

# Global Food, Local Hunger:

Investigating Government Incentives  
For an Equitable Local Food System

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## **Table of Contents**

|  |             |
|--|-------------|
| <b>Abstract.....</b>   | <b>p.3</b>  |
| <b>Chapter 1: Introduction.....</b>  | <b>p.4</b>  |
| <b>Chapter 2: Background.....</b>  | <b>p.8</b>  |
| <b>Chapter 3: Methodology.....</b>   | <b>p.21</b> |
| <b>Chapter 4: Federal Food Assistance and Food Distribution in Providence.....</b> | <b>p.23</b> |
| <b>Chapter 5: Federal Agriculture Subsidies.....</b>                               | <b>p.38</b> |
| <b>Chapter 6: Agriculture Subsidies in Rhode Island.....</b>                       | <b>p.47</b> |
| <b>Chapter 7: Conclusions and Recommendations.....</b>                             | <b>p.67</b> |
| <b>Endnotes.....</b>   | <b>p.75</b> |
| <b>Appendix.....</b>   | <b>p.79</b> |
| <b>Bibliography.....</b>   | <b>p.81</b> |

## Abstract

Over the past decade, the percentage of households in the United States experiencing “food insecurity” has remained at a constant level (12%). In recent years, there has been increased awareness of and support for *local food systems* which aim to mitigate the ecological, social, and economic shortcomings of globally-sourced foods purchased at supermarkets, restaurants, and convenience stores. The synthesis of hunger issues and local food issues has resulted in the concept of *community food security*, whereby local food systems help to increase the ability of lower-income individuals to obtain a nutritious and ecologically-sound diet. In order to identify avenues for increasing community food security in Providence and beyond, I ask the question: *To what extent do federal and state government incentives increase lower-income individuals’ access to local food?*

To answer this question, I place my research within the framework of *food systems analysis*, which addresses both the production and distribution of food. To analyze government incentives for food production, I compile USDA agricultural subsidy data for the entire United States and for Rhode Island using the Environmental Working Group’s Farm Subsidy database. To analyze government incentives for equitable distribution, I identify federal food assistance programs which increase the purchasing power for food of lower-income individuals and households. I also identify some barriers to assuring access to farmers’ markets for Providence residents who receive federal or state food assistance.

I find that the federal Farmers’ Market Nutrition Program (FMNP) has enabled qualified people to use vouchers to purchase locally grown produce at three of the nine farmers’ markets in Providence in 2005. Nevertheless, only two of the nine farmers’ markets in Providence are located in economically disadvantaged neighborhoods as of summer 2005. Furthermore, federal and state agriculture subsidies support the production of commodity crops and the mitigation of on-farm externalities of agriculture without regard as to where food goes after harvest, i.e., subsidies do not promote the sale of locally-grown produce in local markets.

I recommend that the USDA continue to support food assistance programs such as the FMNP which specifically increases access to nutritious local foods. The creation of farmers’ markets in the economically disadvantaged neighborhoods of Olneyville, Silver Lake, and Hartford will also aid in increasing access to local food. I encourage environmentalists, sustainable agriculture advocates, and specifically RI NRCS to expand their notion of “conservation” to include off-farm externalities associated with food systems. Finally, I recommend the creation of agricultural subsidies which support small, diverse farms which produce for local markets.

## Chapter 1: Introduction

For all humans, food is a necessity for existence. To this end, societies since the beginning of time have all shared at least one common goal: feeding themselves. The way in which a society feeds itself can be referred to as a *food system*. In analyzing any food system, there are two central concerns. The first concern is a question of production (Who grows crops? Where? In what manner?). The second concern is a question of distribution (Where does the food go after harvest? How do people get food?). Such a framework can be applied to any food system, whether it is the old feudal system of England or the globalized supermarket culture in America today. This paper will address broadly the United States' food system and more specifically the local food system of Rhode Island. The focus of this paper is to identify the ways in which our food system either helps or hinders citizens from receiving an environmentally sound and adequately nutritious diet.

For the majority of Americans, the point of contact with the food system occurs at the supermarket. According to the Food Marketing Institute, as of 2003, there were 47,434 supermarkets and grocery stores in the United States.<sup>1</sup> When wholesale clubs (e.g. Sam's Club and Costco) and convenience stores are included, that number skyrockets to 210,844 stores or, in other words, approximately one food outlet (discounting restaurants) for every 1,335 US residents.<sup>2,3</sup> Although supermarkets and convenience stores provide one-stop food shopping (arguably a necessity for our fast-paced culture), their aisles also reveal a great deal about our food system. When one walks the aisles of a supermarket, brand names, packaging, the global origins of the produce section, and even the lists of ingredients on processed food (to name a few indicators) all suggest a complex system of

production that operates on anything but a local scale. Confirming the non-local nature of supermarket produce, a study by the Leopold Center for Sustainable Agriculture in 2003 found that food on supermarket shelves traveled, on average, 1,494 miles before ending up in the hands of the consumer.<sup>4</sup> However, there is rarely an indication at the supermarket as to how far the food has traveled. Furthermore, with the plethora of brand names, processed food, and ingredients, it is nearly impossible to gain any insight as to where the food was produced, who grew the base ingredients, and in what manner that food was produced.

Partly in reaction to these anonymous sources of supermarkets foods, the United States has seen a resurgence in local farmer's markets. The USDA reports that the number of farmers' markets in the United States more than doubled between 1994-2004.<sup>5</sup> Farmer's markets cut out the middleman of the food system by creating a venue for face-to-face interaction between producer and consumer. Consumers tend to shop at farmers' markets for many different reasons from environmental concerns (reducing the distance food travels, eating organically), to health concerns (increasing intake of fresh fruits and vegetables), to the social (supporting small, local farms in the face of an increasingly globalized food economy), and to the personal (getting to shake the hand that harvested your dinner).<sup>6,7</sup> Farmers' markets are just one facet of local food systems, which aim to provide an alternative to the agribusiness dominated landscape of our current food system.

As local food systems continue to develop, they tend to focus on a shift of production from the global to the local. Instead of large factory farms in California and Brazil, local food systems more often than not utilize smaller farms growing a diversity

of crops. Instead of supermarkets and convenience stores, there are farmers' markets and community supported agriculture (CSA) programs. As local food systems develop, they are also beginning to address a key factor of food distribution: access. In Rhode Island, the RI Department of Health has reported that low-income households are more likely to experience food insecurity (i.e. the inability to acquire a nutritionally adequate diet).<sup>8</sup> The fact that there are many people in the United States who cannot support an adequate diet is not breaking news. However, the development of local food systems provides an opportunity to incorporate the food-disenfranchised population into a new system and to expand access to a more nutritious and more environmentally sound diet.

In order to assess local food systems, their social and environmental benefits, and the potential to increase access to a healthy diet, this paper addresses federal and state government incentives and barriers to the expansion of local food systems and government efforts to relieve food insecurity with particular focus on Rhode Island. This will involve an analysis of federal and state agriculture subsidies as well as federal and state food assistance programs. Furthermore, a case study of local agriculture in Rhode Island and, in particular, of farmers' markets in Providence is undertaken in order to reveal to what extent an environmentally sound local food system can also aid in reducing food insecurity.

Chapter 2 will address the background and formation of the central thesis question in greater detail. Chapter 3 briefly lays out the methodology used to answer the thesis question. Chapters 4, 5, and 6 comprise the Findings section of the thesis and present USDA Agricultural Subsidies to the United States, USDA Agricultural Subsidies to Rhode Island, and Federal Food Assistance and Food Distribution in Providence

respectively. Finally, Chapter 7 presents conclusions drawn from the finding and recommendations for further action to increase access to local food systems.

## Chapter 2: Background

In a 2002 speech concerning the US Farm Bill, George W. Bush declared:

“And one of our great strengths in this country is the productivity of our farmer and rancher. One of the great strengths of America is that we produce more food than we need. And if you produce more food than you need, it seems like to me that you ought to work to sell that food overseas to people.”

In these few sentences, Mr. Bush exposes the basis for United States agricultural policy. Food, as a commodity, is subject to the laws of the market which stress comparative advantage and free trade as means to a healthy economic system. Therefore, Bush stresses the *productivity* of the American farmer and the belief that increased global trade should be a goal of American agriculture. While there is nothing intrinsically objectionable to a vision of America as the world’s breadbasket, Mr. Bush’s words, like many presidential speeches, are as important for what they include as much as what they leave out.

First, the emphasis on increased production and the expansion of agricultural trade highlights the way in which our food system is embedded in a global context. As noted in the Introduction, food purchased at the supermarket has traveled, on average, nearly 1,500 miles before reaching the consumer.<sup>9</sup> Figure 2.1 shows the upward trend in global trade of agricultural goods, which has nearly quadrupled from 1961 to 2000. Since the global population only doubled within that same time period<sup>10</sup>, there is simply more globally marketed food per person presently than in the past; and that upward trend appears only to be increasing.

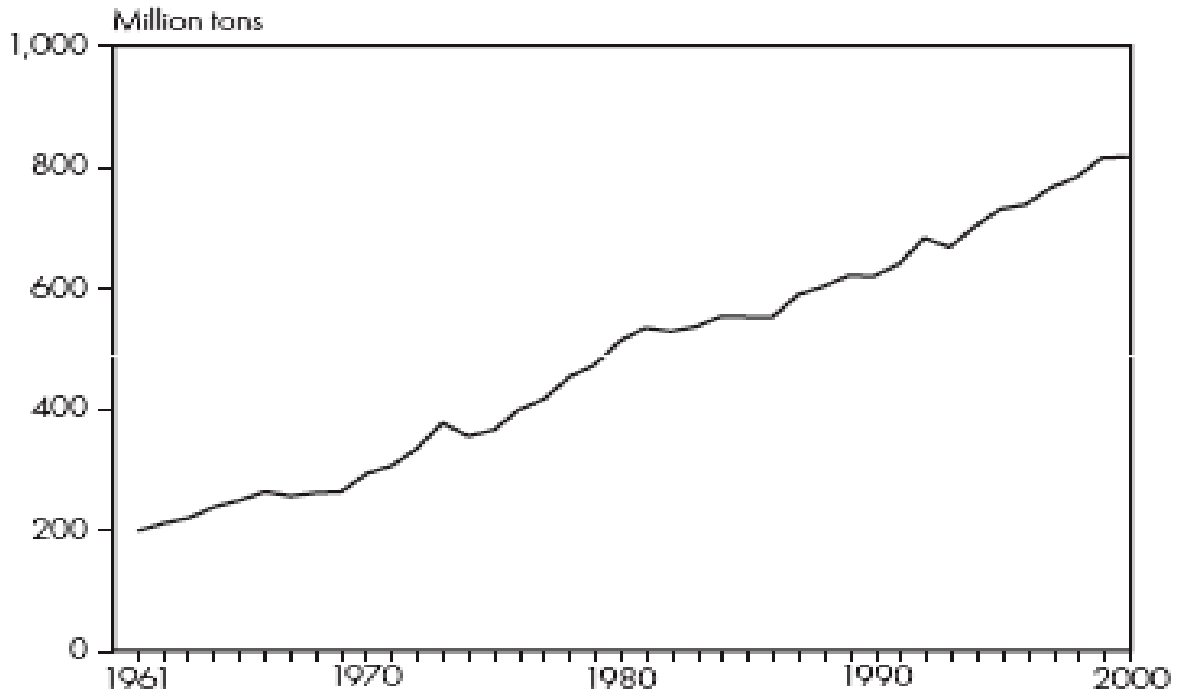


Figure 2. 1: Volume of World Agricultural Trade 1961-2000<sup>11</sup>.

The distance spanned in food transit points to the global food system’s reliance on affordable fossil fuels in order to source ingredients from all over the world.<sup>12</sup> Gottlieb (2001) has documented how the rise of the globalized food system after World War II paralleled a new emphasis on mechanized production, which made farms more reliant on “off-farm business such as manufacturers of agricultural equipment and chemicals.”<sup>13</sup> As supermarkets also expanded in the post-WWII period to become a primary outlet for obtaining food<sup>14</sup>, and as agricultural production became more mechanized and distanced from where the food was actually consumed, our society became more embedded in a global food system where locus and means of production became inconsequential beneath bright packaging and brand names.

Secondly, despite Mr. Bush’s assertion that “we produce more food than we need,” levels of food insecurity and hunger in the United States have remained relatively constant for the past decade. As Figure 2.2 shows, the percent of households in the

United States that are “food insecure” has been increasing slightly since 1999 from ~10% to 12% of households. The percent of households that are “food insecure with hunger” has remained around 4% since 1995. The USDA credits the greater fluctuations in food insecurity for 1995-2000 (seen primarily in the valleys and peaks of 1996-1999) in Figure 2.1 to data collection methods, which led the agency to administer their survey in August/September for even-numbered years and in April for odd-numbered years. As of 2001, the USDA administers all food security surveys in December so as to avoid

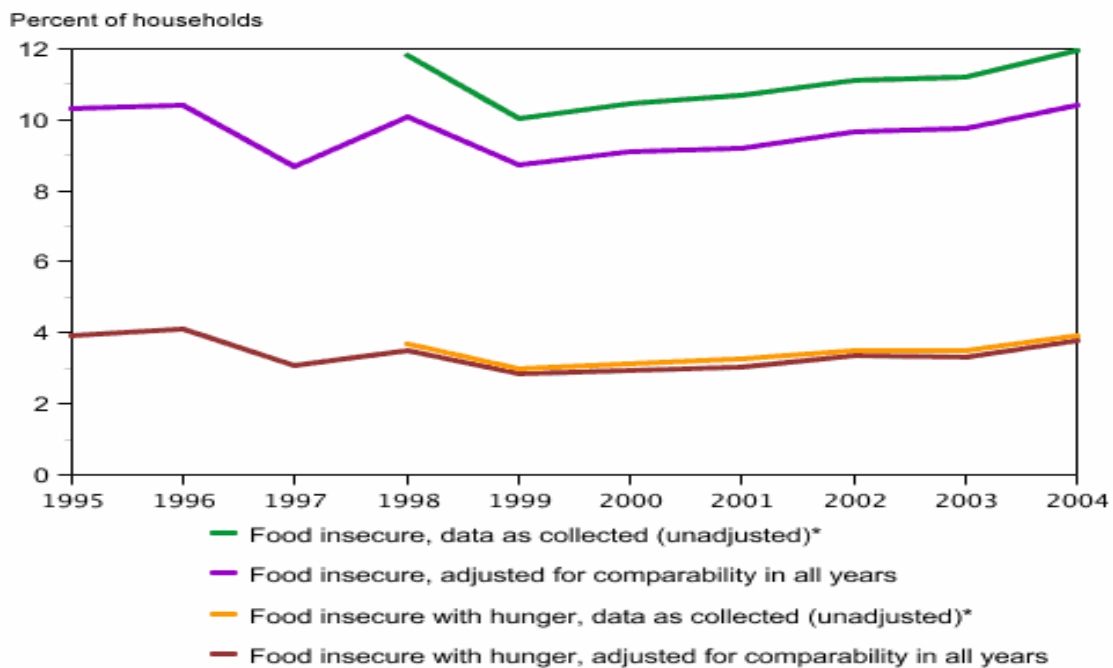


Figure 2. 2: Percent of Food Insecure Households in the United States 1995-2004.  
 Source: Economic Research Service of the USDA: [www.ers.usda.gov/Briefing/FoodSecurity/trends/](http://www.ers.usda.gov/Briefing/FoodSecurity/trends/)

seasonal fluctuations in their data.<sup>15</sup>

From this data, it is fair to say that the dominant food system systemically fails to provide a certain population of the United States access with an adequate diet. The central question of this thesis aims to address the possibilities of relieving this systemic food

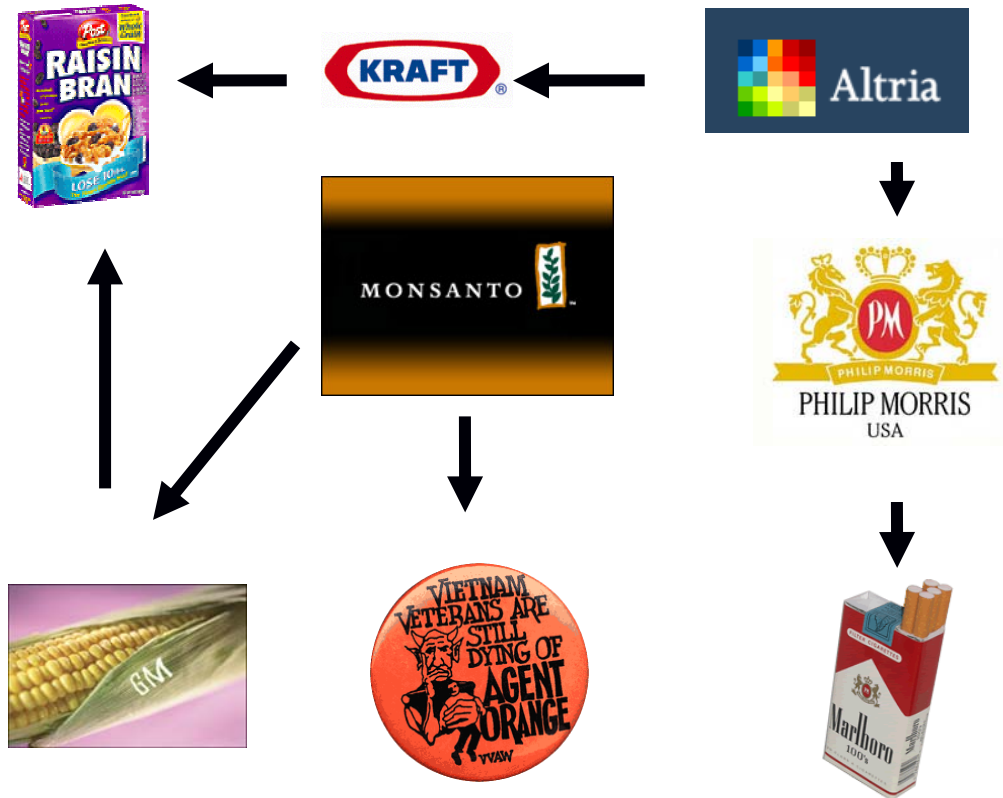
insecurity through greater integration of local and community food systems into government agricultural subsidies and food assistance programs.

