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Green spaces in an urban wilderness: Urban agriculture in Havana Cuba and the United States trade embargo

Joshua John Klaus

The University of Montana

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Green Spaces in an Urban Wilderness: Urban Agriculture in Havana, Cuba, and the United States Trade Embargo

by

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B.A. Willamette University, Oregon, 1998

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for the degree of

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Dean, Graduate School

Date
Klaus, Joshua J. M. Sc., May 2004

Green Spaces in an Urban Wilderness: Urban Agriculture in Havana, Cuba, and the United States Trade Embargo

Director: Neva Hassanein

The primary purpose of this study is to investigate the attitudes of Cubans working in urban agriculture in Havana about the possibility of increasing imports of food from the US, and the effect(s) that might have on urban agriculture, society, and culture in Cuba. In the pages that follow, I explore the attitudes and perceptions of Cubans working in UA towards the US. Specifically, I discuss what they consider to the benefits of UA; how they think Cuba is affected by the embargo; and what they think about recent imports of US agricultural commodities. Finally, I analyze the ways in which they perceive that their agriculture, economy, and society will be affected if trade with the US continues or expands. Participants in this study expressed unanimous support for improved trade relations with the US in hopes of improving their lives through more economical access to goods and services. Participants hope trade will continue despite their criticisms about the extent of trade thus far and despite fears about the unpredictable but inevitable change that will occur in their country if relations improve with the US. They conclude that increased trade will strengthen UA, and that the trade thus far signifies a chance for better relations between the two countries, characterized by freer movement of people, ideas, and resources. In addition to conducting participant observation, I collected data through semi-structured, formal interviews. Using an interpretative approach to content analysis, I created labels to specific categories identified in the data. I condensed important ideas in a spreadsheet, and organized and presented my analysis in a way that provided an answer to the central research question.
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Without the help and patience of the Cuban Association of Agricultural and Forestry Technicians, none of this work would have been possible. Eduardo Martinez made my fieldwork as painless as one could hope for while working in Cuba, as did all the individuals with whom I worked while in Havana. Luis Gomez and Enrique Moret of the Ministry of Science, Technology, and the Environment ensured that I got access to participants crucial to my research. Dr. John Francis provided me with an opportunity to work for his organization Planetwalk, during my initial trip to Cuba, and for this I am grateful.

My family and friends are due sincere appreciation, as they have always encouraged me to follow my heart, even if it leads me far from home. Finally, thanks to everyone who has helped me on the long road to becoming a proficient Spanish speaker.
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The United States (US) trade embargo against Cuba is the longest standing economic blockade to remain in place during modern times (See Figure 1). The embargo, instigated by Cuba's relationship with the Soviet Union, has influenced Cuba's development since the 1960's, including its food and agriculture system. Through the 1980's Cuba's agricultural practices were largely conventional, and relied heavily on petro-chemical imports, a dependence that left Cuba in a state of crisis when the Soviet Union dissolved in 1991 and access to such imports was heavily curtailed as a result. Due in part to the collapse of the Soviet Bloc and to the tightening of the US embargo, Cuba underwent a wide array of economic and agricultural reforms in the 1990's, including the development of urban agriculture (UA) (Funes, et al., 2001). As a result, Cuba has received international acclaim for the organic farms located in all of its cities because they produce not only healthy, fresh vegetables, but also an array of social and economic benefits.

Though the embargo still exerts a strong influence over Cuba's trade relations with the rest of the world, it has very recently been eased in some respects, affording access to US agricultural commodities unattainable between 1960 and 2001. As trade increases with the US, however, the future development of UA has been called into question (Barclay, 2003). What do individuals working in UA think about increased trade with the US? Will easy access to imports from the world's largest economy undermine the achievements of UA? Or will more liberal trade between the US and
Cuba allow urban farmers to import inputs necessary to improve their farms and gardens by expanding and improving existing practices? In more general terms, how will easing the embargo affect other areas of the economy and society? This study sheds light on these questions. In the pages that follow, I explore the attitudes and perceptions of Cubans working in UA towards the US. Specifically, I discuss what they consider to be the benefits of UA; how they think Cuba is affected by the embargo; and what they think about recent imports of US agricultural commodities. Finally, I analyze the ways in which they perceive that their agriculture, economy, and society will be affected if trade with the US continues or expands.

Participants in this study expressed unanimous support for improved trade relations with the US in hopes of improving their lives through more economical access to goods and services. Participants hope trade will continue despite their criticisms about the extent of trade thus far and despite fears about the unpredictable but inevitable change that will occur in their country if relations improve with the US. They conclude that increased trade will strengthen UA, and that the trade thus far signifies a chance for better relations between the two countries, characterized by freer movement of people, ideas, and resources. A review of existing literature about the importance of urban agriculture suggests it has played a critical role in helping Cuba escape from the economic crisis called the ‘Special Period’. To understand that role, it is necessary to review background information about the trade embargo and how it has affected Cuba’s economy and society. Finally, I discuss the extent of the trade that has taken place with the US, as a framework for describing my findings.
Using a qualitative research approach, I collected data about the issues addressed above by conducting fieldwork in Cuba during June 2003 and January 2004. Formal interviews with farmers, government and non-government workers, and university professors provide a rich description of the relationship between UA and the trade embargo. In addition, I conducted participant observation at two types of cooperative urban farms located in Havana. The thesis summarizes relevant literature, describes my methodology, and then presents the findings of my research. I conclude with a discussion and the possible future implications on Cuban agriculture and society of increased trade with the US.

Figure 1. Republic of Cuba
Urban agriculture is practiced throughout the world, and has the potential to alleviate many of the ecological, social, and economic problems created by the dominant industrial agricultural system. According to a 1993 report by the International Development Research Center (IDRC) “Globally, about 200 million urban dwellers are now urban farmers, providing food and income to about 700 million people” (Cook and Rodgers, 1997: 30). Urban agriculture exists more widely in the developing world than in the more industrialized north, as it is “a well-established survival response to what has become a structurally-adjusted urban wilderness for many people” (Garnett, 1996: 8). In other words, the increasing development of urban agriculture has resulted, in part, from a worldwide trend in urbanization.

Migration from rural areas to dense urban centers is occurring at an unprecedented pace. Current estimates hold that by the year 2030, "56 percent of the developing world will be urban dwellers" (Kimbell, 2002: 8). Urban migration, catalyzed by industrialization and government programs, and supported by international organizations like the United Nations, is thought to improve efficiency with respect to distribution of resources, jobs, food, and water. Though urbanization might serve as an effective means of increasing employment opportunities for rural emigrants, in the case of food production and food security, the costs of urban migration outweigh the benefits. Norberg-Hodge (2002: 62) argues that:

When the real costs of urbanization in the global economy are accounted for, it becomes obvious that urban centers are
extremely resource-intensive and that they are actually responsible for a reduction in arable land and therefore in food supplies.

As arable lands are lost to development in the form of sprawling city outskirts, the ability to produce and transport healthful food becomes increasingly inefficient with respect to resource use. It will be of utmost importance to create food production systems in both rural and urban areas as increased urbanization worldwide results in the loss of arable agricultural acreage. In Cuba, seventy-five percent of the population lives in cities, and a great majority of those who do migrated from rural areas. The development of diverse urban agricultural systems has helped offset some of the negative effects of urbanization in Cuba.

**Urban Agriculture in Cuba**

Cuba is a unique example of a nation-state that has successfully developed alternative food systems in general and urban agriculture in particular. Cuban agriculture faced a unique set of challenges instigated by the loss of important agricultural subsidies created by the fall of the Soviet Union in 1989 and weakened by the 30-year United States’ trade embargo (Nova, 2001). Lacking access to Eastern European import markets, and crippled by limited availability of petroleum, fertilizers, machines, and imported foods, Cuba began comprehensive agricultural reform in the 1990's (See Table 1; Oppenheim, 2001). The task of converting their highly input-dependent agriculture to a more organic and sustainable model was met with eventual success.
Table 1. Cuba's Access to Selected Imports in 1989 and 1992 (in Metric Tons)

<table>
<thead>
<tr>
<th>Item</th>
<th>1989</th>
<th>1992</th>
<th>Percentage Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal feeds</td>
<td>1,600,000 MT</td>
<td>475,000 MT</td>
<td>70%</td>
</tr>
<tr>
<td>Fertilizer</td>
<td>1,300,000 MT</td>
<td>300,000 MT</td>
<td>77%</td>
</tr>
<tr>
<td>Petroleum</td>
<td>13,000,000 MT</td>
<td>6,100,000 MT</td>
<td>53%</td>
</tr>
<tr>
<td>Pesticides</td>
<td>US$80,000,000</td>
<td>&gt;US$30,000,000</td>
<td>63%</td>
</tr>
</tbody>
</table>


Part of the triumph of the Cuban transformation resulted from the development of urban agriculture. Rosset (2000: 208) elaborates on urban agriculture in Cuba:

The proliferation of urban farmers who produce fresh produce has also been extremely important to the Cuban food supply. The earlier food shortages and the rise in food prices suddenly turned urban agriculture into a very profitable activity for Cubans, and once the government threw its full support behind a nascent urban gardening movement, it exploded to near epic proportions.

Once Cuba lost access to Soviet subsidies and imports, urban agriculture developed at a quick pace, guided by three principles: use of organic farming methods, use of local resources, and laws that allow producers to directly market food to consumers (Companioni et al., 2001: 220; Nieto and Delgado, 2001). Furthermore, observers and leaders of Cuban UA argue it has a strong potential to continue into the future for other reasons. First, as demand for food is high in cities given dense populations, it makes sense to produce as close to consumers as possible. Second, as many urban residents emigrated from rural areas, many have brought experiential knowledge about agriculture. Finally, as development and growth take place in cities, some space is left vacant, thus providing areas to be cultivated, which result in improved ecology within cities (Companioni et al., 2001: 223).
A national urban garden program officially began in December of 1990, and by 1995 there were more than 26,600 popular gardens in Havana alone (Chaplowe, 1998: 50). By 2002 these gardens totaled over 35,000 hectares (86,450 acres) (Barclay, 2003: 3). In addition to serving as the large labor force necessary to cultivate, tend, harvest, and sell fruits and vegetables, many urban residents had abundant experience growing food, having emigrated from rural areas. Urban agriculture seeks to take full advantage of this personal knowledge, and as a result has created “160,000 jobs taken by people of various occupations and backgrounds, including workers, masons, mechanics, housewives, retired people, and professionals (López, 2000 cited in Companioni et al., 2001: 221). Researchers and advocates of alternative agriculture have collected detailed information about the size and style of urban farms, in addition to quantifying crop yields and varieties. Overall, the Cuban experience in urban agriculture powerfully illustrates the viability of using organic fertilizers and biological pesticides; planting polycultures; replacing machines with human and animal labor; and maximizing seasonal rainfall.

Although scholars and activists have documented the benefits and lessons of UA, little, if any, has been written about what these urban farmers think about Cuba’s relationship with the US and how that relationship affects UA. Do urban farmers think the embargo has catalyzed the development of their programs and should therefore be maintained? Or, would they rather see trade relations strengthened between the two countries in order to allow Cubans to have greater access to more foods, despite the success of urban agriculture? I will shed light on these questions in this study.
The United States Trade Embargo

During the 1990's, the US government tightened a nearly comprehensive trade embargo against Cuba, further intensifying the effects of the collapse of the Soviet Union and worsening the Cuban food crisis. Beginning in 1992 with the Torricelli Act, the United States government prohibited shipment of medical supplies and food to Cuba from subsidiaries of U.S. companies (Funes, 2001: 7). Later that decade, the 1996 Helms-Burton Act restricted foreign investment as a way of hampering Cuba's ability to continue to rebuild its economy (Warwick, 1999: 457). Attempts have been made to quantify the effects of the embargo on Cuba's economy, yet no exact figure has been established. Nevertheless, one author argues: "The direct economic damages to Cuba's economy, caused by the U.S. embargo since its institution, would exceed seventy billion dollars" (Herrera, 2004: 52). In addition to broad measures of the effects of the embargo, other studies have been more focused, highlighting specific areas of the economy. One study notes:

According to the American Association of World Health, the pressures exerted by the U.S. State and Commerce Departments on the suppliers of Cuba have affected the availability of a wide range of goods necessary for healthcare . . . . And went as far as to prevent the free supply of food for newborns and equipment for pediatric intensive care units (Herrera, 2004: 52).

In addition to the effects on medicine and healthcare, the embargo hurts Cuba in other ways, including creating an inability to maintain wide scale interaction between the two populaces. Travel restrictions for US and Cuban citizens result in the loss of: "One of the most potentially fruitful opportunities to develop humanitarian cooperation as a basis of solidarity between nations" (Herrera, 2004: 54). Despite these attempts to harm
Cuba’s economy and society by preventing (among other things) the reconstruction of its agricultural systems, Cuban persistence and patience prevailed, allowing the country to realize impressive reforms.

