city against future shocks that are predicted to impact the global system and cause food shortages in the city. It is developing the necessary skills and resources in its communities and a network of healthy land for growing food throughout the city. In these ways it is increasing food security for the city. Its low-cost food distribution system, growing local food procurement network and support for beginner farmers means more people can make a living from growing food, which enables the system to grow without being so dependent on external funding.

Having such a clear focus on access to local, healthy food for the poorest communities means a large number of people, who would otherwise be totally dependent on what is often less healthy options provided by the global system, have increased food sovereignty and security. However, the sweet spot, that balance between equity, economy and the environment, remains elusive; Providence still has a high percentage of food insecure people. While continued growth of this local system will undoubtedly mean more poor people gain access to healthy local food, the constraints of working within a profit-driven economic system, out-competed by a large and powerful global food system are significant. It could be that without significant transformation of both the food system and the economic system that underpins it (for example by a shift that enshrines the right to healthy food in national legislation) that sweet spot may never be attained unless or until there is collapse of the wider system (Alkon et al., 2012, Allen,

2004; De Souza, 2019; Patel, 2012). This is clearly recognized by some of the Providence food system people, as this final quotation from one of the SCLT founders illustrates:

"The theory was you build the entire food system, and in many ways something like Rhode Island, from the ground up, new again, old from many, many years of centuries of growing sustainably, but new again. You build that up, and then you can have what you're looking for, which is access for everyone to affordable, healthy, locally grown food. But without that systemic change, you're always going to have a food bank that's doing an emergency response".

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