*Consumer Culture, Sense of Place, and Agribusiness*

Before further expansion on the central question of this thesis, it is important to highlight facets of the global food system that go beyond straight environmental and hunger concerns. At the beginning of “Good Oak,” in A Sand County Almanac, Aldo Leopold warns, “There are two spiritual dangers in not owning a farm. One is the danger of supposing that breakfast comes from the grocery, and the other that heat comes from the furnace.”<sup>16</sup> Here, Leopold is not necessarily arguing that we should all become farmers; rather, he is arguing for a consciousness that is driven by an understanding of the interconnectedness of the world in which we live. When a consumer purchases food at a supermarket, whether it be processed or fresh, there is often no indication as to where the ingredients were grown, how far they ultimately traveled to get to the shelf, the production methods used in growing the food, and what middlemen were involved in getting the food from the farmer to the shelf.

For the purpose of exemplifying what happens behind the brand labels, consider a box of Post Raisin Bran cereal. Although a consumer could not guess from just looking at the cereal box, by buying Post Raisin Bran one is supporting more than just the Post cereal company. Figure 1.1 traces a box of Post Raisin Bran back to two large companies, Phillip Morris and Monsanto, which also benefit from sales of the cereal. Post is currently part of Kraft Foods, Inc., which, in turn, is owned by the Altria Group, Inc. The Altria Group was founded in 1985 when Philip Morris acquired The General Food Corporation which subsequently merged with Kraft Foods, Inc. in 1989. Currently, Altria is simply

the parent company of Kraft Foods and Philip Morris, making it a formidable food and tobacco conglomerate. Thus, whether a consumer buys a pack of Marlboro cigarettes or a box of Raisin Bran, Altria Group, Inc. reaps the profits.



**Figure 2.2: Corporate Interests in Post Raisin Bran Cereal**

Additionally, Greenpeace USA determined that Post Raisin Bran contains genetically engineered corn (in the form of the corn syrup).<sup>17</sup> The largest agricultural biotechnology firm in the United States, Monsanto, holds patents on genetically engineered corn varieties. Thus, buying foods with genetically engineered ingredients (which cannot be determined from looking at packaging), contributes to Monsanto’s bottom line. As a major chemical manufacturer, Monsanto produces popular fertilizers and pesticides as well. Monsanto is well known for its role in producing “Agent Orange,”

the defoliant by the United States used in the Vietnam War, which has left a legacy of lung cancer and birth defects in Vietnam Veteran and Vietnamese populations.

The purpose of tracing the corporate interests involved in a box of Post Raisin Bran is not necessarily to cast a value judgment on those who purchase processed foods. Rather, this is simply an exercise to depict how consumers can be left in the dark about the implications of their purchases. In contrast, when consumers purchase produce at a local farmers' market, they can feel assured that the food they are buying has come from local sources without a myriad of middlemen and that they are often buying food directly from the hands that harvested it. The understanding of where food has come from and who grew it both contribute to healing the spiritual dangers which Leopold outlines in "Good Oak."

It is important to note that purchasing *local* produce does not necessarily mean purchasing *organic* produce. In fact the majority of vendors at Providence Farmer's Markets are *not* organic producers.<sup>18</sup> Therefore, shopping at a farmer's market does not guarantee that pesticide and fertilizer producers will not indirectly benefit from one's food purchases. However, in addition to the reduced carbon emissions (see Chapter 3) and the direct benefit to the local economy associated with purchasing local food, customers can also actively engage with farmers at a farmer's market. Whereas nothing on a box of Post Raisin Bran cereal suggests that it contains genetically engineered ingredients or ingredients grown with fertilizers and pesticides, customers at a farmer's market have the opportunity to ask the producer about his/her production methods. This type of transparency simply does not exist for the food found in supermarkets.

Of course, one would be hard-pressed to deny that supermarkets provide certain benefits to their consumers. Supermarkets provide a central one-stop location where shoppers can purchase a wide variety of items (not restricted to food items) such as perishable foods, processed foods, baking needs, cleaning supplies, cosmetics, and toiletries to name a few. Furthermore, by purchasing products in bulk quantities, supermarkets are able to provide lower prices compared to smaller operations such as convenience stores, gas station mini-marts, and “mom and pop” shops.<sup>19</sup> However, while there may not be local substitutes for processed food products, local farmer’s markets can help reduce the demand for globally-sourced produce purchased at supermarkets.

#### *Local and Community Food Security*

Within the last decade, alternative food regimes have emerged that set out to counter some of the environmental and social externalities associated with the global food system. Perhaps the most known regime is that of a local food system in which the distances and anonymity of the global food system are replaced with local producers selling their harvests directly to local consumers. Instead of the supermarket, the local food system relies on farmers’ markets, Community Supported Agriculture (CSA) programs, and direct purchases from the farmer by local restaurants and schools. In the local food system, the brand names and packaging on the supermarket shelf are replaced by the actual farmer who grew the food and a consumer dedication to purchase locally grown produce over globally produced foods.

There is ample evidence that interest in local food systems has been steadily increasing in the last decade. The USDA reports that the number of farmers’ markets in

the United States has more than doubled from 1,755 markets in 1994 to 3,706 markets in 2004.<sup>20</sup> Of course, the number of farmers' markets is still miniscule compared to the number of supermarkets in the United States. Nevertheless, it is clear that more consumers and farmers are attempting to engage in a system that guarantees fewer miles traveled for food, assured freshness of produce, and a greater direct benefit to the local producers of food in lieu of middlemen.

While local food systems shift the locus of production from the global to the local and provide consumers with an alternative to the supermarket paradigm, local food systems in and of themselves do not necessarily address issues of access. As local food advocates, anti-hunger groups and urban residents began to collaborate on food issues affecting urban areas in the 1990s, the concept of *community food security* was born.<sup>21</sup> Defined as "all persons obtaining, at all times, a culturally acceptable, nutritionally adequate diet through non-emergency sources"<sup>22</sup> community food security seeks to integrate local food production and food insecurity issues in an equitable and sustainable food system. Gottlieb (2001) explains:

"...community food groups are not 'environmental' in the way that the term 'environmental' has been commonly understood. Nor [are] they "environmental justice" or "pollution prevention" groups in the way environmental justice and pollution prevention issues have generally come to be defined."<sup>23</sup>

Nevertheless, through merging food security and local food systems, community food security addresses "an environmental link to community needs."<sup>24</sup> Within this framework of community food security, this thesis will address government incentives for the production and equitable distribution of food in order to identify ways in which to increase local and community food security.

As Gottlieb noted, community food security may not appear to be “environmental” in the traditional sense. Mainstream environmentalism, when dealing with agriculture, has often focused on on-farm externalities such as integrated pest management, nutrient run-off, and irrigation issues.<sup>25</sup> Critiquing the on-farm focus of environmentalists, Allen and Sachs (1992) argue, “Sustainable agriculture needs to be conceptualized in a way that not only includes the production process itself, but all of the related backward and forward linkages.”<sup>26</sup> Local food systems and community food security, as part of a larger sustainable agriculture movement, expand environmental concerns in regard to agriculture to include where food goes after leaving the farm. In this framework, farms producing for local consumption are considered more environmentally sustainable than their wholesaling counterparts. The expansion of the environmental focus also addresses the critiques of mainstream environmentalism espoused by Shellenberger and Nordhaus in their controversial essay “The Death of Environmentalism.”<sup>27</sup> In addressing environmentalists’ inability to win a decisive political victory concerning global warming, Shellenberger and Nordhaus criticize environmentalists for defining “environmental” as too narrow a term thereby alienating allies and avenues for environmental change. The environmentalist focus on technological fixes for global warming such as fluorescent light bulbs and hybrid cars, argue the authors, prevent environmentalists from thinking systemically about the ways in which global warming abatement could be integrated with other social concerns. Through promoting community food security, environmentalists have an opportunity to merge the environmental benefits of local food production with the social and economic

benefits of directly supporting the local economy while helping to alleviate local food insecurity.

### *Food System Analysis*

In analyzing community food security, Gottlieb stresses that such analysis falls under the context of *food systems analysis* which strives to “identify the structures and outcomes related to how food is grown, processed and manufactured, distributed, marketed, and sold.”<sup>28</sup> This thesis will focus on federal programs administered through the USDA and their contribution to *production* (in the form of agricultural subsidies) and *distribution* (in the form of food assistance programs). The overarching question guiding this thesis asks, “To what extent, if any, do government incentives support increased access to local food systems?”

### *A Brief History of United States Agriculture Subsidies*

Before analyzing current trends in agriculture subsidies and food assistance programs, it is worthwhile to understand the history of these programs; how these programs have developed over time; and how, in analyzing these programs, this thesis contributes to academic dialogue about community food security and local food systems.

Federal agriculture subsidies and food assistance programs emerged out of the Great Depression as New Deal era programs to deal with the hardships facing the United States. In the 1933, due to agricultural surpluses in the 1920s and 1930s which had driven the price of food well below the cost of production, congress passed the Agricultural

Adjustment Act (AAA) which, in essence, paid American farmers *not* to produce certain agricultural commodities.<sup>29</sup> While the AAA helped to manage the nation's agricultural surplus and stabilize the income of American farmers, it was difficult to reconcile paying farmers to not grow food at the same time that some Americans did not have enough to eat.<sup>30</sup> This inconsistency led in 1939 to the creation of the federal food stamp program, which directly increased the purchasing power of low-income individuals. The food stamp program was discontinued at the beginning of World War II and not resurrected on the national level until 1973.<sup>31</sup>

The World War II period and post-World War II period witnessed drastic changes for the face of American agriculture and associated production subsidies. The rise of industrial agriculture, which corresponds to the advent of widespread use of petro-chemical pesticides and fertilizers and to the dominance of large farms over the small ones, paralleled a new emphasis on subsidizing the production of commodity crops rather than *not* growing commodity crops.<sup>32</sup> Even though many scholars would argue that New England had ceased to be an "agricultural" region during the 19<sup>th</sup> century, Bell (1996), using "land in farms" data rather than rural population data, has shown that the exodus of agriculture from New England actually occurred when the Midwest and Western United States began to be more heavily subsidized in the post-World War II era (not only for agriculture, but also roads and water projects) than the Northeast.<sup>33</sup> Chapter 5 and Chapter 6 provide more detail on the reasons which federal focus on subsidizing commodity crops does not favor farmers in Northeast states such as Rhode Island, where farms are small and commodity crops are not abundantly grown.

In the 1980s, a new environmental consciousness began to permeate through agricultural discourse, leading to the creation of conservation-based subsidies in the 1985 Farm Bill.<sup>34</sup> Although conservation subsidies from 1985 to present (discussed in greater detail in Chapter 5 and Chapter 6) have aided in abating the adverse environmental effects of conventional agriculture, the vast majority of agricultural subsidies still support conventional agricultural production of commodity crops.<sup>35</sup> Nevertheless, there are signs that federal support of commodity crops may be waning. The 2002 Farm Bill drastically cut spending for commodity programs resulting in a 50% reduction in funding for 2002-2004 over 1999-2001.<sup>36</sup> Furthermore, as the United States comes under pressure from the World Trade Organization to reduce barriers to agricultural trade, the federal government may be compelled to continue reducing commodity subsidy payments; however, conservation subsidies, which aim to protect the environment from adverse externalities of agriculture, are permissible under WTO guidelines.<sup>37</sup> Thus, if the federal government must reduce spending on commodity support, there is ample opportunity to transfer funds towards the promotion of a more sustainable system of agriculture.

In the same way the rise of environmental consciousness in the 1970s and 1980s led to the introduction of conservation subsidies to mitigate the adverse effects of conventional agriculture, this thesis capitalizes on increased awareness of the benefits of local food systems and community food security<sup>38</sup> in order to identify the barriers to and possibilities for the expansion of an equitable food system. Previous work at Brown University by Hill (2004) and Smith (2004) helped to identify barriers to the expansion of local agriculture markets and barriers to low-income access to purchasing locally grown food, respectively. This thesis builds on the work of Hill and Smith by expanding the

scope of analysis to include aspects of both production and distribution; furthermore, the scope of analysis for this thesis focuses on federal and state government incentives, resulting in a more thorough analysis of United States agricultural policy and its successes and shortcomings in increasing community food security.

### Chapter 3. Methodology

As discussed in Chapter 2, this thesis aims to answer, “To what extent, if any, do government incentives increase access to local food systems?” through the lens of food systems analysis. Food systems analysis breaks food systems down into two components: 1) *production* and 2) *distribution*. In order to gauge federal government support for increased access to local food systems, this thesis addresses programs administered through the USDA and its subsidiary agencies. In particular, this thesis uses Providence as a case study to see how production and distribution incentives could be integrated into creating greater food security in an urban environment.

The following methods were utilized in order to answer the above question:

- Assemble USDA agricultural subsidy data for the United States and Rhode Island.
- Identify key federal food assistance programs that support local food systems and local food access.
- Using Providence as a case study, address program’s ability to create local food security.
- Use mapping, price comparisons, and personal observation of Providence farmers’ markets and supermarkets to identify barriers to access to local foods.

USDA subsidy data was collected from the Environmental Working Group’s farm subsidy database ([www.ewg.org](http://www.ewg.org)). All citations to EWG refer to raw monetary values from the EWG database; all figures, tables, and other analysis of agriculture subsidies are the work of the author. Data on food assistance programs was assembled from literature and on-line USDA reports and fact sheets. Data on the state of local agriculture in Providence was collected from the author’s personal visits to Providence farmers markets and supermarkets, conversations with producers and consumers of local food, and the

Rhode Island USDA Farm Bill hearing held in October 2005 in Narragansett, Rhode Island.

## **Chapter 4: Federal Food Assistance and Food Distribution in Providence**

### *Providence and Hunger*

Rhode Island ranks 17<sup>th</sup> in the nation for percentage (12.1%) of households deemed “food insecure” for 2002-2004; moreover, Rhode Island ranks 13<sup>th</sup> in the nation for percentage (4.2%) of households deemed “food insecure with hunger.”<sup>39</sup> These figures are determined through a USDA survey comprised of 18 multiple-choice questions addressing whether a household had enough to eat and the reasons why they at times may not have enough to eat. The Rhode Island food insecurity statistics are higher than the national average and point to a disturbing trend for Rhode Island food access. While the overall percentage of food insecure households in Rhode Island may rank 17<sup>th</sup> on the national scale, RI is second in the nation for the greatest increase in food insecure households between 1999 and 2004.<sup>40</sup> In that time period, food insecure homes in RI increased by 3.4% while food insecure homes with hunger increased by 1.7%.<sup>41</sup> It is through the web of Food Assistance Programs that federal and state governments attempt to address household food security concerns. The following sections will discuss federal food assistance programs (particularly the WIC program), farmers’ markets in Providence, and their role in promoting local food security.

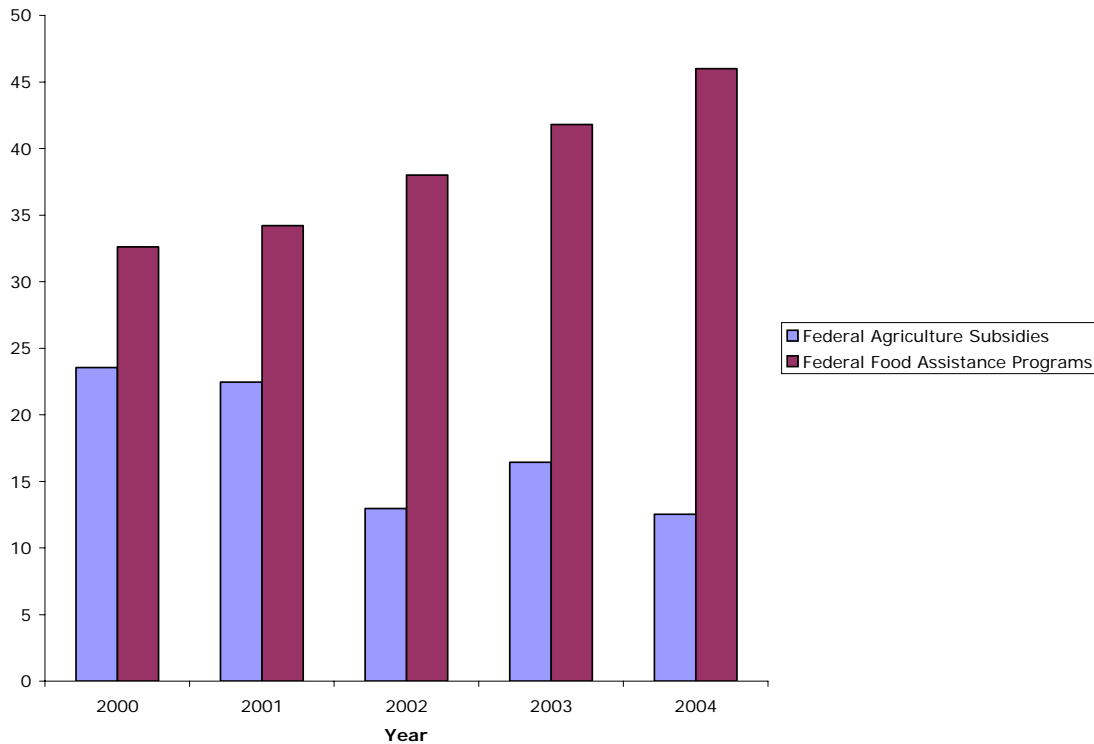
### *Federal Food and Nutrition Assistance Programs*

The federal government directly addresses issues of hunger alleviation through the USDA’s food and nutrition assistance programs. Administered through the Food and Nutrition Service (FNS) agency of the USDA, food assistance programs aim to provide “children and low-income people access to food, a healthful diet, and nutrition education.”<sup>42</sup> The programs administered through FNS include:

- Food Stamp Program (FSP)
- Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)
- School Breakfast and Lunch Program
- Child and Adult Care Food Program

The FSP, the largest food assistance program, which was created to “permit low-income households to obtain a more nutritious diet through normal channels of trade by increasing food purchasing power for all eligible households who apply for participation,” accounted for 60% of national food assistance funding in 2004.<sup>43</sup>

According to USDA, 23.9 million people on average per month received food stamps in 2004 at an overall cost of \$27.2 billion. It is important to note that overall funding for the FSP in 2004 is more than double the amount spent on USDA agricultural subsidies in the same year. Thus, on the whole, USDA spends considerable funds on both the production and distribution of food in the US. USDA estimates that nearly one in five Americans receives food assistance at least once during a given year.<sup>44</sup> Figure 4.1 displays the funding levels for all federal food assistance programs and agriculture subsidies (which are discussed in greater detail in the following two chapters) for 2000-2004.