**Trade with the United States**

Trade relations between Cuba and the US began to change three years ago for the first time in over four decades of the embargo. First, in 2000 President Clinton allowed export of crops from the US to Cuba through the Trade Sanctions Reform and Export Enhancement Act (TSRA) (Barclay, 2003: 4). However, application of the TSRA did not occur until the following year. In December 2001, after hurricane Michelle devastated the island, US wheat growers were permitted by the Bush administration to offer 70,000 metric tons of hard red winter wheat to Cuba the following month as humanitarian aid. Fearing acceptance of the offer would result in conditions being imposed on Cuba by the United States, the Cuban government offered to purchase the wheat instead (Forsythe, 2002: 2). This shipment marked the first of its kind since the trade embargo began, and set the standard for how future shipments would occur. First, sale of agricultural commodities is unilateral, in that Cuba is not permitted to sell to the US. Second, Cuba must make cash payments in advance of receiving the desired goods, and no forms of credit or financing are accepted. Third, only US boats are permitted to handle transportation. These conditions have been upheld in every sale since the initial one in December 2001, which totaled over $4.3 million. In 2002, sale of US goods to Cuba exceeded $138.6 million (See Table 1). By September 2003, Cuba had purchased $161.5 million worth of agricultural goods, an increase of 17% from the previous year (US-Cuba Trade and Economic Council, 2004).
Table 2. U.S. Dollar Value of TSRA-Authorized Exports to Cuba

<table>
<thead>
<tr>
<th>Reporting Period</th>
<th>Amount in US Dollars</th>
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<tbody>
<tr>
<td>December 2001</td>
<td>$4,318,906</td>
</tr>
<tr>
<td>2002 (Jan.-Dec.)</td>
<td>$138,634,784</td>
</tr>
<tr>
<td>2003 (Jan.-Sept.)</td>
<td>$161,580,265</td>
</tr>
<tr>
<td>Total</td>
<td>$304,533,955</td>
</tr>
</tbody>
</table>

Source: U.S. Cuba Trade and Economic Council, 2004

Hoping to have continued access to an additional market in which to sell their crops, the U.S. Wheat Associates (USW) and the National Association of Wheat Growers have initiated a relentless effort to convince the federal government to allow trade to continue with Cuba. In explaining their stance on the issue, USW vice-president Paul Dickerson stated: “We will continue to do everything in our power to end the embargo and embark on normalizing relations” (Forsythe, 2003: 1). Despite their desire to broker future deals with the Cuban government, wheat farmers have been met with a somewhat inflexible US federal government. Nevertheless, sales of US agricultural commodities to Cuba have increased.

Unless eased or eliminated, US government rules and regulations regarding trade with Cuba are extremely restrictive and put a damper on future trade prospects. The current administration has refused to curtail other aspects of the trade embargo, but the increased sale of food has also been considered a somewhat symbolic gesture by activists in the US, indicating its unwillingness to adopt more liberal policies (Barclay, 2003: 5). In fact, a Cuban Deputy Foreign Minister of Foreign Affairs stated: “at this time, every purchase we make from the US has a political component with the objective of ending the embargo” (US-Cuba Trade and Economic Council, 2004: 8). He was criticized for
making unauthorized remarks in one of the Cuban daily newspapers. However, in the same article, after claiming utilization of the TSRA was not undertaken in order to end the embargo, an anonymous author stated: “The objective of our politics . . . . Is the establishment of relations, as much economic as scientific and cultural of mutual benefit for both countries” (U.S.-Cuba Trade and Economic Council, 2004: 8). Though it appears the Cuban government seeks to end the embargo, the current US administration has different objectives.

USW tried to bring Pedro Alvarez Borrego, the president of one of Cuba’s trading organizations, to the US in hopes of strengthening trade relations, but the U.S. State Department denied Mr. Alvarez’s visa. USW chairman Henry Jo Von Tunglen stated, in reference to the State Department stance, “the small-mindedness behind this decision speaks volumes about a shortsighted policy stuck in the past. It is an embarrassment that this great country of ours behaves in such a petty manner” (Forsythe, 2002: 3). Wheat farmers are not, however, the only U.S. group opposed to the embargo. Momentum is building within the US Congress to ease trade restrictions with Cuba (American Society for Agricultural Engineers, 2000; Jalonick, 2003; Taking Com to Castro, 2002).

There is increasing bipartisan antagonism in Congress toward the Bush administration’s maintenance of the embargo. Representative Jeff Flake, a Republican from Arizona argues that: “After 40 years of failure, we need to recognize that this approach is clearly not working and try something new” (U.S. misses boat on Cuba embargo, 2002: 2). Not all of his Congressional colleagues agree, nor do many Americans. In a May 2002 ABC news poll, 44% of respondents said the embargo should be lifted, and 48% said it should not (ABC News Poll, 2002). No clear majority exists in
the US in favor of or against the embargo, neither in Congress nor among the general population.

As a result, and despite pressure from some members of Congress and U.S. agricultural organizations, there is no guarantee that the United States government will continue to ease trade restrictions. In the event that it does, the Cuban economy in general, and urban agriculture in particular, will be affected by increased access to cheap imports. Barclay (2003: 5) argues, "There is also growing concern that if the embargo is eventually lifted, global agricultural giants will persuade farmers to drop their organic methods in favor of high pesticide and fertilizer usage." Whether these changes will come to pass is unknowable at this time. In addition to Barclay's observation, other authors have predicted how Cuba will be affected in other ways by the circulation of US currency.

When the use of US dollars was decriminalized in Cuba in 1994, the peso stopped being the sole acceptable monetary unit. Since that time, Cubans have been allowed to use both pesos and dollars, a phenomenon referred to as 'dolarizacion.' Coupled with the legalization of open-market activity in urban agriculture sales, the proliferation of the black market has caused an increase in more capitalist-style economic activity, as access to dollars creates more buying power than previously possible for the average Cuban citizen. In addition, Cubans living in America send remittance to their families, further expanding the movement of US dollars in the Cuban economy. During the 1990's "Cuban Americans sent an average of $250 million a year in remittances to the island- much more than the annual amount of foreign investment in Cuba" (Castro, 2001: 120). If trade with the US continues to expand, it is expected that 'dolarizacion' will increase as
well. The effects on Cuban society are expected to be strong. One author argues:

Cuba believes it can control the dollar's insidious passage through the country. It may be true that by rationing and central control of housing, services and essential foods, the dollar can live at ease with the peso for a while. But the effect of tourism and dollars on Cuban culture will be harder to control. Cuba's revolutionaries were once proud to rid Havana of prostitution and gambling; today, both are re-emerging. The dollar is doing more to destabilize the revolution than the secret CIA plans ever achieved (Gunnell, 2001: 19).

Another author believes that as: “Castro lives on, the penury of the Cuban people increases, and the only truth that survives is that Cuba cannot withstand one thing—capitalist intervention” (Universal, 2003: 54). Nevertheless, the Cuban government still decides the amount of commodities they want to purchase from the US. Furthermore, allowing US food to be sold to Cuba does not guarantee that capitalism will topple the Cuban revolution. However, potential effects of ‘dolarizacion’ have been identified in the literature.

We know what some Americans think about the embargo. But has anyone stopped to ask the Cubans who are most severely affected by the trade embargo? Will they continue to transform empty urban lots into gardens if they can easily get food from other places? In addition to ways their agriculture might change, what effects will occur in Cuban society and culture as a result of increased trade with the US? Is the embargo the very thing that has allowed Cuba to maintain a political and economic system opposed by proponents of democracy in the US? Accordingly, the primary purpose of this study is to investigate the attitudes of Cubans working in urban agriculture in Havana about the possibility of increasing imports of food from the US, and the effect(s) that might have on urban agriculture, society, and culture in Cuba.
CHAPTER 3

METHODODOLOGY

Using a qualitative research approach, I attempted to “discover answers to questions through the application of systematic procedures” (described below) (Berg, 2001: 6). In order to do so effectively, it was of great importance to have access to a population with knowledge suitable for answering my questions. As a fluent speaker of Spanish I was able to draw on my linguistic training and experience with Latino culture, allowing me to develop sufficient rapport with such a diverse group of individuals working in UA in Havana.

I spent a total of five weeks in Cuba. Between 30 May and 13 June, 2003 I conducted preliminary research and established contact with the Cuban Association of Agricultural and Forestry Technicians (ACTAF) a non-governmental organization (NGO) I would work with in January 2004. Over the course of my two trips, I did participant observation at two farms, both described below. In addition, I conducted 16 formal interviews, plus five informal interviews. Finally, I collected documents, literature, and newspaper articles that addressed urban agriculture, the trade embargo, and government opinion about the United States.

While everything seemed to be pre-arranged prior to returning to Cuba in January 2004, my first week quickly revealed bureaucratic complications. I met with ACTAF president Dr. Ricardo Delgado and Secretary of Communications Eduardo Martinez. Due to visa complications, I was initially unable to visit the ACTAF subsidiary farm, as had been agreed upon during my initial visit. In order to receive permission to formally
visit any farm or garden, I had to purchase a technical visa, and meet with Egidio Paez, Sub delegate of Development and Technical Services, Ministry of Agriculture (MINAG). With the permission and support of the MINAG, I began participant observation on two urban farms: one called *La Vereda*, and the other farm located nearby called *Las Americas*.

**Participant Observation**

At Egidio’s suggestion, I first conducted participant observation at Credit and Services Cooperative (CCS) *Las Americas*, an eight year-old, half hectare urban farm managed and operated by a family of four, consisting of two parents and their two sons (See Appendix A). The land is made available in usufruct from the state. *Las Americas* practices 26 of the 28 sub-programs of urban agriculture in Cuba (see Table 2), lacking only “popular” rice production and ornamental plants.

<table>
<thead>
<tr>
<th>Table 3. Current sub-programs of Cuban Urban Agriculture</th>
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<tbody>
<tr>
<td>1. Soil management and conservation</td>
</tr>
<tr>
<td>3. Seeds</td>
</tr>
<tr>
<td>4. Irrigation and drainage</td>
</tr>
<tr>
<td>5. Vegetables and fresh herbs</td>
</tr>
<tr>
<td>6. Medicinal plants and dried herbs</td>
</tr>
<tr>
<td>7. Ornamental plants and flowers</td>
</tr>
<tr>
<td>8. Fruit trees</td>
</tr>
<tr>
<td>9. Shade houses</td>
</tr>
<tr>
<td>10. Small-scale “popular” rice production</td>
</tr>
<tr>
<td>11. Trees, coffee, and cocoa</td>
</tr>
<tr>
<td>13. Tropical roots and tubers</td>
</tr>
<tr>
<td>14. Oilseed crops</td>
</tr>
</tbody>
</table>

**Source:** Campanioni et. al, 2001.

Rather than dividing profits among the workers, and reinvesting in the cooperative, *Las
*Americas* pays some of its earnings to a CCS, a group of farmers that pool earnings to purchase necessary inputs like seeds or irrigation implements. Carlos manages the majority of farming, while his wife America manages sales. Their two sons help plant, harvest, and tend the animals. Some of the crops are seeded directly, whereas others are transplanted from starts purchased off-farm. I spent two days at *Las Americas*, observing the point of sale and production practices, and interviewing Carlos and America.

*La Vereda* is a five year-old, two hectare Basic Unit of Cooperative Production (UBPC) whose managerial and work responsibilities are shared among cooperative members (See Appendix B). The land is made available in usufruct from the state. I spent three days at *La Vereda*, observing and interviewing workers, taking pictures, and watching production practices. *La Vereda* has a total of 21 workers, 15 of who are cooperative members, and six of who are working on a trial basis. Of the 21 workers, two are women, one of whom is a cooperative member. The farm is divided into five sections or work groups: administration, greenhouse, ornamentals, fruits and nursery, and agriculture. *La Vereda* sells finished produce, starts, grafted trees, spices, and medicinal and ornamental plants. These agricultural items are sold to individual consumers, the state, or to other urban farms and gardens. Unlike *Las Americas*, *La Vereda* does not work with animals or livestock of any sort, and thus only practices 20 of the 28 sub-programs (See Table 2).

**Interviews**

In addition to conducting participant observation, I collected data through semi-structured, formal interviews. Interviews lasted between 30 minutes to an hour, and I
took notes during all interviews. Of the 16 formal interviews (12 men and four women), nine were recorded with a mini-disk player. In addition to interviewing farmers at La Vereda and Las Americas, I interviewed ACTAF employees, government officials, and university professors. During participant observation at the farms described above, I conducted six formal interviews. At La Vereda I interviewed the following individuals: Juan Carlos, head administrator; Abel Rodriguez, worker; Juan Hernandez, worker; and Octavio Chavez, worker. All of these individuals are cooperative members, and only Abel is not considered a specialist. At Las Americas I interviewed Carlos and his wife America. In addition to these individuals, I interviewed ACTAF employees as well.

Founded in 1986, ACTAF, a national Cuban NGO, works in collaboration with government ministries, and other Cuban and foreign NGO’s. ACTAF receives money from Spanish, Canadian, German, French, Italian, Belgian, British, and American organizations. For each dollar ACTAF invests in a project in Cuba, the Cuban government gives ACTAF one Cuban peso (~ US $.04). According to one of its publications, ACTAF:

Facilitates ways to construct sustainable agricultural models with the help of national and international resources through local and community development, farmer and technical trainings, agricultural extension, formation of multidisciplinary groups, integration of national farms webs, and international formal recognition of agrarian activities (Cuban Association of Agriculture and Forestry Technicians, 2003).

ACTAF publishes a quarterly magazine called Agricultura Organica, in addition to other books, leaflets, and brochures about Cuban work in the development of sustainable agriculture. Finally, since 1995, ACTAF has organized an International Conference on Organic Agriculture that takes place every two years.
Of the four interviews conducted with ACTAF employees, two were held at their main office located in the MINAG, and two at their subsidiary farm in La Vibora, Havana. In the ACTAF office I interviewed Dr. Ricardo Delgado, president of the organization, and Eduardo Martinez, secretary of communications. At the subsidiary farm, I interviewed Idalmis Nazco, Executive Secretary, and Ceila de la Peña, Secretary of Training and Extension. In addition to interviews conducted with NGO workers, I also interviewed individuals working for the Cuban government.

Four government workers (three men, one woman) participated in this study. I interviewed Marcos Nieto, Investigator, MINAG in the ACTAF office, as he worked in the same building. I visited Egidio Paez, Sub delegate of Development and Technical Services, MINAG, twice, both times at his office in Capdevila, Havana. When I interviewed Lucy Martin, Director of International Collaboration and Development, Center of Psychological and Social Investigations (CIPS), Ministry and Science, Technology, and Environment (CITMA), we met in the CIPS office. Leonardo Chirino, Director, Department of International Relations, National Association of Small Farmers, invited me to interview him in his office located in Vedado, Havana. In addition to the farmers, and NGO and government workers, I interviewed faculty at the University of Havana.

Of the two university professors interviewed, I was first introduced to Dr. Armando Nova, Professor and Investigator, Center for Studies of the Cuban Economy (CEEC), University of Havana, by Dr. Delgado in the ACTAF office. On a separate occasion, I visited Dr. Nova at the CEEC office in Miramar, Havana. Additionally, on two occasions I spoke with Reynaldo Jimenez, Professor of Rural Sociology, University
of Havana. On both occasions, I met with Reynaldo in his office, and in a classroom at the University of Havana. Apart from the 16 formal interviews described above, I also conducted five informal interviews.

I characterize informal interviews as ones in which I did not utilize the interview guide (Appendix C), nor did I record observations or comments during the interview. These interviews generally were much shorter than the formal ones (5-10 minutes), but they nevertheless yielded useful data. During one of my first visits to a farmers’ market, I spoke with a man who I will refer to as a market runner. His job is to transport produce and other agricultural products from trucks to the stands where vendors sell the food. On another occasion, I had a brief discussion with a market buyer. This man purchases produce from rural growers then sells it to customers in a state-administered farmers’ market. The man pays taxes to the state based on the quantities he brings into the market each day, but unlike state vendors, he is able to set the prices of the food he sells. Outside of the farmers’ market, I conducted informal interviews with two farmers.

On one of my first days in Havana, I passed a small urban farm. After catching the attention of the man working in the beds, I entered the property. The man with whom I spoke was a retiree, and he dedicates his time to urban farming. He does not belong to a cooperative, nor does he have a point of sale at his property. He grows most of his food for familial consumption, and the rest he sells informally to friends or neighbors. In addition, I spoke with Miguel Salcines, the head administrator of the UBPC El Vivero. This UBPC is three times as large as La Vereda, and it supports 52 workers. We spoke as he toured me around the premises, and while we ate the lunch his co-workers prepared for us. Finally, I was able to interview informally Mireya Sanz, professor of rural
sociology at the University of Havana. We spoke during two visits I paid to the office she shares with Reynaldo Jimenez (see above). In addition to offering their ideas and opinions, these individuals helped me obtain documents relating to my research project.

**Document Review**

I collected a variety of documents, including newspapers, scholarly articles, NGO leaflets and brochures, government propaganda, and economic publications. On a daily basis I bought two newspapers, *Granma* and *Juventud Rebelde*, both published by the Communist Party. Furthermore, whenever I visited an NGO, or university of government office, I collected recent publications relating to urban agriculture and the trade embargo. After interviewing Dr. Armando Nova, I purchased two CD's, one containing a 2003 economic yearbook of Cuba, the other containing articles and transcripts from works presented at the eighth annual conference on the Cuban economy.

**Analysis**

After returning to the United States, I transcribed and translated the recorded interviews completely. I then analyzed every interview using an open-coding system, allowing me to “identify and even extract common themes, topics, or issues in a systematic manner” (Berg, 2001: 164). Using an interpretative approach to content analysis, I created labels to specific categories identified in the data. Once I labeled all the data, I condensed important ideas in a spreadsheet, thus facilitating identification of themes that exemplified or contradicted important concepts expressed in the literature. Finally, I organized and presented my analysis in a way that provided an answer to the
central research question. As a result, I have been able to address prior research while also helping to expand the literature.

Limitations

Despite my best efforts, my approach contains certain limitations. First and foremost, given the limited amount of time I spent in Cuba, I was only able to develop rapport with research participants to a limited extent. Ideally, I would have immersed myself in Cuban culture for several months or more, collecting data the entire time. Furthermore, and in part given my time constraints, I was only able to formally interview 16 people. The conclusions I draw below would be greatly improved had I been able to interview more individuals. Additionally, had I been able to spend more time in the two research sites, interviewing every worker or cooperative member, I would have been able to draw out more subtle but nevertheless informative aspects of my research.

While additional time in Cuba would have helped me improve data collection and analysis, certain aspects of Cuban culture and society would have nevertheless continued to limit my work. Cuban society is highly complex, and this complexity manifests itself (in part) in the extent to which people are willing to express themselves freely. Though free speech in Cuba is not the focus of this research, it is important to note that most Cubans are open and honest about the fact that they consider it somewhat risky to speak critically in public about Castro, the Revolution, or other aspects of Cuban culture. Many people spoke in harsh terms about all manner of things Cuban during my research. However, given a history of repression with respect to free speech, and in light of the relationship between the US and Cuba, it is important to acknowledge how my data
might have been affected due to these considerations.

First, research participants might have colored their responses because they wanted to leave me with a particular impression about their country, particularly because I am from the US. Second, as over half the interviews were recorded, participants might have exercised a certain amount of self-censure in order to avoid facing any unpleasant consequences knowing that their words were being preserved, and could perhaps be used against them were they to say anything in conflict with the Communist party line. I do not think this latter concern had tremendous effects, however, as the content of the interviews did not address topics that might have elicited responses particularly critical about Cuba. Nevertheless, and perhaps more so in Cuba than other Latin countries, it can be challenging to decipher what someone wants you to know (because they believe it to be true), what they think you want them to say (because you have a specific research agenda), or what they want you to believe (because they hope to leave you with a specific though not necessarily accurate conclusion). While I made every effort to create a trustworthy rapport with participants, these concerns and limitations have nevertheless affected my research and the conclusions I have drawn from my data.
CHAPTER 4
WHAT'S IN STORE FOR URBAN AGRICULTURE IN THE FUTURE?

In the pages that follow I describe explain the data collected in interviews and participant observation. In the first section, I illustrate the benefits of UA as articulated by participants. Then, in order to complement the literature about the effects of the embargo, I address how participants view the embargo, and how they think their society has been affected over the last 40 years. Next, I relate participants’ opinions about trade with the US. Finally, I discuss how participants think UA in particular, and Cuban society in general will be affected if trade continues to increase with the US, or if the embargo is eased or lifted.

Urban Agriculture (UA) and its Benefits

After inquiring about an individual’s background or experience with UA at the beginning of an interview, I asked them to list or describe what they perceive to be the benefits of UA. Interestingly, rather than ponder the question momentarily then begin to answer, as was often the case with questions later in the interview guide, interviewees typically listed the benefits of UA quickly and concisely. It was as if the benefits were so clear, distinct, and obvious that they did not have to think much to explain them. Additionally, and unlike other questions, interviewees provided only short examples of their answers, if they provided any example at all.

Participants often provided a lengthy list of benefits, many of which echo those articulated in the literature. Campanioni et al. (2001) list organic production, rational use of local resources (in the form of space and labor), and direct marketing to consumers as...
the guiding principles behind UA. Of the 13 distinct benefits of UA, four benefits were most frequently mentioned, three of which are nearly identical to the principles discussed in Campanioni: close proximity to workers and consumers, organic production, employment generation, and the positive manner in which UA serves to change Cuban culture.

Within Arms Reach

Thirteen of the 16 interviewees mentioned the location of the gardens as one of the benefits of UA. The close proximity had multiple advantages. First, the food grown in the cities is easy for citizens to access, as it is conveniently sold near their homes and places of work, a benefit addressed in Campanioni et al. (2001). As UA sites exist throughout the city, most Habaneros need not travel more than a few blocks before they pass at least one farm or garden where they can purchase fresh food. Leonardo Chirino, Director, Department of International Relations, National Association of Small Farmers, explained that products “arrive directly to the population” and that “consumers can access the products more easily” than they otherwise would in the absence of UA. Not only does direct marketing preclude consumers from needing to travel long distances to buy fresh produce, but also producers have to spend little if any money on transporting their production.

When consumers purchase directly from farms and gardens, producers spend almost no money on transportation. Prior to the development of UA, rural producers had to find ways to transport their food from remote farms to more densely populated urban centers, requiring access to reliable vehicles and money to purchase petroleum. With the Special Period came a dramatic reduction in oil imports, and a substantial decrease in
parts and supplies necessary to maintain or repair farm trucks. Thus, by eliminating the need to purchase fuel or spare parts, urban farmers face substantially lower costs overall, and waste no time or labor in transportation. Juan Carlos Sotolongo, head administrator and cooperative member of La Vereda explained the duel benefits of UA in that it: “allows consumers to have fresh vegetables close at hand without [producers facing] high expenditures on transportation.” Reynaldo Jimenez, Professor of Rural Sociology, University of Havana, echoed these ideas, stating that: “the products go directly from the ground to the kitchen, that is, by being [produced] in the same city, they don’t need manipulation or transportation.” While close proximity to urban points of sale benefits consumers, urban farmers benefit in other ways as well.

As UA workers live in the cities themselves, they often have to travel only short distances to get to their place of work, necessitating little in the way of transportation resource use. In some instances, the farmers live at the farm or garden, making the commute to work nothing more than walking out their front door. Carlos and America, the couple that manage Las Americas live on-site at their farm. Their two sons, who help prepare the raised beds and tend the animals, live only blocks away. No vehicles, or even bicycles are required for the family to get to and from their place of work. Abel Hernandez, a La Vereda cooperative member shared similar sentiments. Originally of campesino, or rural origins, and trained to be a communication technician, Abel moved to Havana in search of office work. Rather than relying on slow and sometimes unreliable public transportation to commute into the more densely populated urban core each day, Abel found work four blocks away from home at La Vereda. Thus, UA benefits consumers by providing food close to their homes and places of work, and producers
benefit by saving on transportation costs, both for their products and themselves. Second to the benefits associated with distance, interviewees frequently mentioned the organic nature of UA.

In Harmony with Human and Ecological Health

One of the most well publicized aspects of UA in Cuba is that food is produced organically (Campanioni et al, 2001; Chaplowe, 1998; Rosset, 2000; Warwick, 1999). Resulting from a marked decrease in access to petro-chemical off-farm inputs (i.e. fertilizers and pesticides) during the Special Period, Cuban farmers began to develop organic modes of production. Biofertilizers in the form of compost, manure, and worm castings replaced imported fertilizer; and biopesticides and integrated pest management minimized the need for synthetic pest control. Fourteen of the 16 people I interviewed working in UA identified different benefits of the organic practices, including minimizing negative health effects to human populations and improving the ecological health of soil and waterways. Juan Hernandez, La Vereda cooperative member in charge of the agricultural group, stated, “the crops are produced organically. This [method of farming] doesn’t create a risk for the population like the ones created by chemical products. Our methods are truly ecological.” Though Cuban farmers make every attempt to employ 100% organic methods, they are very upfront about the fact that in some instances they are unable to employ entirely organic production practices.