**Figure 4. 1: Funding Levels for Federal Agriculture Subsidies and Food Assistance Programs 2000-2004.**<sup>45,46</sup>

The FSP acts as an entitlement program, which means that the government will provide assistance to any individual who meets the eligibility requirements. The FSP does not, however, set any restrictions on what type of food the stamps are used for (except for hot foods and foods eaten in the store)<sup>47</sup> In Providence, food stamps can be used to support local farmers if recipients choose to purchase produce at a farmers' market.<sup>48</sup> When food stamps are redeemed at supermarkets, the food security of the individual obviously increases; however, food stamp purchases of processed food and non-local produce do not necessarily increase local/community food security because of the maintained reliance on the supermarket and global food system. As food stamps heavily contribute to many Americans' ability to obtain an adequate diet, the intention

here is not meant to belittle the FSP. Rather, it is to address whether a federal program can incorporate individual food security into a broader sense of community food security.

*The Special Supplemental Nutrition Program for Women, Infants, and Children*

In 1974, the USDA fully implemented the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). Part of the Child Nutrition Act of 1966, the WIC program aims to “serve as an adjunct to good health care during critical times of growth and development.”<sup>49</sup> The WIC program provides pregnant, breastfeeding, and postpartum women and children (up to 5 years old) with access to “supplemental nutritious foods, nutrition education and counseling at WIC clinics, [and] screening and referrals to other health, welfare, and social services.”<sup>50</sup> In 2005, over \$5 billion was federally allocated to administer the WIC program. Rhode Island received over \$14 million in federal grants for WIC in 2005 with an average monthly \$36 benefit to participants.<sup>51</sup>

It is important to note that WIC functions as a *supplemental* program, which means that unlike food stamps, congress has stipulated that WIC-eligible foods are those “containing nutrients determined by nutritional research to be lacking in the diets of pregnant, breastfeeding, and postpartum women, infants and children and foods that promote the health of the population served by the program...”<sup>52</sup> To that end, WIC-approved food packages must contain foods that are rich in at least one of the following nutrients: protein, calcium, iron, vitamin A, and vitamin C.<sup>53</sup> Thus, WIC food packages consist of cereal, juices, milk, cheese, eggs, peanut butter, dried beans, peas, and lentils, tuna, infant cereal infant formula, and (the only fruit or vegetable) carrots.<sup>54</sup> It is the

responsibility of each state agency administering WIC to determine the specifics of its food package (e.g. brands, varieties, sizes). For example, the Massachusetts and Rhode Island WIC approved food lists are practically identical, except that Massachusetts stipulates that WIC vouchers cannot be used on organic varieties of the approved foods (due to the greater price of organics). For the Rhode Island WIC food package as drafted by the RI Department of Health, see Appendix I.

In order to be eligible for WIC, an individual must fall below 185% of the federal poverty line and be determined by a health professional to be nutritionally at-risk. Unlike, the Food Stamp program, WIC is *not* an entitlement program and congress does not fund WIC such that every eligible individual can receive benefits. For 2004, RI Kids Count estimated the eligible WIC population of Rhode Island to be 35,449 individuals <sup>55</sup>(based on 2000 Census data). For the City of Providence, the WIC-eligible population stands at 13,689 individuals.<sup>56</sup> However, only 63% of the eligible RI population and 66% of the eligible Providence population were actually enrolled in WIC in 2004.<sup>57</sup> Nevertheless, WIC is proving to be a well-received program in RI as enrollment in WIC has steadily increased over the past years. Figure 4.2 shows the number of individuals enrolled in WIC for 2000-2005. Figure 4.3 shows the corresponding federal funding levels of WIC for Rhode Island and helps to explain the sharp increase in enrollment in 2002.

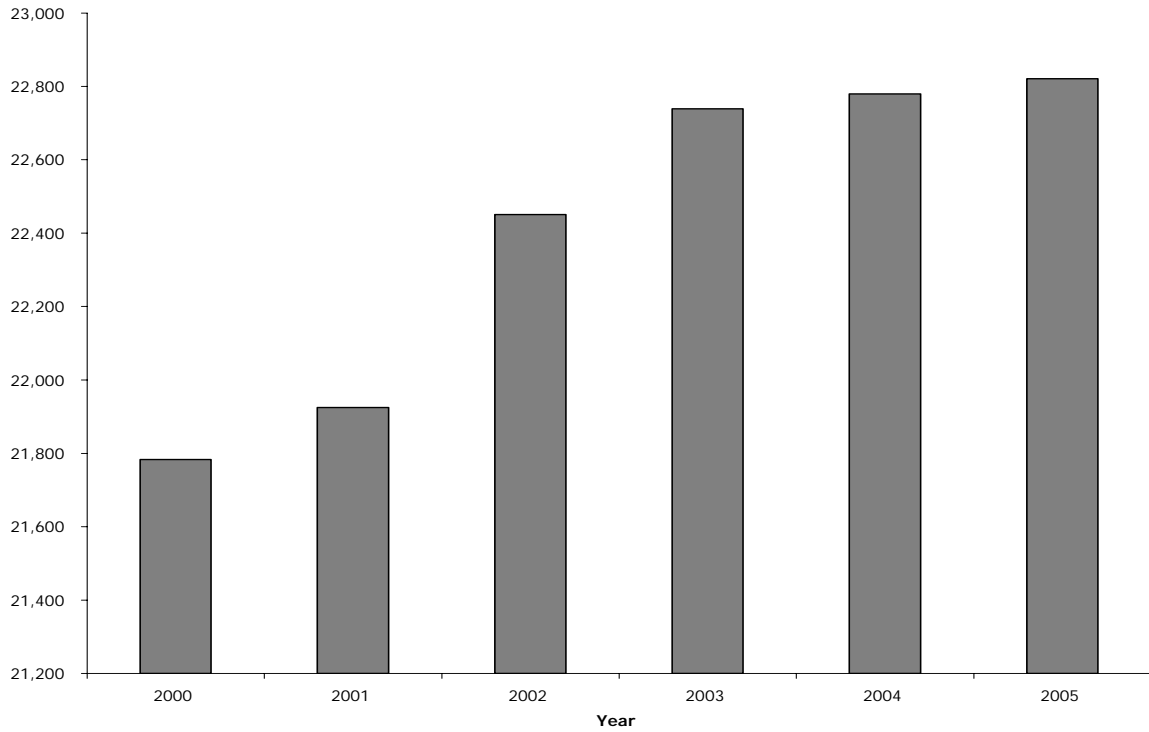


Figure 4.2: Individuals Participation in WIC in Rhode Island 2000-2005.<sup>58</sup>

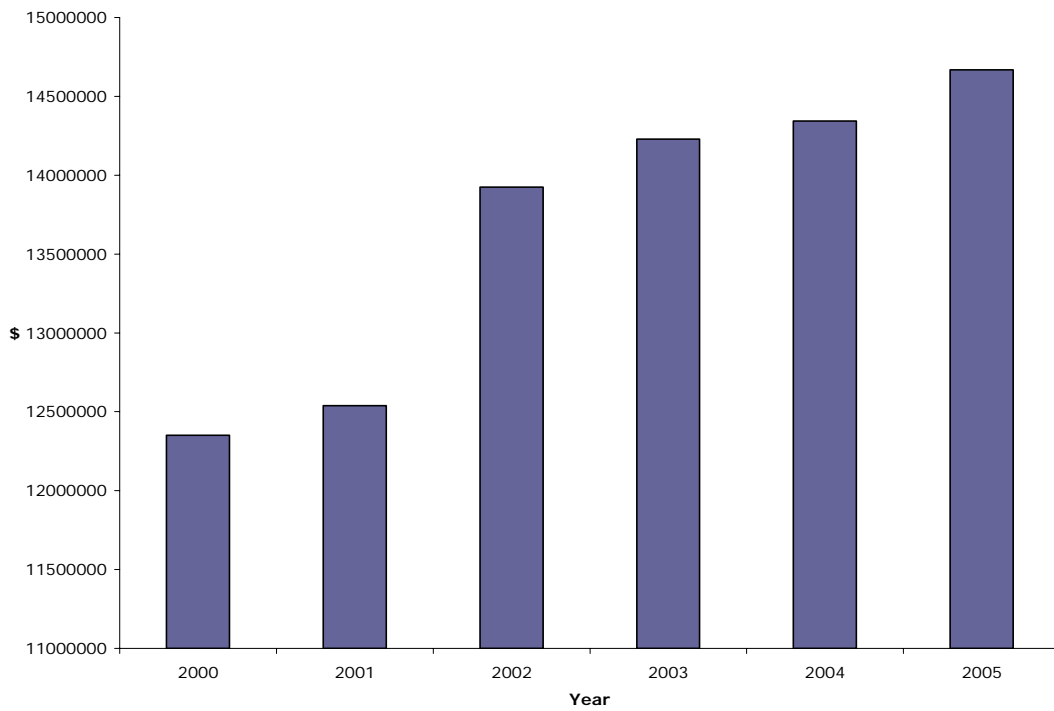


Figure 4.3: Federal WIC Funding to Rhode Island 2000-2005.<sup>7</sup>

### *WIC and the Farmer's Market Nutrition Program*

In 1992, congress enacted the Farmers' Market Nutrition Program (FMNP). Through the FMNP, WIC participants receive "coupons that may be exchanged for fresh, nutritious, unprepared foods at farmers' markets."<sup>59</sup> Unlike US code, the congressional FMNP bill, in addition to improving the health of WIC recipients, also included that FMNP should "expand the awareness and use of farmers' markets and increase sales at such markets."<sup>60</sup> The approach of the FMNP, although not explicitly stated as such in US code, is a genuine manifestation of federally-supported community food security. Through the FMNP, federal and state funds are used to alleviate local hunger and nutrition issues within the context of a local food system.

The focus on food assistance and farmers' markets offers benefits to both local WIC recipients and local farmers. Since the WIC food packages do not include produce (except for carrots), the FMNP provides access to healthy fruits and vegetables that WIC does not normally provide. In Rhode Island, WIC recipients receive \$20 worth of vouchers to be used at approved farmers' markets throughout the season. A 2002 General Accounting Office report found that WIC recipients participating in the FMNP were likely to consume more fruits and vegetables than non-recipients of the same income group.<sup>61</sup> In addition to providing vitamins and minerals essential for good health, there is evidence that the consumption of fruits and vegetables reduces the risk of heart disease, cancer, stroke, diabetes, and obesity.<sup>62</sup> Furthermore, local farmers selling at farmers' benefit from an increased consumer base, especially in low-income areas. In 2005, Rhode Island farmers received over \$400,000 in sales from FMNP vouchers.<sup>63</sup> While not directly subsidizing local farmers, FMNP does bring additional consumers to markets,

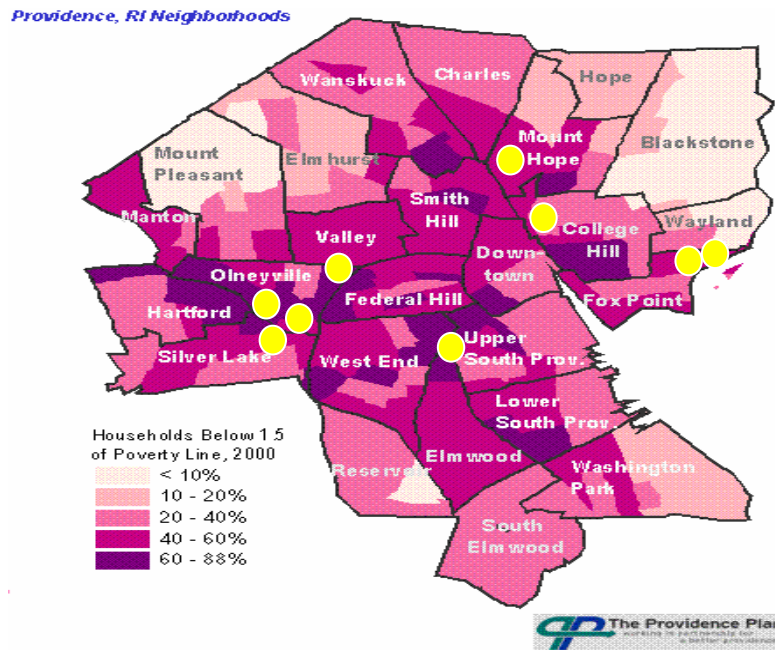
thereby increasing market revenues for farmers. Since many vendors at farmers' markets operate small, diverse farms within reasonable driving distance from the market, the FMNP supports the farms which USDA production subsidies often overlook.

In 2001, Congress initiated the Senior Farmers' Market Nutrition Program (SFMNP), which is practically identical to the FMNP except designed for low-income senior citizens instead of women, infants, and children.<sup>64</sup> Senior citizens who fall below 185% of the US poverty line are eligible to receive SFMNP vouchers. By granting access for another at-risk population to purchase locally grown fruits and vegetables, the SFMNP further increases revenues at markets while helping to address hunger/nutrition needs.

#### *Supermarkets, Farmers' Markets, and the FMNP in Providence*

In addressing issues of food distribution, it is imperative to identify the outlets where people can purchase food. The basis for many urban community food security movements often lies in the flight of supermarkets from urban areas, leaving inner city residents with only convenience stores and fast food restaurants.<sup>65</sup> Therefore, it is important not only to understand where people can buy food, but also where these outlets are located. This section will address supermarkets and farmers' markets in Providence, where they are located, and how location may affect access.

There are nine large-chain supermarkets in Providence, all of which accept food stamps and WIC vouchers.<sup>66,67,68,69,70</sup> Figure 4.4 shows the locations of these supermarkets superimposed over a map of Providence specifying prevalence of households under 150% of the US poverty line.



**Figure 4.4: Locations of supermarkets in Providence**

The supermarkets in the Olneyville neighborhood and the supermarket in Upper South Providence/Elmwood suggests that supermarkets have not abandoned low-income areas of Providence. Since supermarkets provide a considerable amount of convenience and operate long hours, they are important for individuals and households for whom time and transportation are important factors for food shopping. If an individual can take one trip by public transportation to a supermarket to purchase not only the food for his/her house, but also cosmetics, stationary, batteries, and toiletries, considerable time and energy is saved from purchasing the items at separate locations. The convenience of supermarkets stands as a barrier to getting people to shop at farmers' markets since farmers' markets provide only produce and a limited number of prepared goods, such as honey, cheese, and breads. A strong point of the FMNP is that it provides an incentive for participants to

shop at a farmers' market, thereby expanding the recipients' options for where to buy food (especially if the recipient has never patronized a farmers' market before).

To parallel the nine supermarkets in Providence, there are also nine farmers' markets in Providence. Interest in local foods, particularly through farmers' markets, appears to be growing in Providence, seeing as five of the nine markets have opened within the last two years. Seven of these markets operate during the late spring, summer, and early fall, while two of the markets are held indoors (on two separate days in the same location) during the late fall and winter months.

During the market season (approx. June-early November), there are farmers' markets operating five days of the week for at least three hours a day.<sup>71</sup>

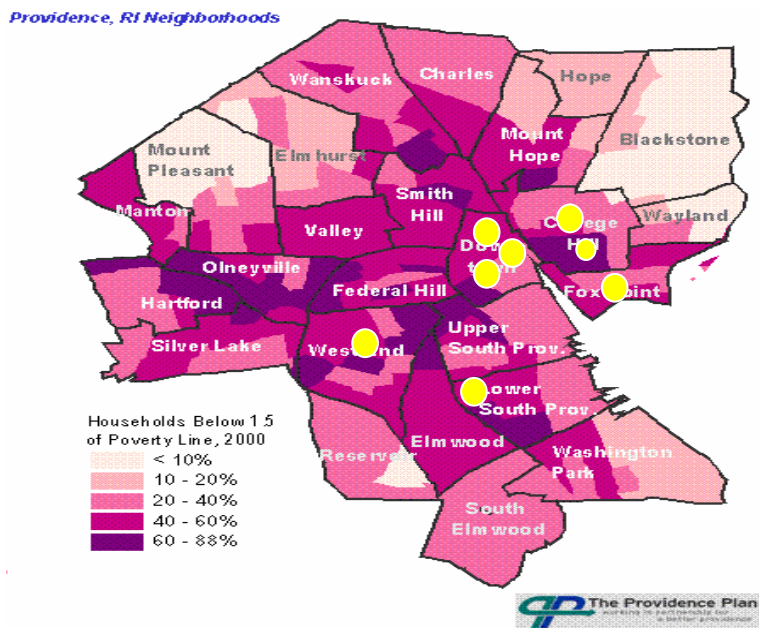


Figure 4.5 shows the

Figure 4.5: Locations of Farmers' Markets in Providence

locations of the farmers' markets superimposed a map of Providence specifying prevalence of households under 150% of the US poverty line.