While visiting La Vereda, I observed two workers preparing flats to grow tomato starts in the greenhouse. After mixing potting soil and filling a speedling tray with the mixture, a woman placed tomato seeds into each square cell. Prior to planting the seed, however, the woman dipped it into a bright pink powder (See Figure 2). Due to the high
humidity in Cuba, fungus grows with great facility, and thus threatens directly seeded plants. To minimize the negative effects of fungi, La Vereda workers coat the seed in a chemical that reduces the risk of fungal rot. The amount of chemical needed to coat a tomato seed is miniscule, and according to the workers, this was the only non-organic input involved in tomato production. Lucy Martin elaborated on the efforts at growing as organically as possible. She stated, “in some cases you might see in a particular instance some agrichemical application, but in the majority of cases, it’s almost organic agriculture. I would say agroecology because [urban farming] takes place with very low levels of chemical inputs.” The agroecological practices employed by the Cubans help create a more sustainable, less-input dependant agriculture.

**Figure 2. Non-organic seed planting**

The organic practices used in UA in Cuba help minimize dependence on foreign
inputs and technology. Ricardo Delgado, ACTAF President, explained that Cuba is unable to continue with industrial modes of production. Cuba cannot produce sufficient inputs necessary to maintain an industrial agricultural system. Through the development of alternative, organic techniques Cuba not only improves the health of its populace and its soil, but also creates a stronger level of national independence by reducing reliance on imports. Octavio Chavez, Agronomic Engineer and La Vereda cooperative member noted that the organic model in use in Cuban UA helped achieve a higher level of independence by requiring less off-farm inputs. As they require no additional additives or synthetic components, most of the biofertilizers are produced on site. After organic production, research participants most frequently mentioned employment generation.

Live in the City? Why Not Work There, Too?

The horizontal hierarchy of La Vereda attempts to ensure that all workers are compensated in an equitable manner. Each worker is guaranteed a minimum salary, and they receive additional payment based on their experience and the monthly earnings of their work group. Production is sold either at the point of sale located on the property, or within the UBPC itself. A specialist, someone who has prior training and experience, receives 3% of the UBPC’s earnings; whereas a worker, someone with less background in agriculture, is paid 2%. A trial worker receives 1%. In addition, each work group divides the profits from the monthly sale of production in their area, and workers can earn an extra 16-35%. Overall, 50% of the UBPC’s earnings are spent on paying salaries. Forty-five percent is reinvested in the bank, 2.5% is paid on a weekly basis to the state in the form of a tax for the point of sale on the property. The remaining 2.5% is paid into a social security fund for the workers. The head administrator, Juan Carlos, stated that the
UBPC experienced 110% growth over the last year.

Twelve of the 16 interviewees noted that UA has created a reliable source of employment for city dwellers. This observation exemplifies the ideas espoused in Campanioni et al. (2001) about rational use of local resources. At least 300,000 jobs have been created in Cuba since 1991 in UA. As factories closed during the Special Period due to lack of necessary inputs and electrical power, thousands of workers were left unemployed. However, with the development and growth of UA in Havana, many workers found long-term employment, often close to home. Hernandez explained that: "[UA] gives the possibility of employment to a lot of people in the city that have no work." Beyond overall job creation, UA has supplied underutilized sectors of the population with meaningful work. Though men make up the majority of workers, UA has nevertheless created employment for women. In addition, both young people, and retirees have been given opportunities to be productive members of Cuba’s economy. Reynaldo Jimenez elaborates on this idea, noting "[UA] is a source of employment for women, young people, and people who are already retired." I witnessed two examples of retired individuals benefiting from UA.

During an informal visit to a small garden, I spoke with a man who used to work as a mechanic in Havana. After retiring, friends alerted him to a small piece of vacant land in the city. After getting permission to use the space, the state also provided seeds. He dug a well, set-up drip irrigation systems, and currently grows oregano, tomato, green onions, boniato (a potato-like tuber), and other crops. In addition to providing him with a small income and a source of fresh vegetables and spices, UA has given the man satisfying work that helps him stay active and be productive. Carlos Campolongo, head
Trained in the field of industrial construction, Carlos retired from his previous work in 1996. The physical demands of his professional job, including working with heavy building materials high off the ground, became too much for a man of his age to handle. When he retired, the state paid him a monthly pension of 216 Cuban pesos (US $8.31). Unable to subsist on this small income alone, Carlos looked to UA as a means of work and income. Though still physically demanding – he works 14-hour days six days a week – he can manage UA responsibilities much more easily than those required of his previous work. In addition to having something meaningful to do with his time, he now earns approximately 1800 Cuban pesos per month (US $69.23), more than eight times the value of his pension. While he became involved in UA in order to continue working, he claims his favorite part of UA is that it allows he and his family to eat well.

After showing me his stocked refrigerator, plus an enormous freezer packed with food, Carlos and his wife served me an enormous meal of salad, soup, rice, chicken, coffee, and dessert. When we finished eating, Carlos pushed his chair back from the table patted his round belly, smiled, and explained that eating was the main benefit from his work. He said, “I don’t care about nice clothes or material things. I [work in UA] to eat well and to fill my stomach.” Stuffed with fresh vegetables, hot soup, and crispy fried chicken, and buzzing from strong Cuban coffee, I did not have a hard time understanding his motivation. While we ate, Carlos focused most of his attention on soup and chicken, but he did eat two plates full of salad. In this respect, he demonstrated another oft-mentioned benefit of UA in Cuba.
Beyond the reasons explained above, UA has an effect on cultural development in Cuba. The effects described below were not widely articulated in the literature, perhaps because they are harder to quantify, or because they require sufficient time to take root and flourish. Nevertheless, in my opinion, the cultural benefits of UA are of paramount importance. Until the benefits of UA are ingrained in the people and identified as part of their culture, preserving UA systems will be challenging.

First, UA helps teach the populace the importance of a balanced diet that includes sufficient fresh vegetables and fruits. Reynaldo Jimenez explained this idea, stating:

"Each day, UA has contributed to changing eating habits in the population. This means that before the beginning of the production of vegetables and leafy greens, the population didn’t eat certain things, like spinach. But after education and preparation efforts, the population has started to purchase and eat spinach, to give you one example."

In a population accustomed to consumption of staples like pork, chicken, rice, or potatoes, the addition of fresh vegetables and leafy greens helps create a more balanced diet. As a result, people's health improves as they diversify their dietary habits. In addition to the immediate benefits of an improvement in caloric intake of vitamins and minerals, UA creates long-term effects as well.

Younger generations are taught the importance of eating fresh foods as part of their school curriculum. In addition to creating small gardens in schools from which students harvest small quantities of food, the yields of UA are employed in the classroom. Jimenez continued, observing that:

"In the area of primary education, they teach children the different vegetables and the different colors of the"
vegetables so that they learn to consume them. It's easier to teach kids than to teach their parents, and many parents are only accustomed to eating a lot of tomatoes and lettuce, but not carrots, beets, and spinach. [UA] is a big help to the population in the different provinces of the country.

Martin echoed this idea, and noted the way that UA is shaping younger generations attitudes about vegetable consumption:

I think that the youth that is growing up now, the kids, the infants, if you were able to ask this same question to people of my generation, you would see a change in mentality in terms of vegetable consumption.

Thus, across an entire cohort of the population, UA helps inform citizens about why they should get in the habit of purchasing, preparing, and eating the foods grown in urban farms and gardens. UA’s influence not only creates general effects on younger generations, but also affects people on an individual basis. Martin elaborated how she and her family benefit from an increase in availability of vegetables:

My dietary habits in terms of eating vegetables have increased to a certain extent due to UA .... In [my family] and my case, we eat more vegetables since we have had UA because sometimes when we go to get our rations from the state bodega the vegetables arrive poorly treated. But the fresh vegetables produced in UA, this freshness motivates you, and you don’t have to prepare anything. You simply buy it and eat it!

Marcos Nieto, investigator for the Ministry of Agriculture told me that with the increased yields in urban farms, on average enough vegetables are produced to ensure that each citizen could receive 300 grams of vegetables per day. He admitted that not every person would necessarily spend their precious Cuban pesos on vegetables and salad fixings, but that at least the country had the capacity to provide for those who so desire.

In addition to providing sufficient vegetables to fulfill basic daily allowances, the
education, training, and extension programs affiliated with UA help teach people not only how to plant and harvest food, but how to preserve it as well. Thus, by allowing participation of all ages across the populace, through its incorporation in school curricula, and through connections beyond strict field work, Cuban culture is slowly being transformed to value UA and the dietary benefits that it brings. While the reasons described above most succinctly reflect the research participants’ thoughts about cultural change, UA also creates new, valuable social networks in Cuban culture.

Weaving Webs and Creating Social Links

Among the lengthy list of benefits created by UA, the urban farming movement changes Cuban culture by catalyzing the development of new relationships in the community. Lucy Martin, psychologist and sociologist, spends her professional time investigating the human side of UA. During the beginning of our discussion she began describing UA in very intangible ways. Rather than focusing on employment generation, or the high salaries paid to urban farmers, she stated that she considered UA to be among the things that makes the world a better place. Specifically, she elaborated on the ways that UA fosters new interactions between people. Speaking as if I were an urban farmer, she said:

You contribute an individual benefit, but a collective, a community one as well....the webs interwoven in the communities, a new form of relationship or connection, between the people, the local actors, the institutions. So, [UA] is like an experiment, something new, beautiful, novel, but productive, healthy. How wonderful for everyone, no? [UA] is good for the country, good for all the levels you look at.

She continued by describing one of the earliest actions taken in UA. Due to the period of crisis and the economic necessity during the 1990’s, members of the populace began
cultivating rice on a small scale out of sheer necessity. Once the population began this practice, the effects reached beyond individual farmers. Martin explained how this popular action eventually worked its way into additional levels of society:

[UA] helped to install spaces in the operation of society at the political levels and in the government. Now there are national programs....they have realized the potential of this participatory action, and they are looking for synergy and bonds to strengthen the cultivation of rice in UA with these participatory methods. It’s like weaving webs; it’s multiplying and strengthening.

Thus, the Cuban culture has changed not only at the scale of the family and the individual as a result of UA, but across different levels of society as well.

The benefits of UA are many and varied. Apart from the four ideas described above (close proximity to workers and consumers, organic production, employment generation, and the positive manner in which UA serves to change Cuban culture), participants noted additional benefits of UA, including: the high salary afforded to workers in UA; the manner in which UA beautifies cities and improves ecological health; how UA helps individuals, families, and the entire country be more self-sufficient; and the nutritional value resulting from the freshness of the food. My research echoes the three guiding principles of UA listed in the literature – organic production, rational use of resources, and direct marketing. This work also extends past scholarship particularly with regards to the social benefits of UA associated with employment and creation of social networks and values. By identifying additional benefits created by urban farms and gardens, my research offers further support for preserving and expanding UA in Cuba, and in other cities in the world as well.
Effects of the United States Trade Embargo: “In Every Way!”

The effects of the embargo are widely described in the literature (Castro’s, 2001; Garfield and Santana, 1997; Gunnell, 2001; Herrera, 2004; Universal Press Syndicate, 2003; Whitney, 2001). Among other things, authors discuss overall economic consequences, a lack of access to medical equipment, and the prevention of cultural exchange resulting from US policy. My findings support most of the arguments made in the literature, offering additional evidence of the pernicious effects of the embargo on Cuba.

When asked how the US trade embargo affected Cuba, most respondents initially said: “In every way!” When pressed for more details, some people would speak in very personal terms about how they were affected as individuals, while others would speak more generally, discussing the country as a whole. Conveying the breadth of opinion about the negative effects of the embargo would require volumes. As my intent in this project is less about the past consequences of the embargo and more about what people think about new trade relations with the US, I only address the topics that received the most attention, including limited access to imports, complicated trade relations, and increase in prices paid for imports. On a more positive note, I discuss how participants explain that the embargo has fostered creativity and resourcefulness, an aspect not identified in the literature.

In economic terms, research participants spoke about the way the embargo creates a lack of imports, how it increases the price of imported goods, and the way it complicates trade. With regard to social or cultural effects, interviewees most commonly noted that the embargo makes it difficult to create a cultural exchange between Cuban
and US citizens and that the US suffers from its own policy. The embargo has created these effects, and participants discussed them at different points throughout the interview. However, most of the comments that interviewees made about social and cultural effects were noted while explaining benefits that could result if the US continues to allow exceptions to the embargo. Thus, these effects were more implied that stated outright, and will be expanded in later sections. (See ‘Perceptions’ below).

Though the vast majority of talk about the embargo was of critical nature, research participants did note one positive aspect. They were quick to point out that the embargo has necessitated creativity and resourcefulness in Cuba, and is one of the factors that led to the development of UA. Generally speaking, however, such comments came after a lengthy list of the things Cuba cannot access due to the US trade embargo.

Limited Acquisition of Resources

Fourteen of the 16 interviewees mentioned that the embargo creates a severe lack of imports. Hernandez conveys the breadth of the effect of a lack of imports, stating, “As much as [a lack of imports] affects the economy in general, it affects individual citizens, because there are things that don’t arrive here, resources that don’t arrive, and this creates a lot of difficulty.” Jimenez reiterated the pervasive nature of the embargo, arguing, “In our country, all the production and the population in general is affected by the embargo.” Of the many things Cubans listed among goods that cannot be imported, medicine was mentioned frequently, but according to Jimenez: “[Cubans] have infinite examples.” Martin said nearly the same thing, asserting: “We have millions of limitations in terms of acquiring resources, from medicine, to food, to materials necessary for construction, things we use on a daily basis. This is the fundamental effect of the embargo.” Seven of
the 16 participants cited an inability to purchase medical technology or pharmaceutical products from the US as one of the negative effects of the embargo. Alarcon cut to the chase when I asked for an example of how the country is affected by US foreign policy:

    The embargo harms us very much and the country as well for many reasons. Medicine that we don’t have here, that cannot be brought from [the US] that exists [in the US]. There are times when medicine is needed for some sickness, and we don’t have it.

Chirino reiterated this idea, using the example of a cousin of his who contracted polio. The vaccine to prevent polio had not been developed at the time in Cuba. His cousin suffered dearly due to the fact that the embargo prevented import of the vaccine. When relating the story, he was visibly upset that the US government refused to allow the importation of medicine for “a sickness that could have been prevented” (Chirino, 2004). While lack of medical-related commodities was the most frequently cited negative effect of the embargo, participants listed other goods as well that they could not access.

    Like medicine, seven of the 16 interviewees said that the embargo prevents importation of parts, supplies, and other inputs necessary in different sectors of the Cuban economy. Other interviewees spoke of the lack of inputs as it relates to agriculture. When I asked Alarcon if she thought there was a relationship between the embargo and urban agriculture, she responded:

    Of course! In terms of irrigation systems that must be used in agriculture, to be able to water, to be able to make a well, to do all the things that are needed for agriculture, we are affected because we don’t have [these things]. The country doesn’t have them because we cannot import them from [the US].

Other participants listed a lack of materials necessary to construct shade and greenhouses. During an informal visit to a UBPC outside of Havana, I witnessed this phenomenon first
I visited the six-hectare grounds of El Vivero with Miguel Salcines, head administrator, and Josh Slotnick, US farmer and director of the Program in Ecology, Agriculture, and Society at the University of Montana. Having just crossed the island over the previous two weeks and after witnessing many farms and gardens, both rural and urban, Josh wanted to know why he only had seen one variety of lettuce. In his opinion, the ubiquitous Black Seeded Simpson (BSS) variety is the worst tasting and one of the least resilient lettuce varieties available. Eager to take advantage of my translation skills, Josh inquired about the lettuce. Miguel responded that they grow BSS because it is the only seed variety they can access. He quickly made the connection between the scarcity of seeds and the US trade embargo. Like irrigation inputs, spare parts, or farm vehicles, the US embargo makes it extremely difficult for Cuban farmers to access seed varieties necessary to diversify their production. In addition to the lack of certain inputs, the embargo has additional effects on imports as well.

High Prices for non-US Imports

One consequence created by the lack of direct importation from the US is the higher prices Cubans must pay to import non-US goods. Though it could be their closest major trading partner, and despite it being the largest economy in the world, Cuba has very little ability to take advantage of their proximity to the US. Sotolongo explained that: “[The embargo] makes things related to agriculture more expensive.” He told me that even if a non-US affiliated foreign company produces an input, it must often be transported great distances before arriving in Cuba. He went on to say:

Another product is invented [outside the US], and now we can buy it, but it comes from farther away, now it’s from
China, and this makes it more expensive. We are obligated to buy from Spain things we could buy more cheaply from the US.

Thus, they must either purchase goods inferior to ones produced in the US, or they must spend additional money in transportation from more remote locations like Brazil, Europe, or Asia. Eight of the 16 interviewees explained that the embargo results in higher prices for certain imports.

Complicating Trade with other Nations

In addition, the embargo complicates Cuba’s trade practices. The restrictions imposed by the Helms-Burton Act of 1996 prevent Cuba from trading with any subsidiary of a US company, even if it is located in a different country. Sotolongo summarized these effects, stating:

Look, the embargo doesn’t only effect direct relations with the US; it also affects Cuba’s relations with many other parts of the world that have North American branches or subsidiaries. [The embargo] makes any importation difficult, and the repercussions are felt with all the products we need, sometimes for agriculture, for medicine, wherever.

Thus, rather than being able to trade freely with the US, Cuba must look elsewhere for products, often necessitating more time and resources than would otherwise be required in the absence of the embargo. Nazco explained how international commercial trade in Cuba would be easier if the embargo did not exist. She said:

There are many things from a commercial point of view that we are developing with other places at this time due to the embargo. Actually, to establish [trade] directly with the US or with other countries in the region would be much easier.

The effects of the difficulties created by the embargo transcend all aspects of the Cuban
Due to difficulties in obtaining raw materials, Cuba’s ability to develop a more robust manufacturing sector is limited by the embargo. And the goods they are able to produce, be they consumer durables, or agricultural commodities cannot be sold to the closest potential trading partner. Thus, the embargo limits both the import and export of goods and services, which in turn weakens overall economic development. Martin summarized some effects of the Helms-Burton Act, noting:

[The embargo] has restricted the possibility that we have to develop... it would be like repeating the same thing we all know: The embargo limits the possibility to trade. First, when the US is the closest country, the aspect about distance is elementary. We have to go to other countries, sometimes using much more fuel. Then, the government of the US, or the US political situation reatins or boycotts the relations we establish, sanctions on second, and third countries for trading with us. And so we have millions of limitations regarding the acquisition of resources, from medical supplies, to food, to construction materials, things we use on a daily basis, and this is the most basic affect of the embargo that I have received.

Thus, in addition to increasing the price of imports, the embargo poses problems for Cuba’s development by limiting availability to resources, both from the US and other countries in the region and the world. Though economic impacts were most frequently cited regarding the embargo, participants also spoke at length about specific benefits as well.

Creativity and the Development of UA

*You have to fall in order to lift yourself up.* - Ceila de la Peña, ACTAF Secretary of Training and Extension, Subsidiary Farm

Over half of the interviewees said that the embargo has forced Cubans to be creative. This creativity takes many forms, especially use, management, and acquisition of resources. The combination of the collapse of the Soviet Union and the Helms-Burton
and Torricelli Acts created a severe crisis throughout the country. These circumstances required that Cubans develop practices in many areas of life, including agriculture, which helped them survive without resources they previously had access to. Martin explained part of this process, stating:

A situation like the embargo creates crisis, and when you can’t access this, this, or this, it requires that you develop your capabilities as an individual or country, or as a society to look for alternatives. If you have easy access to [resources] you don’t put forth effort to look for others, you don’t develop your creativity, your initiative, your potential.

Thus, given the difficulties accessing resources (as explained above), the embargo created a situation in which Cubans developed new alternatives to confront their problems.

According to one participant, the inventiveness that resulted from the embargo came about due to the nature of the Cuban people, and strengthened the “Cuban process.” By the Cuban process, I think Martinez referred to the history of cultural development regarding the importance of communal survival in the face of challenging or seemingly insurmountable obstacles. Chirino elaborated on the positive effects of the embargo with regard to the “Cuban process”:

The embargo has required Cubans to be more intelligent, more creative, more refined in our principles because it’s a question of stock. You have to look at the idiosyncrasy of each populace, and Cuba’s idiosyncrasy. You can’t enslave us, you can’t dishonor us, and you can’t belittle us due to our idiosyncrasy. We are naturally rebellious, and so the embargo has helped this.

In addition to the more abstract ways that the embargo has necessitated positive change, it is also cited as part of the reason for the development of UA.
Given the inability to maintain previous conventional agricultural practices, part of the creativity resulting from the embargo manifested itself in the creation of UA. Given little other choice, Cubans were forced to find a way to produce food with the resources at their disposal. Eduardo Martinez, ACTAF secretary of communications stated, “You die of hunger or you develop an idea.” One such idea was the utilization of vacant urban spaces to grow food. Jimenez explained the process leading up to the development of UA, stating:

Well, when the Soviet Union collapsed, the US embargo was worsened. All of this brought as a consequence that the Cuban people had to resort to a superhuman effort to look for resources and inventiveness in order to be able to produce. Pieces of ground were empty. We saw a necessity to look for resources and a large human effort to be able to grow food outside the cities, and in the cities we started UA.

UA allows urban farmers to free themselves from dependence on machinery, as small urban farms are not suited for heavy machinery. In addition, due to the lack of access to petro-chemical inputs, organic methods of fertilization and pest control became the preferred, and in most cases, only alternative. Hernandez explained that the development of UA enabled Cuba to rebound from the crisis of the Special Period:

I think UA is actually an escape from the embargo because [the embargo] makes it hard to get certain chemicals, machinery and other implements that don’t work in small areas. It’s done more easily with alternative agriculture. I think [UA] is a way out.

Had the embargo not been worsened during the Special Period, it is possible that Cuba would have been able to access sufficient resources to maintain previous conventional agricultural practices. When I asked participants if they thought UA would be as prevalent today if the embargo had been lifted when the Soviet Union collapsed, I
received a range of answers.

At least half of the participants thought an earlier collapse of the embargo would have helped to strengthen and catalyze the practice of UA, whereas others thought the opposite, or were unsure about the effects. According to Abel Rodriguez's, *La Vereda* cooperative member, if the embargo were not in place after the collapse of the Soviet bloc, there would have been less necessity to develop alternative practices. Thus, he thinks that if the embargo had ended at that time, there would be less UA today. Juan Hernandez, a fellow cooperative member agreed, stating:

If [the embargo had ended with the collapse of the Soviet Union] the extensive agriculture practiced in Cuba would not have been affected. There would not have been a lack of resources, and Cuba would have continued with the same form of production. There would not have been the need to look for alternatives. [In Cuba] there is sufficient land to grow what was produced, but it required [synthetic] types of resources.

While these two individuals think UA would not exist currently in the way that it does, others disagree.

Six participants think there would be as much UA, if not more, had the US embargo ended with the collapse of the Soviet Union. For example, America Alarcon, co-manager of *Las Americas* thinks trade with the US would have allowed Cubans to purchase the inputs necessary for UA. She believes that the embargo prevented Cuban development in the way that it does today, arguing:

[If the embargo had ended with the collapse of the Soviet Union] ideally there would have been more [UA] because there would have been relations, there would have been exchange of the type that we need, and that we needed even more at that time. As long as the embargo is tightened, we can't have more development.
Though several other research participants shared America’s certainty, not everyone spoke as definitively about this topic.

A few interviewees were unsure about whether or not UA would have been developed as extensively had the embargo ended. Juan Carlos Sotolongo, head administrator and cooperative member of *La Vereda* articulated this uncertainty. He explained that the development of UA began prior to the Special Period, noting that in the city of Cienfuegos, around 20 hectares of land were dedicated to UA prior to the collapse of the Soviet Union. In his opinion, UA was “a movement already on its way” as the need previously existed. A few other participants noted that UA existed in a small ways prior to the Special Period, but Sotolongo’s opinion contradicts the prevailing argument that the primary factor influencing the creation of UA was the collapse of the Soviet Union. While he thinks the end of the embargo would have facilitated the development of UA, he noted that “[UA] might not have been as organic as it is today, but more would have been planted.” While Sotolongo thinks UA would have existed but perhaps taken a different form, Chirino chose not to pick one side or the other. He recognized the difficulty in answering this question. Instead of speaking in absolute terms, as did some of his colleagues, he returned to the idea that the developments necessitated by the embargo have been of benefit to Cuba. He stated:

> To answer this question ‘yes’ or ‘no,’ I wouldn’t go there. What I do believe is that the situation created by the ex-socialist countries required that we undertake different reform. It helped us be more efficient, and apply measures more in accordance with our conditions. By my criteria, this is one of the positive effects of the embargo.

Chirino did note that the needs and limitations of Cuba at the time would have been less had the embargo ended with the collapse of the Soviet Union. Whether or not the
diminishment of these needs would have resulted in more or less UA, he would not say.

The effects of the US trade embargo on Cuba are diverse and substantial. Much has already been written about this subject (Castro's, 2001; Garfield and Santana, 1997; Gunnell, 2001; Herrera, 2004; Universal Press Syndicate, 2003; Whitney, 2001). Based on my limited discussion of the embargo here, it is clear that from the perspective of research participants the main economic effects of the embargo are that it creates a lack of a variety of imports, including medicine and agricultural inputs. In addition, it makes available goods more expensive, and complicates trade relations with the rest of the world. In the realm of social and cultural impacts, the embargo has many effects (to be discussed below). However, in spite of all the criticisms about the embargo, many participants (but not all) credited the embargo as being a source of Cuban creativity and resourcefulness, and perhaps part of the reason UA exists to such a great extent today. This aspect has received little attention in the literature and, in my opinion, is of tremendous importance when considering the future of UA. If UA has flourished, at least in part, from the US embargo, one could conclude that easing the embargo could have a reverse effect.