All nine of the farmers' markets accept food stamps; seven are approved to accept SFMNP vouchers,; but, only three are approved to accept FMNP vouchers. Two of the three FMNP-approved markets are the Broad Street Market and Parade Street Market located in South Providence and the West End respectively. Located in low-income neighborhoods of Providence, Broad Street and Parade Street markets draw a different

overall clientele than the markets located downtown and on the East Side. The majority of shoppers at both markets tend to be Latino, Asian, or African-American as opposed to the Caucasian dominated Hope Street Market on the East Side.<sup>72,73</sup>

Due to the markets' proximity to low-income neighborhoods, more FMNP vouchers are redeemed at the Broad Street and Parade Street Markets.<sup>74,75</sup> The market vendor for Red Planet Organics at the Parade Street Market explained that some neighborhood residents who are not WIC recipients express surprise when learning that the market is not "WIC only."<sup>76</sup> Broad Street and Parade Street Markets exemplify the benefits of placing farmers' markets in low-income neighborhoods where the prevalence of households receiving WIC benefits will be greater than that of higher income areas. Unfortunately, as of yet, no farmers' market has been established in the Olneyville, Hartford, and Silver Lake neighborhoods where poverty rates are among the lowest in Providence (see map on previous page).<sup>77</sup>

#### *Price Comparisons Between Farmers' Market and Supermarket*

As the Broad Street and Parade Street Markets demonstrate, FMNP voucher redemption rates will logically be higher in markets are located in the proximity of recipients. However, barriers still exist for attracting non-recipients and recipients who have exhausted their vouchers to patronize farmers' markets. Smith (2004) identified that an individual's proximity to a farmer's market and access to an automobile affects one's access to shopping at a farmer's market.<sup>78</sup> Building on this research, prices of produce were collected from farmer's markets and Stop&Shop in Providence to see if price should be considered a serious barrier to having access to local foods. In order to compare prices between Providence farmers' markets and supermarkets, prices from the

Hope High Farmers' Market (which had three conventional produce vendors and three organic produce vendors in the 2005 season<sup>79</sup>) were recorded on three separate occasions. An average of these prices was then compared to Stop&Shop average prices for the same items. Figure 4.6 displays the results of this comparison for eleven types of produce.

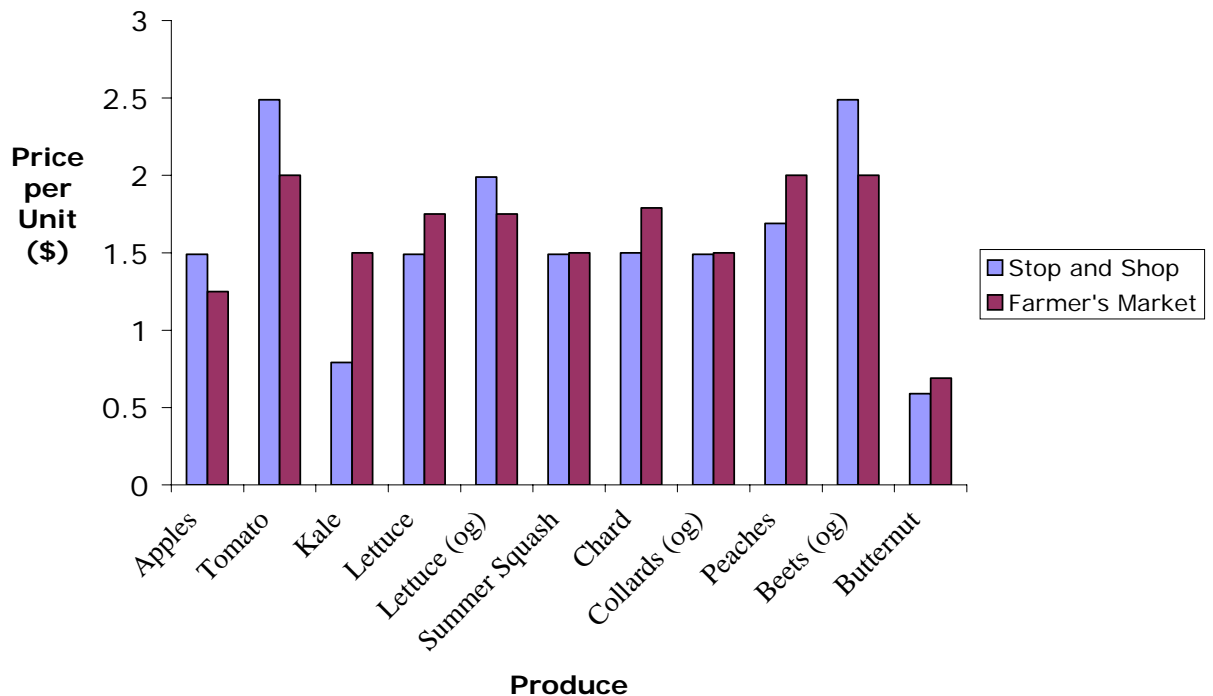


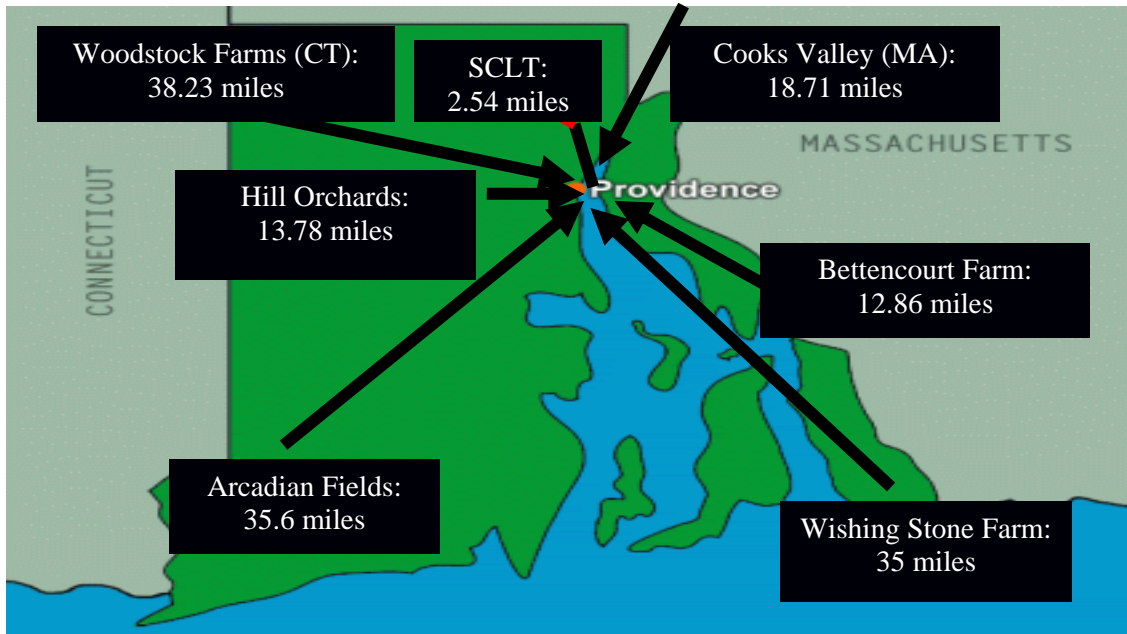
Figure 4.6: Comparison of Prices Between Stop&Shop and Hope High Farmers Market. Stop and Shop Prices: n=2 (7/14/05, 8/7/05) Hope High Prices: n=3 (7/16/05, 7/23/05, 8/6/05). For Butternut, n=1 (11/14/05 Holiday Farmers' Market) .og=organic

From Figure 4.6, it is clear that one outlet is not intrinsically cheaper or more expensive than the other. Four types of produce (apples, tomatoes, organic lettuce, and organic beets) were more expensive at Stop&Shop, while five types of produce (kale, conventional lettuce, peaches, and butternut squash) were more expensive at Hope High Farmers' Market. Since many of the vendors at Hope Street Market also sell produce at the same price at other Providence farmers' markets, the Hope High Market prices reflect

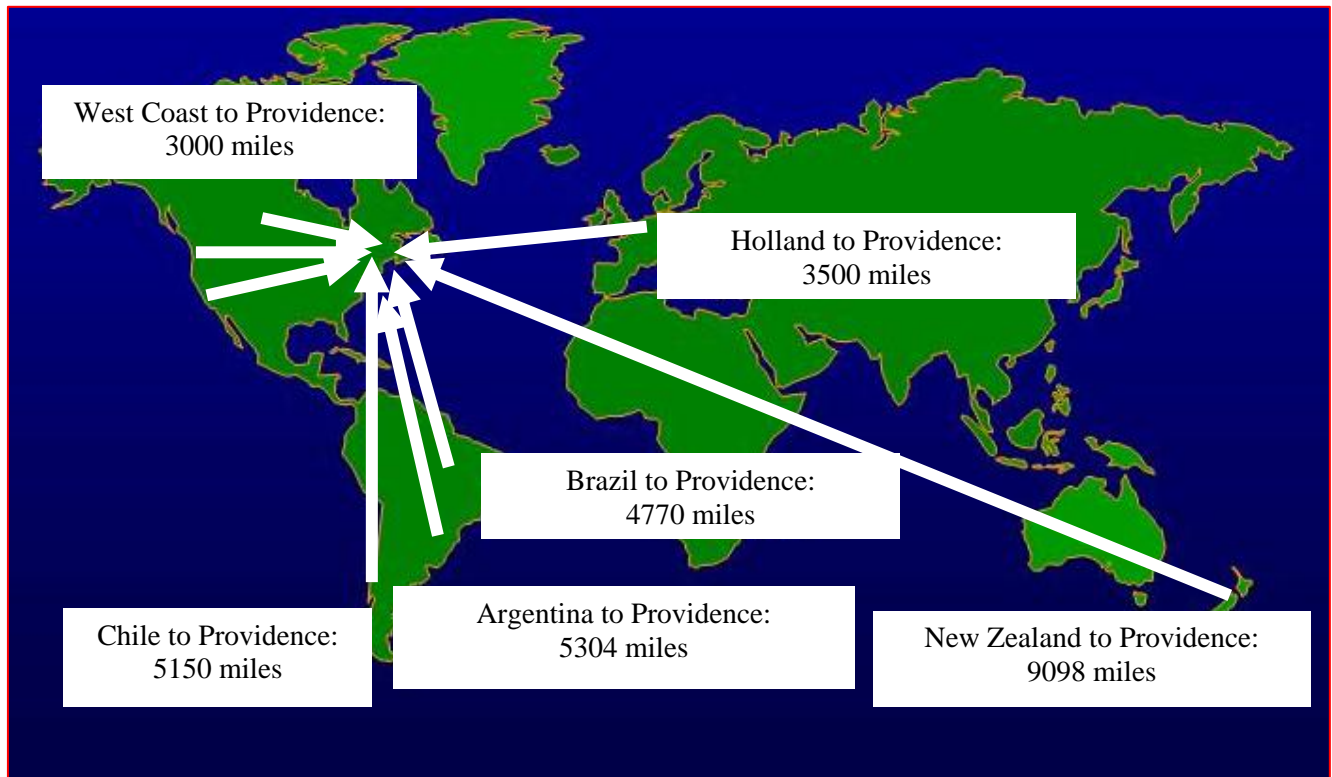
the prices found at any farmers' market in Providence. The price comparison suggests that price should not be an overriding factor in shopping for produce at a Providence farmers' market of major supermarket chain.

Of course, many factors are not directly reflected in the price of the produce. The convenience factor of supermarkets may be worth a slight extra cost per unit to a consumer. Some externalities associated with buying from Stop&Shop may not be a persuading factor for food insecure individuals to shop at farmers' markets, but it is still important to note two particular factors. First, each type of produce surveyed at Stop&Shop had traveled farther than its farmer's market equivalent. Second, by purchasing produce directly from the farmer at a farmers' market, an individual directly supports the grower of the food and the local economy rather than a distant middleman distributor. Figure 4.7 and Figure 4.8 show distances traveled for the Hope High Farmers' Market and the Stop&Shop produce aisle, respectively. While it is difficult to determine absolute carbon emissions associated with produce travel, especially since produce may travel in an indirect path from country of origin to importer to distributor then finally to the supermarket. Based on a cursory calculation using an EPA carbon calculator, transportation emissions associated with Stop&Shop for each type of produce in Figure 3.5 amounted to 80 tons of CO<sub>2</sub> while that of the Hope High Farmers' Market produce amounted to only 0.09 tons of CO<sub>2</sub>. While a shipment of produce to Stop&Shop is larger than the amount of produce at a farmer's market, these emission figures show that a single piece of produce at Hope High Farmer's Market will require less fossil fuel than a single piece of produce from Stop&Shop. These emission totals are not to be taken as

exact calculations; however, they highlight the large amounts of carbon-emitting fossil fuels burned in order to maintain a global food system.



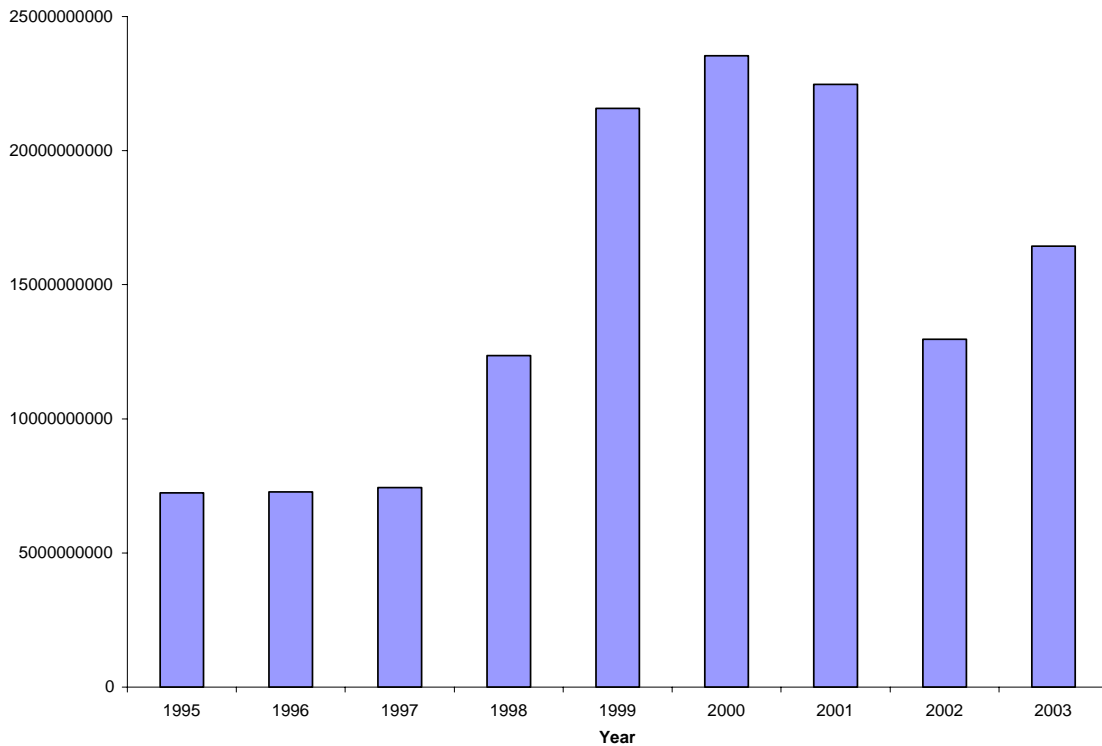
**Figure 4.7: Distance of Produce from Farm to Hope High Farmers' Market**



**Figure 4.8: Distance of Produce from Country of Origin to Providence Stop&Shop**

## Chapter 5: Federal Agriculture Subsidies

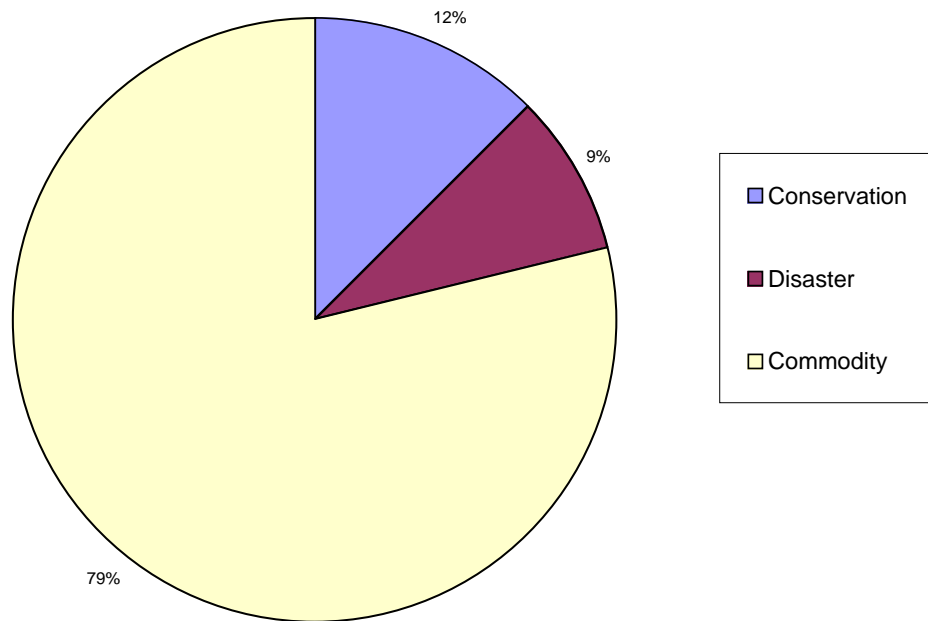
Through agriculture subsidies, the federal government is able to directly support qualifying farmers. Nationally, subsidies administered through the USDA and its agencies amounted to an average of over \$14.5 billion per year from 1995-2003.<sup>80</sup> Figure 5.1 shows the total USDA subsidies for the entire United States per year for 1995-2003.