Trade with the United States: "A Hope of a New Path"

In going to Cuba to conduct research, my main interest was to learn about people's views on recent trade with the United States and how it might affect the future of UA. Discussion of increased trade with the US elicited a wide range of responses. Participants answered in ways that addressed past effects of the embargo, current realities created by the Bush Administration, and hopes for the future. All answers regarding
what will come in the upcoming years were necessarily predictions and speculations. No one knows for sure exactly how increased trade with the US will affect Cuba. Yet, there was still complete agreement in one regard. Every person I asked, whether in a recorded formal interview, a casual informal conversation, during a short taxi ride, or over a meal, answered the central research question in complete uniformity.

The research participants think that recent trade with the United States is a positive benefit to their country and their economy. In other words, they are glad that the United States has started to trade with Cuba. Like most questions I asked, explanations varied about why they thought this to be the case, as did criticisms about certain aspects of the trade to date. Participants’ first response was that they thought the recent sale of US agricultural commodities was something positive. Chirino stated:

> You commented to me when we first met that for the first time, the government of the United States, and some North American businesses have consented to sell food [to Cuba]. Well, actually I consider it to be a positive gesture.

Chirino’s response was similar to that of many of the interviewees. Sotolongo told me “This kind of trade always suits us, always interests us, always benefits us from a general point of view.” Martin stated, “It appears very good to me. [Trade with the US] is really positive.” There are different reasons that help explain why the research participants view trade with the US in such a positive light. In general, economic reasons were among the first reasons listed that explain why Cubans are in support of increased trade with the US. Nazco noted this idea, and said:

> Actually, for us it is very favorable. We, as Cubans, are truly grateful that there exist people in the United States....that are interested in establishing [commercial] relationships with us. This is like a light, like a hope of a new path down which both countries are embarking. It’s
very good for Cuba from an economic point of view.

Though not always the case, when giving an example of an economic benefit, respondents often made reference to agriculture. For instance, despite its noteworthy agricultural reform in the last decade, Cuba still does not have a surplus of food produced in its country.

US imports help fill the void unsatisfied by Cuban production. In addition to acquiring finished agricultural products, trade with the US allows Cuba to purchase raw commodities that can be used as inputs in other agricultural activities. Due in part to the collapse of the Soviet Bloc and in part to the US embargo, Cuba struggled to maintain its livestock production. Trade with the US allows Cuba to purchase cattle. Nazco expanded on this idea, stating:

We can purchase inputs we need to develop, for example, livestock. We have had difficulty with the development of livestock recently due to questions of inputs that we cannot acquire in the international market, or if we can acquire them, we must get them at very high cost.

In addition, in hopes of expanding cattle production, imports of corn and other grains provide Cuban ranchers with feed necessary to support larger herds. Chirino explained, “The idea [of trading with the US] is good. Recently I know [the Cuban government] bought cows to improve livestock, improve livestock in Cuba and the production of milk.” Thus, by trading with the United States, the Cuban agricultural system is strengthened by securing access to inputs necessary to improve their agricultural development. Though economic factors received the most attention, research participants cited other reasons why they support trade with the United States. Considering the tenuous history between the two countries, the initial opening of commercial relations in
over 40 years has implications in other aspects of life, including society and culture.

Increased trade with the US is viewed as a symbol of movement toward more normalized relations between the two countries. As explained above, one of the most widely cited effects of the embargo is how it makes it difficult, if not impossible, for the US and Cuba to develop normal relations between the citizenry of the two countries. In turn, trade in agricultural commodities in the last few years suggests to the Cubans I spoke with that the relationship between the two countries is improving. Martin, in discussing trade with the US, noted:

I think that in principle this is an incredibly wonderful opportunity. They speak of an extension, of extensions between two countries, in favor of a dialogue, of a peaceful coexistence between two neighbors, two neighbor countries with traditions, familiar cultures, etc. It appears to me to be a positive opening at every moment.

In a similar vain, Nazco reiterated how increased trade might be the harbinger of better relations between the two countries in general. In referring to recent trade with the US, she said:

It’s a light, a hope, not only of a political or economic change between both countries, but also a change of thought from a spiritual point of view, as much for the Cuban people as for the American people, you know?....We are all human beings and we have the right to what Mother Earth has given us. If everything she has given us is shared between her inhabitants, life would be really much more beautiful.

In light of a common value placed on social justice I observed in many of the comments made by interviewees, I was not surprised to hear Nazco speak in such egalitarian terms. Despite her hopes, and despite the overwhelming positive support of the recent trade with the US, research participants were nevertheless very critical of certain aspects of the trade
While the Cuban government has allowed US agricultural producers to sell their products to Cuba, no Cuban vendor has been able to sell any commodities of Cuban origin in the US. Cuba is world-renowned for its rum and tobacco. These goods, plus medical vaccinations or citrus fruit, could be a source of income if Cubans were allowed to sell to the US, according to Chavez. Although Chirino thinks trade with the US is a positive gesture, he also stated “nevertheless, it isn’t fair in the way [trade] was done. For example, the sale of food to Cuba had its restrictions, its regulations, and its premise.”

In addition to the unilateral nature of the trade to date, Chirino referred to the fact that Cuba must pay in cash prior to receiving any commodities. The lack of credit or financing opportunities creates difficulties in other parts of Cuba’s economy and society. Rather than spending money on health care, education, or other social services, financial resources must be liquidated in order to make cash available. Economics professor Nova explained this process:

Buying agricultural commodities from the US has to be done in cash. The money first has to be deposited, and once it is, the delivery of the product is authorized. [Difficulties created by cash payments are] a reality. An economy that has limited hard currency has to make a huge effort in this sense to be able to purchase these products.

Thus, there is concern that some of the positive benefits accrued from trade with the US will be negatively offset by a decrease in resources necessary to maintain other important services. The challenges described above are not the only source of criticism however.

Only US boats can be used to transport the goods, and once they unload in Cuban ports, they are required to return to the US totally empty. In addition to preventing
Cubans from benefiting from the sale of any of their products, research participants think they must pay more for using US boats than if they were able to use Cuban ones. One participant noted that up to this point, Cuba has only been permitted to buy agricultural commodities, not medicine, or other raw materials that could be used in different industries. Typical of the Cubans with whom I spoke, Jimenez summarized some of the criticisms about the trade that had taken place thus far between the two countries, noting both the positive and the negative:

[Trade with the US] is good....but we would need in the agreement the ability to receive credit in order not to have to pay in cash. And to be able to use the same boats, selling our products, or even better, in my opinion, be able to utilize Cuban boats so they can go to the US, look for products, then bring them to Cuba. Using US boats makes things more expensive....We need to be able to sell [to the US] as well.

Less than half of the research participants criticized the unilateral nature of the trade thus far. Nevertheless, I think that had I asked people directly about the fact that Cuba has not been allowed to sell to the United States, I strongly suspect that most, if not all, of the interviewees would have responded like their colleagues quoted above.

Apart from the consistent support for the trade that has taken place to date, and in addition to the criticisms listed above, research participants made other comments. Interestingly, none of the respondents were outspoken about the fact that the majority of food being imported from the US was produced using conventional agricultural practices. One individual said that he does not think Cuba is in a position right now to be critical of the style of production. Though they are proud of their organic practices in UA, they admit that in the Cuban countryside, much of their farming still depends on petro-chemical inputs. Also noteworthy is that all but one person I interviewed was aware that
any trade had taken place. Along these lines, Sotolongo mentioned that the quantities of food purchased from the US were small, and that once they arrived at the market, it was impossible to tell what had come from the US, and what had originated in other countries. He told me that he “is not worried about this” as if to say he had plenty of other things deserving of his attention.

Participants in this study indicated unanimous support of the trade that has taken place thus far between the US and Cuba. Access to the US agricultural commodities market allows Cubans to satisfy demand unfulfilled by Cuban production. Furthermore, Cubans can purchase inputs necessary to expand parts of their agriculture, such as feed for livestock or improved livestock genetics. Additionally, participants viewed trade with the US as an indication that the two countries will continue to improve their relations, allowing better dialogue and exchange between the two countries. Though participants were supportive of the trade thus far, they were nevertheless critical about the way things are about from the US. Participants disliked the fact that all payments must be made in cash in advance, and criticized the fact that Cuba cannot export to the US, and thus cannot generate hard currency necessary to improve their development. But, above all, they view recent trade as a hope for a better future.

**Perceptions about Future Easing of the US Trade Embargo**

Despite the recent development of trade between the US and Cuba, little has been written about future effects on UA in Cuba of increased trade with the US, and one of the purposes of this study is to expand the literature in this area. Barclay (2003) does note that access to cheap inputs from the US might cause Cuban farmers to return to
conventional practices popular prior to the Special Period. By contrast, the leaders and participants in UA that I spoke with would largely disagree. While there is limited literature about UA and trade with the US, other authors (Gunnell, 2001; Universal Press Syndicate, 2003) have discussed the effects of the circulation of the dollar on Cuban culture and society. My findings tend to support their arguments, as explained below.

Toward the end of each interview, I asked participants how they thought UA would be affected if the US embargo continues to be eased or is eventually lifted. Most respondents strayed away from the effects on UA per se, and answered in more general terms addressing broader economic, social, and cultural effects. Those who did refer specifically to UA noted that easing the embargo would allow greater importation and availability of inputs necessary for production. None of the participants thought that lifting or easing the embargo would undermine UA. If the participants hopes prove correct, Barclay’s suggestion about the potential undermining of UA would be wrong. However, most participants spoke in somewhat general terms about the inputs they hope to access. If they only sought to purchase irrigation supplies or seeds, organic UA could be maintained or improved in the embargo were lifted. However, if trade with the US increases and urban farmers could again access petro-chemical inputs, they might be able to expand UA but without maintaining the current levels of organic production.

In more general terms, participants explained how they thought lifting the embargo would be of mutual commercial benefit to the US and Cuba. Additionally, they spoke about how relations between the Cuban and US people would improve as well. While many of the potential effects listed were positive in nature, participants did identify negative consequences as well, including a possible erosion of social values due to the
influence of capitalism. These fears are consistent with ideas established in the literature.

One additional negative consequence not identified in the literature but mentioned by participants was that Cuba might have an inability to create infrastructure necessary to handle increased tourism. In discussing the importation of US food, and possible effects of a continued easing of the embargo, participants described how they thought UA would be affected.

Nine of the 16 interviewees indicated that UA would be maintained if not strengthened in the event that the embargo continues to be eased. When asked how he thought UA would be affected in such a situation, Marcos Nieto, investigator for the Ministry of Agriculture, and perhaps the highest-ranking official with whom I spoke, began by making a simple drawing on a blank piece of paper. On one side he drew a square with the word hay or ‘there is’ inside, then another square to the right with the words no hay ‘there is not’ inside. He explained that the first square represents the food security situation before the Special Period, when food security was not an issue in Cuba, but when Cuba depended heavily on Soviet subsidies and conventional agriculture. The second square represented the Special Period and the economic crisis and ensuing food insecurity. He then drew a third square to the right of the previous two, again labeling it ‘hay,’ representing the current productive situation created in part due to UA. With simple arrows he connected the squares as if part of a flow chart, looping one arrow from the third square back to the first.

After reiterating the benefits of UA mentioned earlier in the interview, and despite the last arrow he drew, he firmly stated: “I am sure that we will not go backwards.” By backwards, he referred to the unsustainable production practices prior to the collapse of
the Soviet Union, and to the food insecure Special Period. In his opinion, and according to current Ministry of Agriculture policy, the Cuban government will do everything in its power to ensure that UA is maintained and strengthened in the future. Nieto was not the only person who thought along these lines. Other participants echoed Nieto's remarks, and argued that UA will continue to grow in the future, whether or not the trade embargo is eventually eased or lifted. Reynaldo Jimenez said essentially the same thing, stating, "Here, the politics are to continue with organic production as much as possible." Some respondents even thought lifting the embargo would be of potential benefit to UA.

At least six participants indicated that lifting or easing of the US trade embargo might serve to strengthen UA by increasing the availability of inputs necessary to develop urban farms and gardens. In regards to potential lifting or easing of the embargo, Hernandez, La Vereda cooperative member demonstrated his confidence in the future of UA, noting:

I think [easing the embargo] would possibly strengthen UA. Although we have UA, we always lack some machinery, transportation, and things like this that we could get from the US. From this we would be able to increase the possibilities of UA. I don't think UA will go backwards. In addition, it has been demonstrated to be sustainable. It has actual advantages that come from its immediacy.