**Figure 5.1: Total USDA subsidies (in dollars) 1995-2003.**

In order to facilitate analysis of the USDA subsidies, it is possible to organize the subsidies into three broad categories: commodity subsidies, disaster subsidies, and conservation subsidies. Figure 5.2 shows the percentage of USDA subsidy funds allocated to each category for 1995-2003. Clearly, commodity subsidies outweigh both disaster and conservation subsidies. In order to identify the type of agriculture that the

federal government supports, it is necessary to understand the purposes of these different types of subsidies.



**Figure 5.2: Percentage of USDA Subsidies 1995-2003 by Category<sup>81</sup>**

### *Commodity Subsidies*

Commodity subsidies are administered by the Farm Service Agency (FSA). The main purposes of commodity subsidies are:

“...to assist in the marketing of agricultural commodities for domestic consumption and for export; and to regulate interstate and foreign commerce in cotton, wheat, corn, tobacco, and rice to the extent necessary to provide an orderly, adequate, and balanced flow of such commodities in interstate and foreign commerce through storage of reserve supplies, loans, marketing quotas, assisting farmers to obtain insofar as practicable, parity prices for such commodities and parity of income, and assisting consumers to obtain an adequate and steady supply of such commodities at fair prices.<sup>82</sup>”

To this end, the FSA offers loan programs and commodity price support programs to US farmers. While USDA commodity programs do aid in supporting farmers' incomes and

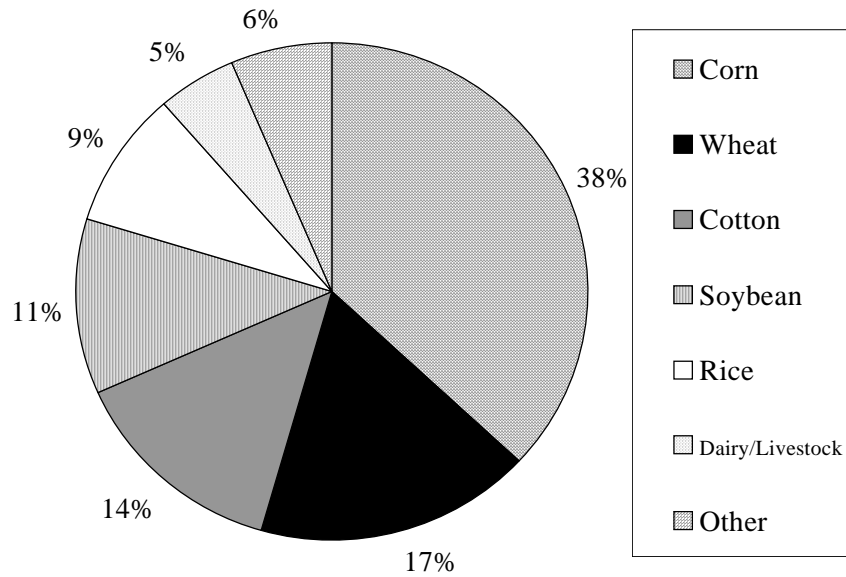
in helping to guarantee an adequate supply of staple agricultural products, in order to receive this aid, farmers must meet eligibility requirements as well as grow the right crops. The federal government has approved commodity support for the following crops:

“...wheat, corn, grain sorghum, barley, oats, upland cotton, rice, soybeans...sunflower seed, rapeseed, canola, safflower, flaxseed, mustard seed, crambe, sesame seed...wool, mohair, honey, dry peas, lentils, and small chickpeas.”<sup>83</sup>

Furthermore, commodity payments “are based on historically-based acreage and yields”<sup>84</sup>

In other words, a farmer is only eligible for commodity support if he/she has grown the proper crops; furthermore, devoting more acreage to commodity crops, rather than diversifying, will result in a greater subsidy. It is not surprising then that a 2001 GAO report found that the greatest concentration of commodity support went to large-scale corn and wheat farms in six states (Iowa, Illinois, Texas, Kansas, Nebraska, and Minnesota).<sup>85</sup> Effectively, this GAO report shows that a large-scale farmer, monocropping a commodity-approved crop, will have better access to commodity subsidies than a small diverse farm that does not grow (or not grow enough of) the approved crops.

As Figure 5.2 (previous page) shows, commodity subsidies account for more than 75% of all agriculture subsidies. The crops receiving the most subsidies for 1995-2004 were, not surprisingly, wheat, corn, cotton, and soybeans, together accounting for ~80% of all commodity subsidies for those years.<sup>86</sup> Of the remaining 20%, the largest commodity subsidies went to rice, dairy and livestock programs, sorghum, tobacco, barley, and peanuts.<sup>87</sup> Figure 5.3 shows the percentage of commodity subsidies directed



**Figure 5. 3: Percent of Commodity Subsidies for Individual Commodity Crops 1995-2004<sup>88</sup>**

to each crop. While it will be addressed in greater detail below, it is important to note that producers receiving commodity subsidies often receive such subsidies annually, as opposed to disaster and some conservation subsidies, which are often one-time subsidies.

### *Conservation Subsidies*

Conservation subsidy programs are administered by two agencies in the USDA, the FSA and the Natural Resources Conservation Service (NRCS). The two largest conservation subsidy programs from 1995-2004 were the Conservation Reserve Program (CRP) and the Environmental Quality Incentive Program (EQIP), accounting for 90% and 5% respectively of total conservation subsidies.<sup>89,90</sup> While Rhode Island will be discussed in greater detail later, it is important to note here that although the CRP is the most well funded conservation program for 1995-2004, only one Rhode Island farmer has enrolled in the CRP as of date. As opposed to other conservation programs, such as the

Wildlife Habitat Incentive Program (WHIP), the CRP and EQIP deserve greater attention since they are directly targeted at agricultural producers<sup>91</sup> as opposed to general landowners.<sup>92</sup>

The Conservation Reserve Program (CRP), administered through the FSA with technical assistance provided by the NRCS, was put into effect in the 1985 Food Security Act, which restructured the Soil Bank Act of 1958.<sup>93,94</sup> According to US Code, the purpose of the CRP is "...to assist owners and operators of [agricultural] land ...to conserve and improve the soil, water, and wildlife resources of such land."<sup>95</sup> To this end, the CRP provides financial incentives for producers to convert "...eligible land normally devoted to the production of an agricultural commodity on the farm or ranch to a less intensive use (as defined by the Secretary), such as pasture, permanent grass, legumes, forbs, shrubs, or trees, substantially in accordance with a schedule outlined in the [local conservation district] plan."<sup>96</sup> The contracts to participate in the CRP have a duration of 10 to 15 years,<sup>97</sup> meaning that once a contract is signed, the landowner will receive annual payments for the duration of the contract. Currently, approximately 34.7 million acres (3.5% of total US farmland<sup>98</sup>) in the US are enrolled in the CRP and the program has been successful in protecting environmentally sensitive areas such as riparian zones and wildlife habitat.<sup>99</sup> With nearly a \$2 billion yearly budget, the CRP accounts for 11% of total agriculture subsidies in the US for 1995-2004.

The Environmental Quality Incentive Program (EQIP), administered by the NRCS, accounts for 5% of USDA conservation subsidies for 1995-2004.<sup>100</sup> Through the EQIP, farmers can receive assistance, in the form of incentive payments or cost-shares, in order to implement conservation practices.<sup>101</sup> EQIP operates with five main purposes:

“...(1) assisting producers in complying with local, State, and national regulatory requirements concerning (A) soil, water, and air quality; (B) wildlife habitat; and (C) surface and ground water conservation;  
(2) avoiding, to the maximum extent practicable, the need for resource and regulatory programs by assisting producers in protecting soil, water, air, and related natural resources and meeting environmental quality criteria established by Federal, State, tribal, and local agencies;  
(3) providing flexible assistance to producers to install and maintain conservation practices that enhance soil, water, related natural resources (including grazing land and wetland), and wildlife while sustaining production of food and fiber;  
(4) assisting producers to make beneficial, cost effective changes to cropping systems, grazing management, nutrient management associated with livestock, pest or irrigation management, or other practices on agricultural land; and  
(5) consolidating and streamlining conservation planning and regulatory compliance processes to reduce administrative burdens on producers and the cost of achieving environmental goals.”<sup>102</sup>

EQIP, like the CRP, does not depend on specific crops or historic yields to determine eligibility. Therefore, all farms, no matter the size nor the specific crops grown, are eligible for EQIP.

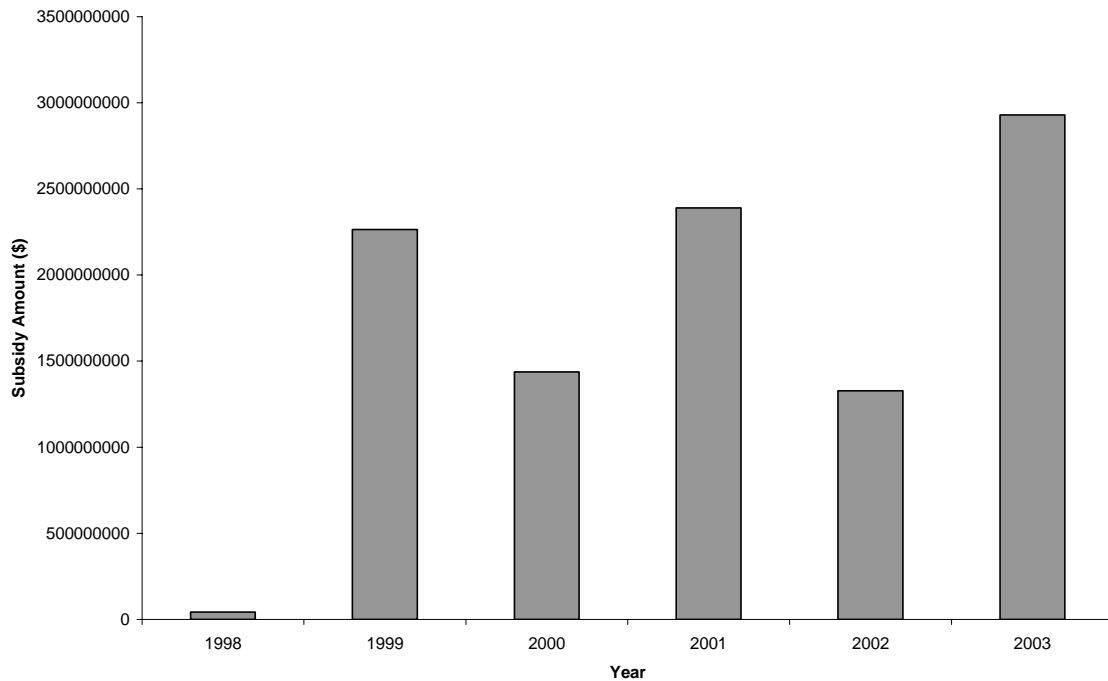
A regional NRCS office determines priorities for EQIP in its region and producers wishing to receive EQIP benefits apply to their regional office. EQIP can help farmers with a number of conservation practices, such as installing less-wasteful irrigation, protecting local waterways from nutrient run-off, or conserving wildlife habitat on sensitive properties. In return, farmers receive assistance from the USDA up to 75% of the implementation costs. While the EQIP is not one of the largest subsidies for the entire US, it is the second most well-funded USDA subsidy program in Rhode Island (see Chapter 6).

It is important to note that the major USDA conservation subsidies described above, as well as Wetlands Reserve Program, Wildlife Habitat Incentive Program, and the Grassland Reserve Program, all narrowly approach conservation as an on-farm externality issue. In fact, no USDA production subsidy is designed to support farmers producing for a local market. Therefore, although the environmental benefits of the

USDA conservation subsidies are clear, they in no way provide an incentive for producers to sell *locally* and, as a result, these conservation subsidies do not directly provide incentives that would result in greater access to local food.

### *Disaster Subsidies*

Disaster payments, administered by the FSA, account for the least of the three subsidy categories of USDA subsidies. Farmers are eligible for disaster assistance as a result of a natural disaster such as a hurricane or drought. As Figure 5.4 shows, it is difficult to determine trends in disaster payments due to the fact that natural disasters are not regularly spaced nor timed. However, similar to the commodity and conservation



**Figure 5.4: Total USDA Disaster Subsidies 1998-2003**

subsidies, these disaster payments are dependent on the producer growing the eligible crops. It is not surprising then that the disaster payment programs provide assistance to the same farmers who are eligible for commodity subsidies. Since disaster programs are utilized in such specific situations, they are not a prime focus of the thesis. Nevertheless, this is not meant to diminish the importance of disaster subsidies. While disaster subsidies only accounted for 9% of USDA subsidies for the entire US, as seen in Table 5.1, they accounted for 41% of Rhode Island's subsidies (more than conservation or commodity subsidies). For the disaster subsidies, it is most important to remember that, in, essence they support the same crops and production methods as the commodity programs. Thus, although commodity subsidies attempt to stabilize farm income and commodity prices while disaster subsidies support farmers in times of natural disaster, it is the same farms that are eligible for these programs. Therefore, just as with commodity subsidies, large mono-cropping farms will have greater access to disaster subsidies than smaller diverse farms.

Table 5.1 provides a summary of the USDA agricultural subsidies for the US. In the next section, specific USDA subsidies to Rhode Island are investigated in greater detail.

Table 5.1: Summary of USDA Agriculture Subsidies

| Type of USDA Subsidy | Agency in Charge | Percent of Total US Ag Subsidies 1995-2003 | Percent of Rhode Island Ag Subsidies 1995-2003 | Top Funded Programs for the US   |
|----------------------|------------------|--|--|--|
| <b>Commodity</b>     | <b>FSA</b>       | 79%<br>(\$103 billion)                     | 29%<br>(\$1.28 million)                        | Direct-Counter Cyclical Payments, Production Flexibility Contracts, Market Loss Assistance, Loan Deficiency Payments |
| <b>Conservation</b>  | FSA, NRCS        | 12%<br>(\$16 billion)                      | 30%<br>(\$1.32 million)                        | Conservation Reserve Program, Envntl Quality Incentive Program, Agricultural Conservation Program                    |
| <b>Disaster</b>      | FSA              | 9%<br>(\$11 billion)                       | 41%<br>(\$1.82 million)                        | Livestock Disaster/Emergency, Crop Disaster Program  |

## Chapter 6: Agriculture Subsidies in Rhode Island

The United States in 2004 has approximately three acres of farmland per capita.<sup>103,104</sup> With only 858 farms and 16,000 acres of farmland, Rhode Island falls far below the national figure with only 0.06 acres of farmland per capita.<sup>105,106</sup> Even when compared to states with a similar climate (the other New England states, PA, NJ, and NY), Rhode Island has the least acres of farmland per capita.<sup>107</sup> However, while it should not be surprising that such a non-agricultural state such as RI receives the least amount of USDA subsidy funds of all fifty states, Rhode Island has the smallest percentage of farms receiving federal agriculture subsidies according to 2002 data.<sup>108</sup> Furthermore, while the USDA provided an average \$50 per capita in subsidies to US farmers for 1995-2004, Rhode Island received an average of less than fifty cents per capita for the same time period. It makes sense that the size of Rhode Island and dense population limit the amount of the land dedicated to farming; however, it is not immediately clear, without closer inspection, as to why such a small *percent* of Rhode Island farms receive subsidies or why RI receives much less subsidy funding per capita than other states. It is therefore important to take a closer look at Rhode Island agriculture and attempt to comprehend what type of agriculture the USDA supports (or does not support) in Rhode Island.

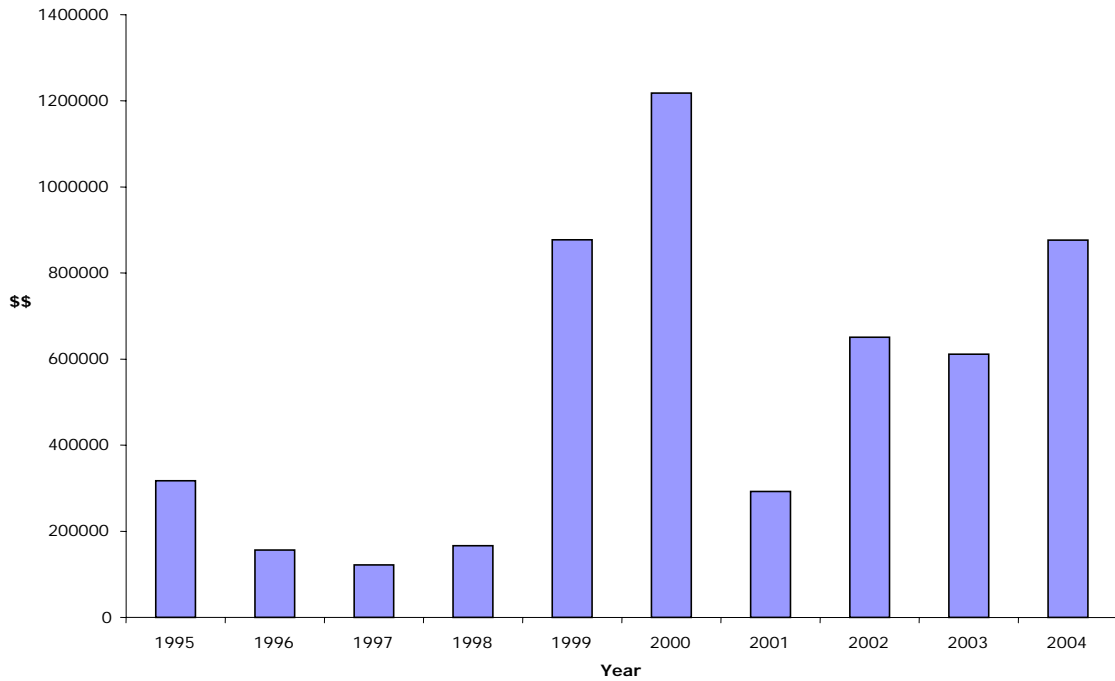
As seen in the previous chapter, federal agricultural subsidies tend to favor large-scale producers of commodity crops.<sup>109</sup> Rhode Island, however, is a state of small farms: the average farm size in RI (71 acres) is the smallest of any state.<sup>110</sup> Furthermore, the majority of the farms in RI (60%) are smaller than 50 acres as opposed to national figures in which the majority of farms (65%) are larger than 50 acres.<sup>111</sup> While acres of farmland per capita and average farm size of farms in RI are the lowest in the country, the market

value of farmland per acre in Rhode Island (\$9,225) is among the highest in the nation (Massachusetts and Connecticut are the only two states with higher values).<sup>112</sup>

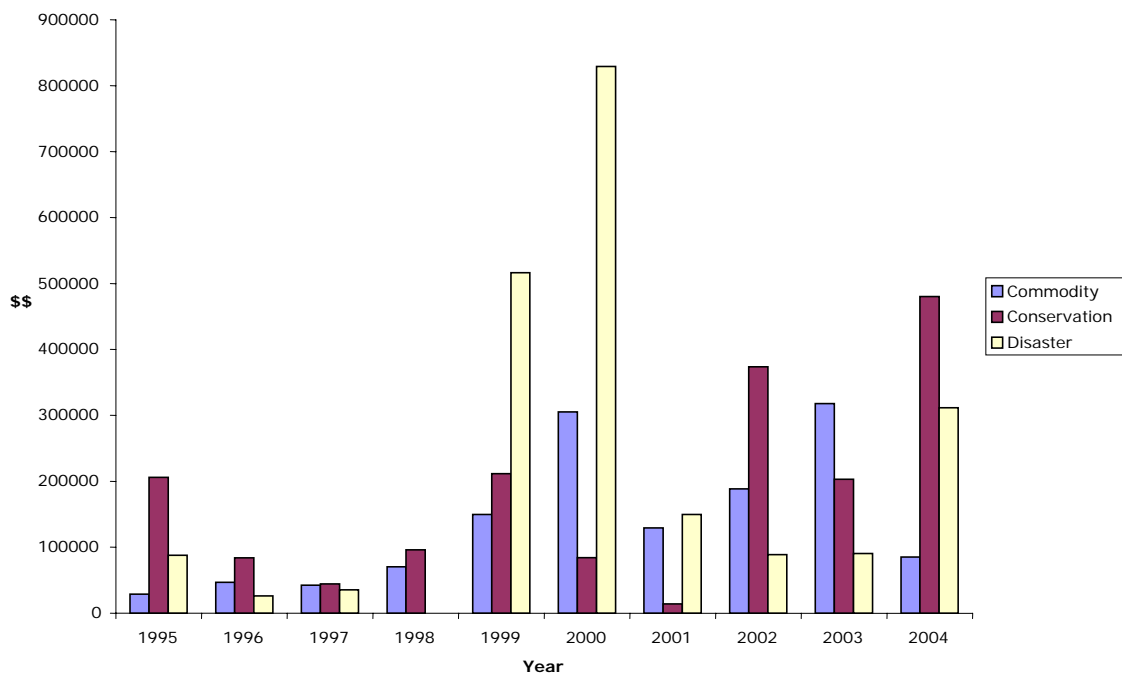
The high market value of Rhode Island farmland is indicative of the intense development pressure on Rhode Island farms. Due to Rhode Island's small geographical size, farms in the state are all within proximity of metropolitan areas and are accordingly highly valued for suburban development.<sup>113,114</sup> Of course, selling Rhode Island farmland off to commercial and residential development would be antithetical to establishing a vibrant local food system. When Ken Ayars was appointed chief of the Rhode Island Division of Agriculture in 1998, he stated, "We need to preserve and enhance the [agriculture] industry, and develop a strategy to deal with development pressures. For once we lose a farm, it's difficult, if not impossible, to regain it."<sup>115</sup> In essence, the challenge to expanding access to local food in Rhode Island lies not only in preserving active farmland in the state, but also in encouraging farmers to gear their production for the local Rhode Island market. To this end, it is imperative to identify the federal and state programs that support agriculture in Rhode Island in order to determine to what extent the programs support farmers producing for the local market.

Figure 6.1 shows the trend for total USDA subsidies to Rhode Island 1995-2004. Figure 6.2 displays the same data as Figure 6.1, but has broken the subsidies into three separate categories (commodity, conservation, and disaster). It is important to note that the data show no clear trends for how subsidies will be divided between the different categories in a given year. However, the two figures, taken together, permit us to understand how the specific categories have contributed to overall change in the subsidy level. For example, although subsidies increased in 2004 over 2003 levels, this increase

is caused by a surge in conservation subsidies to Rhode Island (not a bad increase from the environment’s perspective). The following sections address these specific categories of subsidies for Rhode Island.

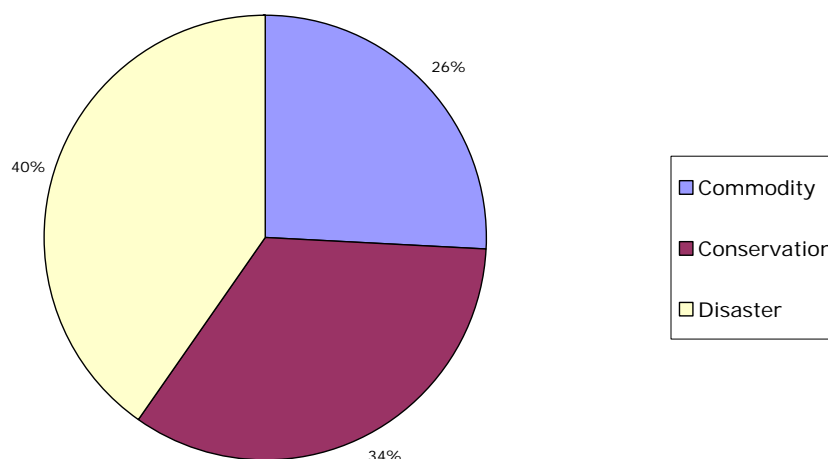


**Figure 6.1: Total USDA Subsidies to RI 1995-2004**



**Figure 6.2: USDA Subsidies to RI by Category 1995-2004**

Unlike the subsidy distribution at the national scale, in which 79% were commodity subsidies, Rhode Island's federal agriculture subsidies are more evenly divided between commodity, conservation, and disaster. Figure 6.3 shows the breakdown of USDA subsidies for RI by category. Comparing Figure 6.3 to Figure 5.2 (see Chapter 5), we see that commodity subsidies, which dominate total USDA subsidies, are the least abundant subsidies in Rhode Island. Conservation subsidies account for 34% of total Rhode Island subsidies as opposed to only 12% of total USDA subsidies. Likewise, while disaster payments accounted for a mere 9% of total USDA subsidies, in Rhode Island disaster subsidies account for 40% (more than the other two categories) of federal agriculture subsidies. As we will see below, the amount of disaster subsidies is not due to steady annual subsidies; rather, two subsequent years of drought in RI has skewed disaster subsidy levels for the 1995-2004 period.



**Figure 6.3: Commodity, Conservation, and Disaster Payments to RI 1995-2004**

The various programs under which these subsidies are administered were discussed in the previous chapter. Table 6.1 shows the top ten subsidy programs for Rhode Island, the average amount received under that program 1995-2004, the number of recipients in 2004, and the total number different recipients in RI for each program 1995-2004.

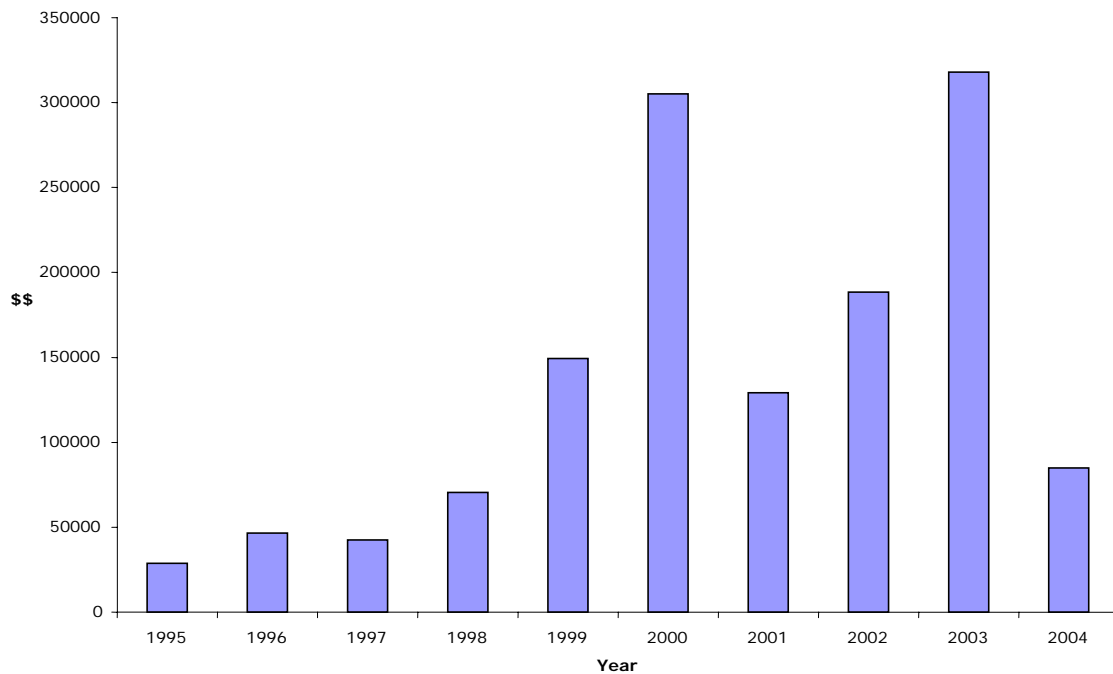
**Table 6.1: Top Ten USDA Subsidy Programs to Rhode Island 1995-2004**

| <b>Program</b>                 | <b>Average Amount Per Year<br/>1995-2004</b> | <b>Number of<br/>Recipients in RI<br/>2004</b> | <b>Total Number of<br/>Recipients in RI<br/>1995-2004</b> |
|--------------------------------|--|--|---|
| Disaster Payments              | \$212,906                                    | 19   | 160   |
| Env. Quality Incentive Program | \$121,392                                    | 23   | 67  |
| Dairy Program Subsidies        | \$73,388                                     | 22   | 46  |
| Corn Subsidies                 | \$51,393                                     | 31   | 67  |
| Livestock Subsidies            | \$11,494                                     | 0  | 84  |
| Apple Subsidies                | \$8,890                                      | 0  | 24  |
| Wetlands Reserve Program       | \$5,302                                      | 0  | 2   |
| Wool Subsidies                 | \$915  | 1  | 35  |
| Sheep Meat Subsidies           | \$626  | 0  | 13  |
| Conservation Reserve Program   | \$237  | 1  | 1   |

While Table 6.1 summarizes the programs and relative funding for the USDA subsidies, it does not indicate how these subsidies are *distributed*. In 2004, only 76 farms in Rhode Island received USDA subsidies.<sup>116</sup> With 858 farms in Rhode Island, the USDA subsidized less than 9% of the farms in Rhode Island in 2004. In other words, less than 9% of Rhode Island farms received 100% of USDA subsidies to the state. So, even though a substantial amount of money does come into Rhode Island through these subsidies, over 90% of Rhode Island farmers operate completely outside this USDA production subsidy system. The following sections address these USDA subsidies to Rhode Island and are organized by commodity, conservation, and disaster.

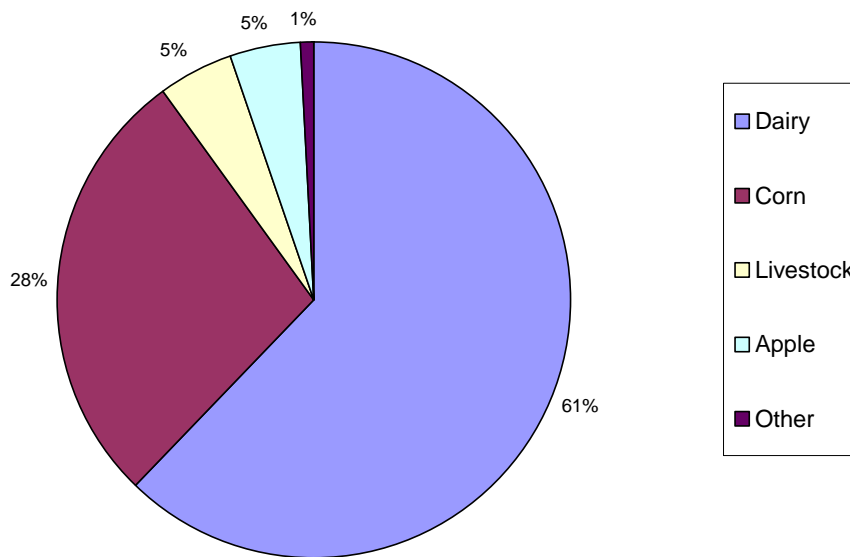
### *Rhode Island Commodity Subsidies*

Since 1995, RI has received an average of \$136,000 per year in commodity subsidies. In 2003, the commodity subsidy level reached \$317,956, the highest level since 1995. In 2004, RI commodity subsidies dropped to their lowest level in five years at \$84,942. Figure 6.4 shows the trend in total commodity subsidies to RI from 1995-2004. The reversal in the commodity subsidy trend between 2003 and 2004 shows a 73% decrease in funding. The majority of this decrease in commodity subsidies is due to an 86% decrease Dairy Program subsidies between 2003 and 2004. Nationally, commodity subsidies only decreased 14% between 2003-2004;<sup>117</sup> thus, since total US commodity subsidies decreased by a lesser percentage than RI commodity subsidies between 2003-2004, it is clear that RI bore a greater majority of subsidy cuts than the average state. It is also important to note that this 2004 drop in commodity subsidies parallels a dramatic increase in conservation subsidies to RI (see Section 5.3) and perhaps indicates a shift away from over-reliance on federal commodity subsidies for RI farmers.



**Figure 6.4: USDA Commodity Subsidies to RI 1995-2004<sup>118</sup>**

It is important to know what commodities these subsidies are supporting in Rhode Island (for nationwide data, see Section 4.2). Figure 6.5 shows the breakdown of commodity subsidies for the top 100 (of a total 181) commodity subsidy recipients 1995-2004 in Rhode Island. These top 100 recipients display a wide range of commodity support from USDA subsidies: the top recipient, Tomaquag Valley Farm, received a total \$156,942 from 1995-2004, while the 100<sup>th</sup> top recipient, David Cotta, received only \$538 in the same time period.<sup>119</sup>



**Figure 6.5: Commodity Programs for Top 100 RI Recipients 1995-2004**

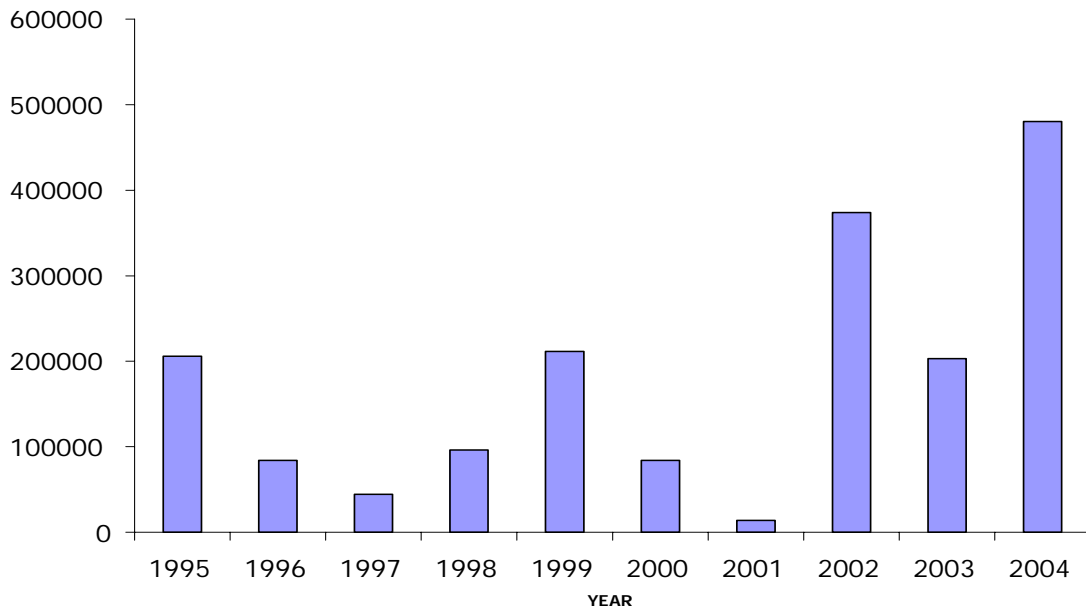
It is clear from Figure 6.5 that the majority (61%) of commodity subsidies are dairy program subsidies. Additionally, over 85% of the corn subsidies go to farmers who are also receiving dairy/livestock subsidies and are not growing the corn for human consumption.<sup>120</sup> Taken together, dairy, livestock, and corn for dairy cattle/livestock consumption account for at least 90% of all commodity subsidies to Rhode Island. The commodity subsidies which support these agricultural sectors operate through various price support programs which aim “to assure an adequate supply...to meet current needs, reflect changes in the cost of production, and assure a level of farm income adequate to maintain productive capacity sufficient to meet anticipated future needs.”<sup>121</sup> The remainder of commodity subsidies supports apples and “other,” which include sorghum, oats, sheep meat, wool, soybeans, and sunflower. It should not be surprising that the majority of commodity subsidies support Rhode Island’s dairy farmers. As discussed in Chapter 5, commodity subsidies support commodity crops. Without large expanses of farmland dedicated solely to wheat, soybeans, cotton, or corn in Rhode Island, the dairy

farmers are one of the few sectors of RI agriculture that are still eligible for commodity subsidies.