Thus, some individuals believe increased trade with the US would allow Cuban farmers to improve their practices, potentially helping them expand their production. Up to this point, access to necessary inputs has been limited, and many UA practitioners have had to rely on donations from foreign non-governmental organizations. Farmer America Alarcon explained this dependence, noting how access to foreign inputs improves UA:

There are many things, like equipment, shade houses, and all the
things we can’t have in the country. We don’t have factories, nor do we have businesses. We have to wait. For example, the greenhouses that are here, the Germans have donated them. The German NGO has donated many things for agriculture, and this benefits us a lot.

She went on to explain that the embargo limits access to inputs, which creates the need to depend on foreign donations. However, if the US embargo were eased, urban farmers would ideally be able to purchase equivalent infrastructure materials more quickly and at a lower cost. As a result, the only limit to expanding UA would be access to available land. Given the extent of existing free space in the city and in light of the government’s interest in promoting UA, improved availability of inputs could help strengthen it.

Jimenez explained these ideas:

If the embargo were ended, it would be a great benefit for UA because the inputs that we need for production, for all the organoponicos, we could buy them from the North American market. That is, it’s a close market for the country, and production would increase, prices would drop, production would increase, prices would drop. It would be a direct benefit to the population.

If Jimenez’s scenario were to come to pass, the Cuban economy could potentially benefit from an expansion in UA, rather than return to less-sustainable practices in place leading up to the Special Period. In addition to improved food security, the effects of UA might take other forms as well.

Every participant expressed that they think the embargo should be lifted. Over half of the interviewees expressed their hope that if the US government changes its policy, Cuban producers will be able to export their agricultural commodities to the United States. Nazco addressed this idea and the work that comes with it:

And from an agricultural point of view, for us [lifting the embargo] is a challenge. It’s a challenge in that if the
embargo is broken we have to grow our productive capacities that satisfy the demand that might be created....some type of raw material we can give North American producers, perhaps coffee, sugar, things they want.

If more bilateral trade begins to take place, Cuba’s overall economy could benefit from additional revenues generated from the sale of food to the US. Economics professor Armando Nova was optimistic about the possibility of exporting Cuban food to the US. He said:

In some areas of production for example, vegetables, leafy greens, tubers and root crops, and the production of tropical fruits, it seems to me that the lifting of the embargo will stimulate production and will be exported to the North American market.

Though Cuba’s economy is a fraction of the size of the US’s, the tropical climate, and its abundant sun and precipitation create a comparative advantage in the production of specific crops, including the ones mentioned by Nova. As UA practices are nearly entirely organic, Cuba might be able to capitalize on increasing demand worldwide for foods grown without synthetic inputs. Jimenez explained how Cuba could benefit if they are able to market their organic harvests in the nearby US market. After providing historical context that helps frame his perspective, he stated:

With the Special Period came a rapid increase in organic production that I think will continue. It will continue in the future. Sure, it costs more in terms of labor because the results are in the short term, but in terms of health it’s beneficial, and the products that [UA] producers are going to sell in the market are more expensive, which means more earnings for the producer.

Two crops frequently mentioned that have seen expansion and development in organic production include oranges and sugar cane. However, none of the sites I visited have the
capacity to grow enough fruit or cane to satisfy export demand, thus making Jimenez's claim more applicable to rural agriculture. While the direct benefits to UA created by an eased or eliminated trade embargo might be limited to those described above, respondents did list additional ways in which the Cuban economy would benefit in more general terms.

Nine of the 16 interviewees thought that lifting or continuing to ease the US embargo would be of mutual commercial benefit to both countries. The people I interviewed think the US suffers as a result of the trade embargo. Martin commented on this idea, explaining that Cuba might suffer more direct and debilitating consequences:

I think it would of benefit to both countries, not only Cuba. Sometimes it appears that Cuba is losing for not having established relations with the US. I think the losses and the benefits are mutual. Perhaps in one way it's more in one country than the other, but it affects the [US] and it can liberate itself. I think it affects both countries.

Other interviewees expressed similar ideas, noting that as a result of the embargo, the US businesses lose access to a nearby market. Ceila de la Pena thought the benefits of more liberalized trade between the two countries would expand beyond the two countries, and that: “Lifting the embargo would be a benefit for both countries, as well as other countries within the region.” Other interviewees expressed more specific ideas about how a weakening of US policy would be of mutual commercial benefit.

If Cuba could export to the US in the future, its economy would improve, and thus the country as a whole would have more buying power. As a result, increased revenue from exports to the US would create available capital with which to purchase US goods and services. Economics professor Armando Nova spoke at length about this idea. He began by reinforcing ideas expressed above about general mutual benefits of a relaxed
embargo, stating:

I think the lifting of the embargo is an element that not only helps Cuba, but also is going to help US producers, US businesses, as does any type of normal relation established between two countries from a commercial point of view.

After noting that both countries would benefit, he then explained the nature of some of the benefits, addressing the idea of increased buying power in Cuba. Nova said

Until now, the supply of inputs, of raw materials for agriculture has not been authorized. And on the other hand, Cuba is not allowed to export to the US. This of course would help a greater commercial movement. If I not only buy, but also sell, it gives me that ability to purchase, to be able to buy from the US. This movement from the lifting of the embargo would achieve an important dynamism in the Cuban and US economies.

He then went on to specify other ways the US and Cuba might benefit from an improved trade relationship.

In addition to a general increase of the movement of goods and services, easing the embargo could allow US businesses to invest human or financial resources in Cuba, either in the agricultural sector or other areas of the economy. Nova noted how foreign investment could play a role:

If the embargo were lifted, perhaps the US producers and businesses would be interested in developing shared production in Cuba. I am referring to joint ventures: US producers invest capital, technology, they produce the product in Cuba, and they keep a portion of the earnings.

The above reasons were the most discussed positive economic benefits that interviewees predicted might result from lifting or easing the embargo. One aspect involved in economic improvement between the two economies would involve more interaction between citizens of both places.
Exchange between Cuba and US citizens was mentioned by ten of the 16 interviewees as an additional positive result of a liberalization of US foreign policy toward Cuba. Chavez, La Vereda cooperative member said, “Exchange always brings positive things” and in doing so, summarized the belief of many of his colleagues. When discussing potential interaction between Cuban and US citizens, interviewees addressed cultural interaction, as well as professional and technical exchanges. In a particularly fiery declaration, Nazco elaborated on the notion of professional interaction, and criticized the embargo by saying:

I declare myself against many things: against monopolization, and especially against the embargo. Every time I have the opportunity to do so, I will say it, not only so our country can finally enter into a free, fairer market, but also so our country can freely interact and share the positive results of our work. The embargo doesn’t only limit access to food, but it also prevents our scientists and investigators from participating in events in the US.

Chavez’s co-worker Hernandez echoed this sentiment and told me “I don’t think there could be any negative consequences [of the lifting of the embargo] because, definitely, what could increase are relations between the people, and relations between the people never can be bad.” While over half of the participants thought easing the embargo would benefit both countries by increasing exchange of some sort, not all interviewees shared Hernandez’s optimism.

Respondents mentioned a variety of negative consequences that might result if the embargo is continually eased or lifted, including an erosion of social values resulting in a loss of national identity due to the influence of capitalism or an inability to create adequate tourist infrastructure to accommodate large increases in tourism from the US. Not all interviewees identified potential negative consequences, and at least three
specifically said they could not think of anything negative that could result from a weakened US embargo. Nevertheless, despite the impossibility of predicting the future, participants said sufficient things to merit discussion about ways they think Cuba could be harmed if trade increases with the US.

Seven interviewees feared that a less restrictive US foreign policy toward Cuba would lead to the eventual erosion of social values currently in place in the country, a fear identified in the literature (Gunnell, 2001; Universal Press Syndicate, 2003). Juan Carlos Sotolongo noted that lifting the embargo “could be negative from a social point of view.” Prior to 1994 it was illegal to circulate or use US currency in Cuba. After that time, in order to bolster the economy through tourism, US currency was legalized though it did not replace Cuban pesos. Currently, there are three primary ways to obtain US dollars, worth 26 times that of the national currency. First, Cubans can work in the tourist economy in order to receive tips, or second, engage in transactions on the black market. Finally, some receive remittance from family members living abroad, an amount that totals more than all additional foreign investment (Castro, 2001: 120). This increased access to dollars has begun to foster a larger degree of economic inequality than previously experienced.

Prior to 1994, the majority of Cubans received a similar salary, plus social services like free education and health care, and the right to own a home, rights that created a largely equitable society. However, in addition to continuing to receive everything listed above, some people receive dollars while others do not. As a result, those who have access to dollars, regardless of the source, have increased buying power and can purchase consumer items previously unaffordable. Jimenez admitted: “It’s true
that we have lots of people that have moved to another [employment] sector, an emerging sector in order to look for a quicker source of cash.” Though he explained that a certain portion of the populace has changed occupation in search of US dollars, he also claims “the social part of the revolutionary project hasn’t been lost: helping people, and the solidarity, as much internally as externally.” Whether or not he is correct is hard to say, but other interviewees agree that people’s mentalities and values have begun to change, and might continue to do so.

Participants feared that consumer values will slowly erode the more socially and communally oriented ones propagated by the Cuban revolution. Leonardo Chirino commented about this, noting that increased access to US dollars “undoubtedly can influence a change in the mentality of some people.” Ricardo Delgado, ACTAF President, agreed that in the last ten years people’s paradigms have changed, causing a social transformation due to the circulation of money. He said that spending on material items has increased, perhaps at the expense of more important things, like fresh fruits and vegetables. In order to offset the negative effects manifested in people’s attitude toward wealth and money, interviewees recognized that the entire society would have to evolve in order to adapt to a new set of circumstances. Martin noted, “We have to learn to behave and think in ways that are different. If I change your footing, your context, you have to change as a person, or at least [change] the way you think.” Martin elaborated on this idea, explaining how all aspects of society must prepare to experience a more open relationship with the US. She said, “So, it’s one of the things we have to work on a lot, create consciousness about [a new relationship with the US], and work in all the institutions, all the social disciplines, all the actors.” Among the various sectors of
society that need to adapt to new ways of thinking, one particular cohort received the most attention.

If the embargo were to be lifted, preserving and maintaining the ideals and values of the Cuban revolution would be especially important with regard to young people in Cuban society. The changes that might result from an end of the embargo could have profound influences on Cuba, especially if they take place over a short period of time.

Addressing the potential shock of such a change, Martin noted:

> If all of a sudden the embargo is lifted, it’s like they move you from water to earth, like a fish, and now you can breathe because we are accustomed to work with a certain philosophy. We have positioned ourselves in a certain space, and we would have to change to another one. This could be a challenge, especially with our youth.

Whereas people of older generations are perhaps more indoctrinated into the revolutionary way of thought, young people have had less of a chance to receive such an education. As a result of their youth, they are more impressionable, and would likely be more easily influenced by capitalism than older members of society. Martin continued her focus on youth, explaining:

> Above all else we have to work to educate our young people. Yes, [the unknown effects of normalized relations with the US] is a challenge, a danger. I identify it as one of the potentially negative things that might result if we aren’t prepared for new scenarios. We might continue to act in inadequate ways. Yes, because if we continue with the same mechanisms, with the same reactions that in another context...If your context is changed but you continue with the same old perspective, well, you’re finished.

The extent to which a change in US policy will affect Cuban youth is impossible to predict. However, based on changes that have taken place since 1994 when the dollar was decriminalized, observers of Cuban society have already received some indication.
Beyond Delgado’s fear that people are spending increasing amounts of money on material goods, other more serious changes are taking place as well. One example includes the rise in prostitution, as noted in Gunnell (2001). One interviewee alluded to this phenomenon, though she never actually said prostitution. She explained that despite the best intentions and efforts of the Cuban educational system and societal values, the influence of money could be overpowering. She told me:

The youth might be very well prepared but still with a deficit of certain resources. You see that you can acquire [US dollars] very easily and so you prioritize your time. I have explained all this to you so you understand that youth are attracted to the easiest thing, in this case that means involving themselves with foreigners in order to acquire cash.

Aware that an increasing number of young men and women are engaging in prostitution, Nazco expressed her concern, but also told me that only a small sector of the youth cohort engaged in these activities. She assured me that:

It’s really not all the young people, it’s not a significant percentage, but, well, as insignificant is the amount of young people inclined to these activities with foreigners, we always have to have an answer to be able to rescue them.

In the late 1990’s the Cuban government has cracked down on prostitution in Havana, requiring young men and women whose home address is in another province to return to their places of birth. However, increased visits from foreigners coupled with Cuba’s informal reputation as a place rife with “sexual tourism” make such crackdowns effective for only short periods of time. Thus, if the embargo were to be lifted, allowing more US citizens to visit the island, it is possible that increased circulation of US dollars will continue to affect negatively Cuban culture. Lack of infrastructure necessary to
accommodate increased tourism has been identified as another negative consequence if the embargo is lifted.