For the purpose of this report, the heavy concentration of commodity subsidies in the dairy sector underscores a central hypothesis: the federal subsidies dedicated to stabilizing farm income are not aiding those farmers who grow diverse vegetable crops in Rhode Island. Since farmers' markets, such as those associated with the WIC program, often consist of farmers growing different types of fruits and vegetables (which are not eligible for commodity subsidies), it is fair to say that USDA commodity subsidies are not supporting the Rhode Island farmers who are selling their produce locally at farmers' markets. From the RI experience, we can extrapolate that for the US as a whole (where commodity subsidies account for 80% of all agriculture subsidies), local food producers are overlooked by commodity subsidies.

#### *Rhode Island Conservation Subsidies*

In contrast to commodity subsidies, conservation subsidies to Rhode Island reached a decade-long high in 2004. At over \$480,000 in 2004, conservation subsidies accounted for the majority (55%) of USDA subsidies to Rhode Island. Figure 6.6 shows the total amount of USDA conservation subsidies to Rhode Island for 1995-2004. The percentage of RI farmers receiving conservation subsidies is still low: only 25 of 858 RI farms received conservation subsidies in 2004.



**Figure 6.6: Total USDA Conservation Subsidies to Rhode Island 1995-2004**

Nearly 70% of conservation subsidies to RI were for the Environmental Quality Incentive Program (EQIP) for 1995-2004. This stands in stark contrast to data for the entire US where EQIP accounts for only 4% of conservation subsidies for 1995-2004. The largest USDA conservation program, the Conservation Reserve Program (CRP), which accounts for 90% of conservation subsidies nationally, remained unutilized in RI until 2004. Consequently, the CRP has accounted for less than 1% of RI conservation subsidies. Table 6.2 lists the conservation programs in which Rhode Island farmers have been enrolled in the last decade.

**Table 6.2: USDA Conservation Programs to Rhode Island 1995-2004<sup>122</sup>**

| <b>Conservation Program</b>       | <b>Total Amount<br/>1995-2004</b> | <b>Number of Recipients<br/>1995-2004</b> |
|-----------------------------------|-----------------------------------|---|
| Env. Quality Incentive Program    | \$1,213,921                       | 67  |
| Agricultural Conservation Program | \$341,761                         | 57  |
| Emergency Conservation            | \$145,686                         | 42  |
| Wetland Reserve program           | \$53,018                          | 2   |
| Misc. Conservation Programs*      | \$39,819                          | 10  |
| Conservation Reserve Program      | \$2,369                           | 1   |
| Grasslands Reserve Program        | \$180                             | 1   |

\* primarily Agriculture Management Assistance Program and Soil and Water Conservation Assistance Program

*The Environmental Quality Incentive Program*

EQIP stands as the dominant USDA conservation program throughout the years. In 2004, EQIP accounted for 99% of all RI conservation subsidies with twenty-three recipients (the most EQIP recipients in any year). It is not surprising that Rhode Island receives such a disproportionate amount of EQIP subsidies in contrast to national trends. Unlike the vast majority of USDA subsidies—whether they be for conservation, commodity, or disaster—eligibility for EQIP does *not* depend on the type of crop grown on the land. Thus, more Rhode Island farmers are eligible for EQIP subsidies overall than are eligible for commodity subsidies. Unlike commodity subsidy recipients which were predominantly dairy and livestock operations, conservation subsidy recipients include farms that sell at farmers’ markets and run CSAs in Providence such as Wishing Stone

Farm in Little Compton and Southside Community Landtrust's Urban Edge Farm in Cranston.

In 2004, the Rhode Island division of the Natural Resources Conservation Service (NRCS) reported an increase in EQIP applications over previous years.<sup>123</sup> For the 2004 EQIP contracts, the RI NRCS reports:

“The vast majority of contracts address livestock related concerns, such as manure storage and fencing animals out of wet areas. Several contracts also address irrigation water management systems, including storage of water, delivery of water to the field, and application of water. Many other contracts address erosion control on cropland and forestland.”<sup>7</sup>

The organizational structure of EQIP differs from other subsidies due to the use of a State Technical Team and local working groups (LWGs) to determine EQIP priorities for a specific region. In RI, the priorities for EQIP funding were as follows<sup>124</sup>:

- Water Quality associated with pathogen, pesticides and/or nutrients
- Water Quantity, particularly where wildlife habitat may be impaired by irrigation water withdrawals
- Soil Erosion Control and Soil Quality
- Animal and Plant Quality associated with Threatened and Endangered Species, other wildlife habitat, and invasive species
- Air quality associated with chemical drift, particulates, ozone and odors

EQIP is a good example of a well-designed subsidy program for two main reasons. First, the use of a State Technical Team and LWGs allows the program to be modified to best suit local needs. Secondly, EQIP stipulates no specific crop requirements, making the subsidy available to a more diverse set of farmers. This means that farmers of all sizes and types in conjunction with NRCS officials are able to work cooperatively to alleviate pressures on the local ecosystem. Such flexibility accounts for the diverse range of agricultural operations throughout the United States. Unlike the case for commodity subsidies, the majority of Rhode Island farmers are not shut out of EQIP

conservation subsidies. This helps explain why RI receives a far greater proportion of conservation subsidies to overall subsidies (30%) as compared to the national proportion (12%).

The structure of EQIP could serve as a blueprint for the merging of agriculture subsidies and local food movements. The Environmental Working Group (EWG) has suggested that subsidies should be shifted to “promote farming systems that protect the environment” including helping “farmers make the transition to organic farming, and environmental stewardship payments...[for] those who have already made the transition.”<sup>125</sup> If we expand the standard environmental focus of EWG’s opinion on conservation subsidies to include farmers producing for local markets, then farmers contributing to local food security can be brought under the subsidy umbrella. If administered in the same manner as EQIP, individual states could identify producers or organizations (small scale farmers such as those producing for farmers’ markets and CSAs; or, community organizations such as the Southside Community Land Trust) as eligible recipients of assistance regardless of farm size, income, or crop choice. A further discussion of merging the environmental conservation framework with local food security can be found in the Conclusion and Recommendation sections.

#### *Other Conservation Subsidies to Rhode Island*

As stated in the previous section, EQIP accounted for 99% of conservation subsidies in 2004. Table 6.2 shows all the conservation programs that RI farmers have participated in since 1995. The Agricultural Conservation Program (ACP) has received \$341,761 from 1995-2004, second only to EQIP. However, no RI farmer has received

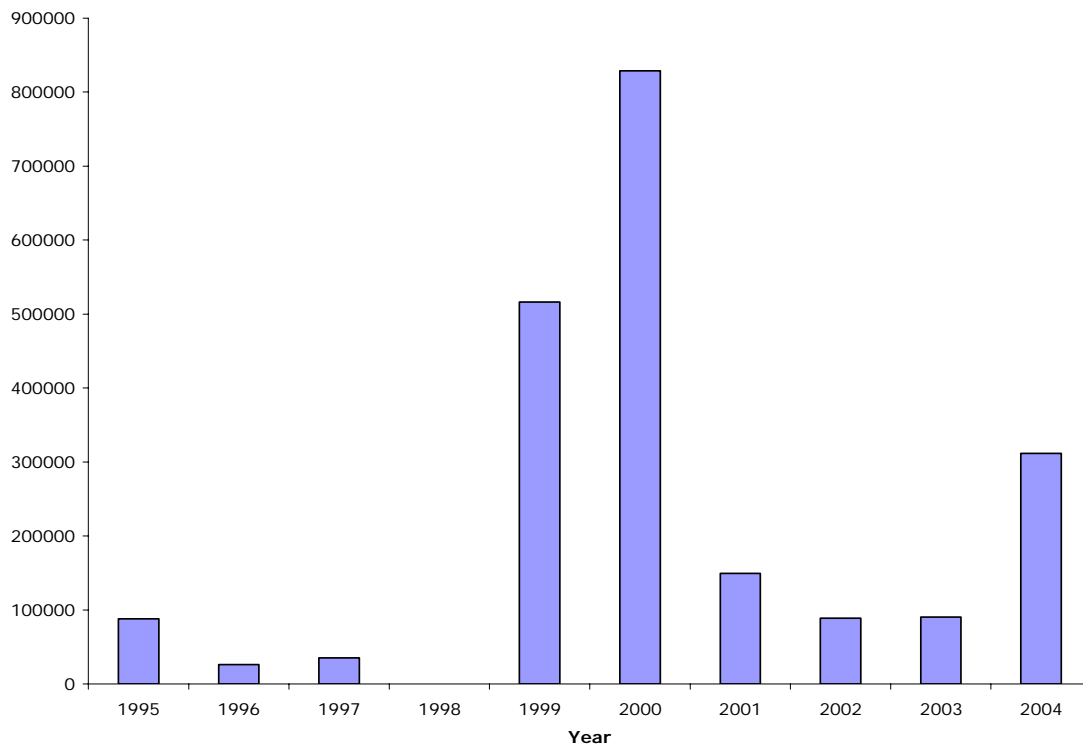
ACP subsidies since 2000 due to the fact that the ACP has been incorporated into EQIP subsidies. In fact, in an NRCS effort towards “streamlining and improving its conservation programs, four of USDA's former conservation programs were combined in EQIP: the Agricultural Conservation Program, Water Quality Incentives Program, Great Plains Conservation Program, and the Colorado River Basin Salinity Control Program.”<sup>126</sup> Therefore, the ACP has been discontinued as a conservation program.

The Emergency Conservation program was utilized primarily in 1999 and 2000 as a result of a serious drought in RI. The RI NRCS administers emergency conservation subsidies through its Emergency Watershed Protection (EWP) program, which includes easements “for runoff retardation and soil erosion prevention to safeguard lives and property from floods, drought, and the products of erosion on any watershed whenever fire, flood or any other natural occurrence is causing or has caused a sudden impairment of the watershed.”<sup>127</sup> As with the disaster payments discussed in the following section, the EWP is obviously available only in times of natural disaster.

The remaining five programs—the Wetlands Reserve Program, Agriculture Management Assistance Program, Soil and Water Conservation Assistance Program, Conservation Reserve Program, and Grassland Reserve Program—together account for only 5% of conservation subsidies to RI in the last decade. With these programs playing even less of a role in recent years, in-depth analysis of these programs is unnecessary for the purposes of this report. For more information on these or any programs, see [www.nrcs.usda.gov](http://www.nrcs.usda.gov).

### *Rhode Island Disaster Subsidies*

The final category of agricultural subsidies, disaster payments, plays a larger role in Rhode Island than the national average, much like conservation subsidies. Whereas disaster payments account for only 9% of subsidies on the national level for 1995-2004, Rhode Island received more disaster subsidies (41%) than conservation or commodity subsidies. However, the role of disaster payments in RI subsidies is grossly inflated due to extreme drought years in 1999 and 2000. Figure 6.7 clearly shows the effects of 1999 and 2000 on overall disaster payments.



**Figure 6.7: Total Disaster Subsidies to Rhode Island 1995-2004.<sup>128</sup>**

Disaster payments differ from the commodity and conservation subsidies in that they are not directly supporting certain forms of production. Also, due to the randomness of natural disasters, it is impossible to determine whether disaster payments will rise or

fall in upcoming years. Nearly all the disaster payments in Rhode Island are part of the Crop Disaster Program (CDP) and, to a much lesser extent, the Non-Insured Crop Disaster Assistance Program. There appears to be no strong correlation between farms receiving disaster subsidies and those receiving commodity subsidies. Of the nineteen RI recipients of disaster subsidies in 2004, ten had received commodity subsidies within the last decade, while nine had never received a commodity subsidy.

Since there are no strict requirements regulating which crops must be grown to be eligible for disaster subsidies, any Rhode Island farm should be eligible for disaster assistance. However, for some farmers, the bureaucratic hurdles associated with disaster subsidies (such as providing detailed production records which are more common among commercial farms) outweigh the financial assistance they would receive.<sup>129</sup>

Due to the fact that disaster subsidies do not directly support a certain type of production, they do not weigh as heavily on the purpose of this report as commodity and conservation subsidies. Moreover, the unpredictability of natural disasters creates difficulty in assessing disaster subsidies on the state level. In terms of merging government subsidies with promoting local food access, it is more important to focus on those subsidies which directly promote certain agricultural practices.

Table 6.3 summarizes the Rhode Island subsidy sections. It is most important to note that despite the amount of funding coming into Rhode Island, only a small percentage of total Rhode Island farmers receive USDA subsidies. In effect, roughly 800 Rhode Island farms remain outside the federal subsidy umbrella. For small farmers unable to rely on government support and unable to provide consistent quantities of produce to wholesalers<sup>130</sup>, alternative-marketing options such as farmers' markets, direct

restaurant sales, and community supported agriculture programs have provided the means for keeping farms viable while simultaneously creating the groundwork for a local food system.<sup>131</sup> It is clear that USDA subsidies in their current state do not intrinsically contribute to supporting local food systems, in that no subsidies directly support farmers producing for a local market.

**Table 6.3: USDA Subsidies to Rhode Island<sup>132</sup>**

| <b>Type of USDA Subsidy to RI</b> | <b>Total Amount Received in RI 1995-2004</b> | <b>Average Number of Recipients in RI 1995-2004</b> | <b>Number of Recipients in 2004</b> | <b>Percent of Total RI Farms Receiving Subsidy in 2004</b> |
|-----------------------------------|--|---|-------------------------------------|--|
| All Subsidies                     | \$5,289,061                                  | 92  | 76                                  | 9%   |
| Commodity                         | \$1,363,243                                  | 27  | 41                                  | 5%   |
| Conservation                      | \$1,796,754                                  | 24  | 25                                  | 3%   |
| Disaster                          | \$2,134,063                                  | 60  | 19                                  | 2%   |

*Community Food Project Competitive Grants*

In 1996, the Cooperative State Research, Education, and Extension Service (CSREES), a branch of the USDA, began the Community Food Projects Competitive Grant Program (CFPCGP). The purpose of this program is three-fold: 1) “Meet the needs of low-income people by increasing their access to fresher, more nutritious food supplies,” 2) “Increase the self-reliance of communities in providing for their own food needs,” and 3) “Promote comprehensive responses to local food, farm, and nutrition

issues.”<sup>133</sup> The funding level for CSREES amounts to only \$5 million per year through 2007 which is allocated through a competitive grant process to projects addressing the above goals.

In 2003 and 2004, two Rhode Island-based organizations received funding through the CFPCGP, the Rhode Island Association of Conservation Districts and Southside Community Land Trust. The former received a three-year \$130,000 grant to promote neighborhood gardening and food production with urban and rural youth in Rhode Island and establish a food policy council; the latter received a three-year \$183,000 grant to initiate the Providence Urban Agriculture Initiative which aims to empower more Providence residents with the knowledge of producing food and to further support community food security in Providence.

While these grants inherently promote Community Food Security, the \$5 million per year funding for the grants pales in comparison to annual federal funding of agriculture subsidies and food assistance programs. Furthermore, as a competitive grant process, the program awards groups and organizations which are working to promote food security, but does not directly offer assistance to RI farmers engaged in producing food for the local market. Also, the grant writing process is burdensome and requires substantial labor and education to create a winning grant proposal. The CFPCGP , therefore, is a well-intentioned and necessary source of funding for organizations working towards community food security, but, as the two above examples show, it neither directly provides established farmers with incentives to produce for a local market nor directly increases low-income residents ability to access fresh, local food.

Instead, these grants indirectly support local farmers and increased access by financing independent organizations to help develop community food security.

### *Rhode Island State Incentives for Local Food Systems*

Unlike the federal government, which heavily subsidizes commodity crops and has pushed for the expansion of agricultural exports, the state government of Rhode Island continually shows strong support for a local food system in Rhode Island. Compared to other states, Rhode Island ranked 2<sup>nd</sup> in the nation for the value of agricultural products sold directly to consumers for human consumption according to the 2002 USDA Census of Agriculture.<sup>134</sup> This statistic has not gone unnoticed by the Rhode Island Department of Environmental Management and Division of Agriculture<sup>135</sup> and several initiatives have been undertaken to preserve the agricultural community of Rhode Island while simultaneously attempting to expand a local food system within Rhode Island.

The most important program in Rhode Island for keeping farmland in production is the purchasing of development rights for farmland. Under this program, the state government purchases the development rights for a farm provided that the owner of the land keeps the farm in agricultural production. Since the inception of the program in 1985, the state has spent over \$19 million to protect over 4,800 acres of Rhode Island farmland from development pressure.<sup>136</sup> This program is invaluable, since a local food system cannot exist in Rhode Island if farms do not exist to produce for the local market. While there is no stipulation that a farm must produce for local markets in order to qualify for the state purchase of development rights, it cannot be denied that protecting

farms from development helps to reduce the pressure of converting scarce farmland for commercial or residential interests. Similarly, the Rhode Island Division of Agriculture promotes the Farm, Forest, and Open Space Act as another program to help reduce the development pressure on Rhode Island farmland.<sup>137</sup> Under this program, landowners can have their land assessed at current use value rather than its value for development, thereby reducing the pressure to sell to developers.

In addition to keeping farmland in production, the state government has taken strides to increase the local distribution of Rhode Island grown food. The RI Division of Agriculture and Department of Health act as market managers for five farmers' markets throughout Rhode Island, one of which is located at the State House in Providence.<sup>138</sup> The active involvement of the state government in promoting farmers' markets is promising, especially if the state takes the initiative to help operate markets in low-income areas of the state where private individuals have not yet opened markets. Through managing farmers' markets, the Division of Agriculture shows its dedication to promoting all aspects of the food system and not maintaining a narrow focus solely on agricultural production.

## Chapter 7: Conclusions and Recommendations

Table 7.1 summarizes the major USDA programs discussed in the previous chapters. For each program, per capita funding levels for 2004 are provided for both the national level and for Rhode Island.

**Table 7.1: Food System Subsidies and Per Capita Funding Levels in 2004.**

| <i>Program</i>          | <i>Goals</i>   | <b>Funding for United States in 2004 per US capita</b> | <b>Funding for Rhode Island in 2004 per RI capita</b> |
|-------------------------|--|--|---|
| Commodity Subsidies     | To stabilize farm income for producers of certain crops  | \$35   | \$0.08  |
| Conservation Subsidies  | To provide technical/financial assistance to address natural resource concerns   | \$7.50   | \$0.50  |
| WIC                     | To safeguard the health of low-income women infants and children   | \$17.70  | \$13  |
| FMNP                    | To safeguard the health of low-income women infants and children; expand use and awareness of farmer's markets   | \$0.08   | \$0.20  |
| Community Food Projects | To meet the needs of low-income people by increasing their access to fresher, more nutritious food supplies; increase the self-reliance of communities in providing for their own food needs; promote comprehensive responses to local food, farm, and nutrition issues. | \$0.02   | \$0.17  |

### Conclusions

#### *The Federal Government Endorses the Global Food System Over a Local Food System*

On the national level, USDA commodity subsidies exceed the combined spending levels for the other four programs in Table 7.1. The emphasis on subsidizing the production of select commodity crops promotes large-scale monocrops and excludes

small-scale producers on diverse farms from the most well funded agriculture subsidies. Also, the 2002 Farm Bill and proposals by George W. Bush for the 2007 Farm Bill push for the expansion of international export of American crops. Furthermore, the federal government has cut spending on the FMNP by over 20% since 2003<sup>139</sup>, thereby directly reducing support for a federal food assistance program with a local focus.

*Subsidies to Rhode Island are not as perverse as overall subsidies to the United States*

Whereas commodity subsidies account for nearly 80% of overall USDA agriculture subsidies in the last decade, Rhode Island has received a far greater percentage of conservation subsidies than the national average (12% versus 34%). Thus, Rhode Island uses more federal money to support environmental conservation measures than supporting commodity crops. Also, although at the national level FMNP funding pales in comparison to commodity subsidy funding, Rhode Island receives more funding to provide low-income mothers and children with vouchers for local food purchases than to support commodity crops. As Table 7.1 shows, federal funds to Rhode Island contribute a greater amount to local environmental protection and local food access than to supporting commodity crops. This stands in stark contrast to national per capita funding where commodity crops receive far more funds than conservation subsidies or food assistance programs.

### *Rhode Island Understands the Link Between Agriculture and Conservation*

As many Rhode Island farmers are not eligible for USDA commodity subsidies, Rhode Island places high value on conservation rather than increased production of commodity crops. At the Rhode Island USDA Farm Bill forum (Narragansett, RI, October 2005), the success of EQIP in Rhode Island was heavily lauded. At the Farm Bill hearing, where interest group comments outnumbered comments by farmers<sup>140</sup>, it was clear that alleviating the on-farm externalities of agriculture has been a primary focus of RI's farmers and environmental advocates.

### *Local Food Systems Still Seen as “Special Interest” and Not a Serious Part of Federal Agriculture Policy*

Federal funds for specifically supporting local agriculture are scarce. The FMNP accounts for only a fraction of overall WIC funding and, as noted above, has been receiving less funding over the last few years. The Community Food Project competitive grants, while a much-needed federal program, have a maximum funding level of only \$5 million per year until 2007. Furthermore, as competitive grants, Community Food Projects do not have the broad reach of agriculture subsidies or food assistance programs. The continued emphasis on further expansion of American agricultural trade also underscores our society's attachment to a global food system.

### *Local Food Systems Are Capable of Addressing Environmental and Social Concerns*

As seen in Chapter 4, the food miles traveled by a single piece of produce at Hope High Farmers' Market in Providence has traveled on average a much shorter distance than its Stop&Shop equivalent. As noted in Chapter 2, a local food system and a global

food system are clearly different economies of scale. While a local food system in Rhode Island does not appear posed to fully replace global supermarket culture, each purchase of local produce results in one less piece of produce purchased that is sourced from thousand of miles away; additionally, each purchase of local produce directly from the farmer helps alleviate the distancing between producer and consumer that is inherent in the global food system. Also, the price comparison between the Hope High Farmer's Market and Stop&Shop in Chapter 4 shows that one outlet is not intrinsically more or less expensive than the other. The success of the Providence farmers' markets to cater to a diverse population of Providence (especially at the Broad St. and Parade St. Markets) exemplifies the ability of a local food system to help alleviate social concerns (in this case, hunger and nutrition). Furthermore, local food systems make it possible to associate the face of the farmer with the food you are eating, a unquantifiable, yet important, factor in internalizing the interconnectedness of the natural world and human existence.

*“Environmental” Focus on Farms Often Ignores Environmental Impact of Distribution*

While measures to reduce run-off and minimize irrigation water on farms are considered “environmental” issue and subsequently are funded through conservation subsidies, producers dedicated to selling a diverse range of produce to a local market are not considered “environmental” and receive no direct subsidies for producing for a local market. This is unfortunate since small, diverse farms, which are already ineligible for commodity subsidies, make up the bulk of those selling at local markets. The focus on on-farm externalities ignores the environmental and social ethic espoused by farmers who wish to place their production in the context of a local food system.

## **Recommendations**

### *Keep Cutting Back Commodity Subsidies; Create Subsidies for Small Farmers Producing for Local Market*

The trend in reducing funds for commodity subsidies is positive. Through the reduction of commodity subsidies, the United States is slowly removing commodity price supports thereby reducing the incentive for farmers to grow large acreage of the same crop. As funds are diverted from supporting commodity crops, the government has the opportunity to allocate these funds towards supporting a more socially and environmentally responsible food system. The EWG has argued that all USDA subsidies should be shifted to conservation subsidies. I would argue that a shift to total conservation subsidies might still fail to address inequalities in the food system. Small farmers, especially in Rhode Island, face immense development pressure. The creation of a subsidy which supports small-scale farmers producing for a local market will help offset some of these pressures and encourage farmers to retain their land instead of selling.

### *Environmentalism Must Re-Define Conservation*

Chapter 2 presented some of the critiques of mainstream environmentalism as put forth by Shellenberger and Nordhaus in “The Death of Environmentalism.” As they argue, environmentalists have failed to rouse political and public will to combat global warming due to the framing of the environment as a distant and separate “thing.” However, carbon emissions and global warming do not exist in a vacuum but are intrinsically intertwined with broader systems and policy, such as the global food system and the Farm Bill. Conservation, therefore, should not only apply to agricultural production methods, but should take the whole food system, including distribution, into

consideration. When this is achieved, environmentalists will realize the conservation benefits of local food systems (e.g. fewer carbon emissions, preservation of open space through offsetting development pressure).

Since Rhode Island NRCS administers USDA conservation subsidies at the state level, RI NRCS could take distribution factors into consideration when accepting applications from RI farmers. The priorities for EQIP funding as determined by NRCS can be found on page 58. If NRCS were also to consider conserving farmland that is engaged in producing for a local market as a priority, then there would be a direct incentive for farmers become actively engaged in a local food system. At the same time, creating conservation subsidies for local food system producers not only provides an incentive to produce for local markets but also helps to ensure that as the local food system in Rhode Island continues to develop, it will be an ecologically sound system.

#### *Stop Cutting Funding to the Farmers' Market Nutrition Program*

As a program whose stated purpose simultaneously advocates for providing an adequate nutritional diet to at-risk populations and for supporting local farmers' markets, the FMNP embodies a holistic approach to the food system by addressing issues of production and distribution. The program, as witnessed at Parade St and Broad St Markets in Providence, has been successful in diversifying the customer base of farmers' markets and helping to support farmers markets especially when located in low-income areas. The program also helps to promote farmers' markets as an alternative food outlet to the supermarket. The FMNP helps to create broad support for local food across race and class resulting in a true community ethic for a local food system. The federal

government, which determines the national funding for the FMNP, should support such a program that integrates environmental and social concerns and continue to adequately fund the FMNP into the future.

*Increase Outreach and Advertising for Providence Framers' Markets, FMNP, and SFMNP*

Farmers markets are operating 5 days a week in Providence from late spring to late fall. However, since they are in different locations and at different hours, farmers' markets lack the consistency of a 24-hour supermarket. Greater effort should be made to advertise farmers' markets and their operating hours in an attempt to raise awareness and consumer base of farmers' markets. RIPTA buses and bus stops seems like an ideal location for such advertising. An individual walking down Westminster St. on a Saturday morning, see a RIPTA bus pass by with an advertisement for the Broad St Market, and realize that fresh, local produce is only a few blocks away. A worker may get on a RIPTA bus in the morning and realize he/she could go to a market during a lunch break. Since many people ride RIPTA and just as many (probably more) pass by bus stops or see buses drive by, farmers' market advertisements would help promote local nutrition and local food.

*Need to Create Farmers' Market in Olneyville, SilverLake, Hartford Neighborhoods*

In order to expand community food security and a local food system, efforts must be made to further integrate all parts of Providence into the system. The success of Broad St. and Parade St. Farmers Markets shows that placing a market in a low-income area helps to diversify the consumer base and leads to higher redemptions of FMNP and SFMNP vouchers. Olneyville, Silver Lake, Hartford are among the poorest neighborhoods of Providence and would benefit from increased access to fresh and nutritious produce. In the same way that Broad St. and Parade Street Markets were intentionally placed in proximity to low-income Providence residents, a market serving Olneyville, Silver Lake, and Hartford would help to further the inclusion of all classes in the local food system.

*Every Farmers' Market in Providence Should Be Approved For FMNP and SFMNP*

Thankfully, this recommendation should not be difficult to enact. Providence Farmers' Markets such as the Monday Market in Kennedy Plaza, the Capital Hill Farmers' Market, and the indoor Holiday Market were created after the deadlines for FMNP certification for 2005 had passed. The indoor Holiday Market also missed the SFMNP deadline. For the 2006 season, it can be assumed that more (if not all) Providence Farmers' Markets will be eligible to accept FMNP and SFMNP vouchers thereby helping to increase access to local food for low-income individuals in Providence.

## Endnotes

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<sup>1</sup> [http://www.fmi.org/facts\\_figs/keyfacts/stores.htm](http://www.fmi.org/facts_figs/keyfacts/stores.htm)

<sup>2</sup> Ibid.

<sup>3</sup> US Census Bureau, 2000 Census Population Data, <http://quickfacts.census.gov/qfd/states/00000.html>

<sup>4</sup> Pirog, Rich. "Checking the Food Odometer: Comparing Food Miles for Local Versus Conventional Produce Sales in Iowa Institutions." Leopold Center for Sustainable Agriculture. July 2003.

<sup>5</sup> <http://www.ams.usda.gov/farmersmarkets/facts.htm>

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# Appendix I: Approved WIC Food Package in Rhode Island

Source: Rhode Island Department of Health <http://www.health.ri.gov/family/wic/approved.php>

## Juices

All Juices Must be 100% Juice

### Juicy Juice - All Flavors



46 oz Fluid Can



11.5 oz Liquid Concentrate

### Grape Juice - Frozen Concentrate



Welch's, 11.5 oz  
Yellow Stripe Only



Welch's White Grape, 11.5 oz  
Yellow Stripe Only

### Apple Juice - Frozen Concentrate



Seneca, 12 oz  
Red Can Only



Shaw's, 12 oz



IGA, 12 oz



Stop & Shop, 12 oz

### 100% Orange or Grapefruit Juice Any Brand



46 oz Fluid Can  
12 oz Frozen Concentrate

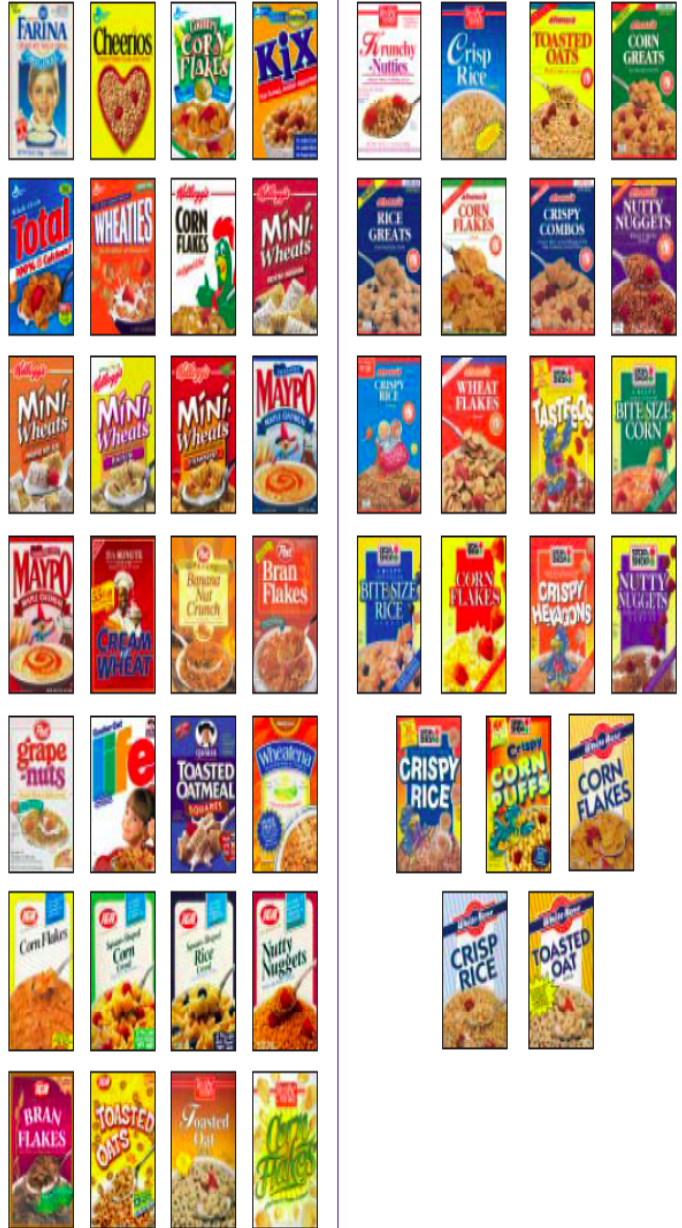
### 100% Pineapple Juice Any Brand Vitamin C Fortified



46 oz Fluid Can  
12 oz Frozen Concentrate

## Cereals

(12 oz Box or Larger)



|       |
|-------|
| Juice |
| 46 oz |

+

|       |
|-------|
| Juice |
| 46 oz |

|       |
|-------|
| Juice |
| 12 oz |

+

|       |
|-------|
| Juice |
| 12 oz |

|       |
|-------|
| Juice |
| 46 oz |

+

|       |
|-------|
| Juice |
| 12 oz |

|        |
|--------|
| Cereal |
| 18 oz  |

+

|        |
|--------|
| Cereal |
| 18 oz  |

= 36 oz

|        |
|--------|
| Cereal |
| 20 oz  |

+

|        |
|--------|
| Cereal |
| 16 oz  |

= 36 oz

|        |
|--------|
| Cereal |
| 24 oz  |

+

|        |
|--------|
| Cereal |
| 12 oz  |

= 36 oz

|        |
|--------|
| Cereal |
| 12 oz  |

+

|        |
|--------|
| Cereal |
| 12 oz  |

+

|        |
|--------|
| Cereal |
| 12 oz  |

= 36 oz

## Appendix I (cont.)

### Milk

Whole, Low Fat or Nonfat



Store Brand or  
Least Expensive Brand

### Cheese



American, Cheddar, Colby, Monterey Jack,  
Mozzarella, Muenster or Provolone

Any Brand  
One Package Only, Up to 16 oz  
Sliced, Shredded or Block. No Individually Wrapped Slices.  
Domestic Cheese Only. No Imported Cheese.

### Eggs



Least Expensive Brand  
Grade A Large  
Brown or White

### Peanut Butter



Any Brand  
Smooth or Chunky  
No Added Honey or Jelly  
18 oz Jar

### Dried Beans, Peas or Lentils



Any Brand  
1 lb bag  
No Flavorings

### Tuna



Least Expensive Brand  
Chunk Light Tuna  
6 to 6 1/2 oz Can Only

### Carrots



Any Brand  
1 lb Bag Fresh Carrots or  
14 to 16 oz Canned Sliced Carrots

### Infant Cereal



Any Brand  
Rice, Oatmeal, Mixed, or Barley  
8 oz or 16 oz Box Only  
No Added Formula or Fruit

### Infant Formula



Concentrate or Powder Infant Formula  
As Listed on WIC Check

For more information, call the  
Family Health Information Line at 1-800-942-7434

This institution is an equal opportunity provider.

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