At least five participants stated that lifting the embargo could be negative if Cuba fails to build adequate infrastructure to accommodate a substantial increase in US tourism. While tourism and the hard currency it brought to the island was one of the ways Cuba was able to escape from the crisis of the Special Period, a dramatic increase in visits might prove untenable for the Cuban tourist sector if sufficient hotels, restaurants, and transportation options are not put in place simultaneously. Armando Nova addressed this question. He said:

I ask myself if we are sufficiently prepared to confront [the lifting of the embargo]. I am referring to our ability to assimilate the magnitude of these relations because if you lift the embargo, it will mean ending travel restrictions and a good number of North Americans will likely visit Cuba as tourists. Ah, well, is Cuba prepared with its infrastructure and levels of production to confront this important increase?

A marked increase in tourist visits will have other effects that extend beyond the tourist economy. For example, in addition to requiring the construction of more hotels, an increase in tourism will affect agricultural production. A rise in tourism would require a boost in national production in urban and rural areas, an effect that could stimulate more growth in UA. However, if Cuban production cannot satisfy the needs of hungry US tourists, other solutions will be required that might have negative effects on UA. Nova noted this idea:

Well, this is a challenge. Is there a response that will be able to confront this in the current agricultural infrastructure in terms of food production? Because [an increase in tourism] would imply that we would import more food from the US. Sure, national production would
increase, but so would imports.

Whether or not an initial increase in imports of US food would start a continued trend in more extensive food imports is hard to say. Nevertheless, there was some agreement about how the Cuban government should handle more normalized relations with the US.

Though only a few participants made mention, at least three said that the Cuban government must maintain a somewhat restrictive government if the embargo falls in order to prevent unchecked foreign influence. Half of the participants expressed faith in the decisions made by the government, and felt they had no reason to doubt that wise decisions would continue to be made in the future. Eduardo Martinez used Mexico as an example. He said that due to the influence of multi-national corporations, the production of corn in Mexico has been negatively affected by the influence of capitalism. As control of corn production gets increasingly consolidated by a small number of entities, genetic diversity in corn varieties is lost. Martinez explained that with the loss of this diversity comes the loss of part of the Mexican national identity, which has been shaped by the role corn has played in the culture for thousands of years. Martinez argued that due to its isolation Cuba has maintained a strong national identity. He feared that uncontrolled capitalist influence could serve to unravel this characteristic, something he thinks has happened to other countries in the region. Thus, if the embargo were to end, he and others think the Cuban government must set tight quotas on the import of goods as well as tourist visits. Failure to do so will cause irreparable harm to their society, and perhaps their economy as well.

Despite Barclay's suggestions that increased trade with the US could undermine the organic practices in place in UA in Cuba, participants think that UA will improve.
They argued that increased trade with the US would eventually create access to necessary inputs, in addition to potentially being a market to which they could export their agricultural commodities. Nevertheless, even if UA can withstand the influence of the American market, participants were reluctant to admit that Cuban society will be as impervious to negative influences, as discussed in Gunnell (2001) and Universal Press Syndicate (2003). In light of an existing change toward more consumer-driven values fostered by increased access to US dollars, participants feared future erosion of values will negatively harm Cuban society. They focused their concern on the younger generations, noting how easy access to dollars can lead young people to harmful activities like prostitution with foreigners. Finally, participants expressed concern that Cuba will have insufficient infrastructure to accommodate tourist visits from the US unless the Cuban government sets restrictions on the number of people that can visit the country on an annual basis.
CHAPTER 5
CONCLUSION and DISCUSSION

The purpose of this research was to identify and describe what individuals working in UA in Havana, Cuba think about recent trade in agricultural commodities with the US. In order to provide adequate information about this topic of research, I made additional inquiries to help inform the central research question. First, I described what participants identified as the benefits of UA. Then, I provided examples of how interviewees have been affected by the embargo, and how these effects relate to UA. Next, I conveyed what participants think about trade with the US thus far, and how they think UA and Cuban society in the future will be affected if such trade continues or expands. In this section I synthesize arguments made in the literature with the findings of my research. In addition, I discuss the implications of the data, as it relates to future developments in Cuba, both in UA, and across society in general.

Urban Agriculture

According to Campanioni et al. (2001), UA in Cuba is guided by three principles: organic production, rational use of local resources, and direct marketing to consumers. My research supports these ideas, and participants addressed all three elements in great detail. I was initially surprised at the uniformity within the data, especially considering the range in age, occupation, experience, and expressiveness of the participants. When I began to analyze my data, I wondered if participants’ responses were more guided by what they had been told were the benefits of UA rather than what they actually believed
them to be. Why would a 28-year-old farmer originally from the countryside say essentially the same thing as a 60-year-old organization president who spent most of his day behind a desk unless someone had told them specific benefits? However, after listening to the participants explain themselves and noting the almost involuntary way the listed benefits, it became clear that participants believe in them and have experienced these benefits of UA.

While participants believed in the human and ecological health benefits of organic practices, simple economics appears to be the main reason why organic production receives the support that it does. Organic production makes sense in an urban setting because given the relatively small areas in production, a limited amount of fertilizer is required. In a larger, perhaps rural setting, creating and transporting sufficient organic compost on-site would be perhaps an inefficient (or even untenable) use of labor or machinery given available resources in Cuba, though large-scale organic farming is being done in other parts of the world. If only limited fertilizer needs to be produced on site and can be created with minimal off-farm inputs, farmers increase their self-sufficiency, and keep production costs down. Why spend precious profits on something you can make by yourself? However, if the embargo were lifted and urban farmers could again purchase non-organic fertilizers, what would stop them from doing so? As the majority of UA was developed after the collapse of the Soviet Union, most urban farmers have developed their systems and practices without the help of imported fertilizers. Though some practitioners of UA might resort to more conventional practices if such resources were available, I think most would stick to organic methods given the current low-cost model requiring urban farmers to spend relatively little capital, and in light of a lack of
experience with petro-chemical inputs in UA.

At least nine participants said lifting the embargo would allow Cuba to begin exporting food to the US, some of whom mentioned higher prices that could be generated from the sale of organic food. Based on my observations, though Cuba might be able to export organic foods produced in rural areas, the volume produced in urban farms would not satisfy even a fraction of US demand for organic food unless the majority of urban farms combined their production in some form of cooperative way. It seems to me, however, that doing so would require additional intervention from government ministries and would result in lower profits for individual farms. The farmers at La Vereda and Las Americas are well paid because they satisfy a neighborhood niche, not a regional one. Nevertheless, if the Cuban government were to prioritize generation of hard currency through food exports (rather than food security), they might require urban farmers to sell all of their production to the government. Thus, even if UA could produce enough organic food to satisfy some of the US market, doing so would undercut Cuba’s food security, thus minimizing local self-sufficiency, one of the aspects of UA most encouraged by the Cuban government. This is one area of research that merits further investigation.

While I was able to interview at least three government employees, I did not have an opportunity to speak with anyone involved with trade or foreign relations. In order to get a better sense of the government’s intentions or hopes regarding the export of organic foods, it would be helpful to conduct an investigation the deals specifically with exterior trade. Though the Ministry of Agriculture has indicated that they will pursue organic production into the future as a way of ensuring food security, ministries in charge of trade
and commerce might have different plans. Thus, in order to better understand the future of UA in Cuba, it would be helpful to have information about both national urban production, and goals regarding exports and foreign trade.

In the event that the US begins to allow Cuba to export to the US, it would be of great benefit if both foreign and Cuban organizations worked to promote the preservation and maintenance of organic production. Currently, international NGO’s have contributed resources to help the development of UA, and without their help, it is possible that UA would not have reached the evolved state in which it exists today. While promotion by foreign entities might result in positive future developments, their efforts will ultimately be in vain unless they have sufficient influence or power to convince the Cuban government of the importance of maintaining organic production. As stated above, the Ministry of Agriculture appears to be promoting organic agriculture, but not all government entities have made similar commitments. Perhaps foreign NGO’s could refuse to donate capital and resources unless they are used in conjunction with organic methods. Though this might prove effective, if such groups must resort to such pressure, I suspect the Cuban government will have already prioritized things other than organic foods.

With regard to rational use of resources, it comes as no surprise that so many participants described employment generation as a benefit of UA. There exists an abundance of human labor in cities. If the Special Period served to displace workers in the countryside (or in cities themselves), it makes sense that people (especially rural emigrants) would be pleased to find a way to occupy themselves in a productive way while also earning a good living by national standards.
Participants in my study identified direct marketing as one of many benefits associated with the location of urban farms and gardens. First, from the viewpoint of a worker who lives on site or nearby, the economic and temporal benefits of having a short commute to work make sense. Why wait for a bus four an hour when you could walk to work in a fraction of the time? Second, from the viewpoint of a consumer who might pass one of several urban farms or gardens in their quotidian travel within the city, UA reduces time spent on purchasing food for the home. In a country lacking sufficient public transportation, the ability to purchase food near home or work is of great importance. In the event that the government decided to pursue an export market, the benefit to consumers would be largely eliminated if the government purchased most of the urban production. However, the US government has not indicated a willingness to purchase Cuban food, thus calling the likelihood of food exports into question. Third, there is little incentive to consume anything less than the freshest when fruits and vegetables are available close at hand, thus supplying good nutritional value because of their freshness. The last benefit of location deals with the aspect least discussed in the literature, but nonetheless worthy of discussion.

UA influences positive change within the Cuban culture. As urban farms are interspersed with homes, restaurants, roads, government buildings, and factories, urban dwellers interact with them, at least visually whenever they are out in public. Beyond the visual beauty of UA, the presence of urban farms becomes something familiar to the populace. This familiarity creates, in my opinion, a willingness to experiment and a sense of trust, two things necessary for people to want to change their dietary habits. The trust developed between a farmer and the person who purchases their harvest helps
satisfy what I consider to be a basic human desire: awareness of the people with whom you share your space, culture, and identity. By helping people improve and expand relationships, UA provides benefits that go far beyond vitamins and minerals. By getting to know more about food, UA helps Cubans get to know more about each other.

The Embargo

The effects of the US embargo on Cuba are well documented (Castro’s, 2001; Garfield and Santana, 1997; Gunnell, 2001; Herrera, 2004; Universal Press Syndicate, 2003; Whitney, 2001). My findings support the arguments presented in the literature that the embargo limits Cuba’s access to important things like medical technology or inputs necessary for development. As participants provided ample examples of the issues covered in the literature, I am reluctant to doubt or question their depiction of the way they have been affected by the embargo. Though I have no personal experience with the Cuban health care system, anecdotal evidence shared with me during informal settings seems to confirm that despite its good reputation, the Cuban health care system lacks badly needed supplies and medicines.

Regarding the embargo’s effects on the development of UA, participants claimed that the embargo has helped influence the creation of UA, and that is consistent with the literature (Rosset, 2000). It seems likely there would be less UA today if the embargo had ended with the collapse of the Soviet Union. While I do not think UA would not exist, I argue that it would not have been as prevalent if Cuba had access to agricultural inputs on which they were dependant at the time. This being the case, one could conclude that the embargo has been a good thing for Cuba in the sense that it has helped
necessitate creativity and resilience, and that perhaps it should remain in place in hopes of fostering other noteworthy developments. I disagree.

Every single person with whom I spoke in Cuba wants to see the end of the embargo. Though Cuba has developed alternative and appropriate technologies in many areas of their economy, and especially in UA (perhaps due to the restrictions imposed by the embargo), in light of the overwhelming criticism of the embargo it should be lifted. If its negative effects are as severe as suggested by the literature and by participants, then I agree with Chirino when he characterized it as unjust. While one participant’s characterization of the embargo as ‘genocide’ is probably way too strong, I would go so far as to say the embargo has inflicted cruel and detrimental harm on Cuba.

**Trade with the US**

The central research question of this study addressed what Cubans working in UA think about recent trade with the US. On this account, I found unanimous support for the trade that has taken place thus far. In addition to providing Cuba with badly needed foodstuffs that complement national production, imports from the US also help supply inputs that are hard to produce in Cuba, such as feed for livestock. In spite of their support, many participants were critical of the terms of the trade that has taken place thus far, as it limits their ability to generate hard currency necessary to fund development projects. Participants would like to see future trade take place on a more bilateral basis whereby Cuba would be allowed to export to the US. In the event that this kind of trade is prohibited by the US in the future, I still think participants will support trade.

As much as I attempted to get participants to focus their answers on how they
think trade with the US affects UA, most individuals spoke in general terms. Trade with the US, in the opinion of research participants, indicates hope for improved relations between the two countries. In light of the impacts of the embargo and the privation it has created, I think most Cubans would view positively any action on behalf of the US that might indicate a change in policy toward freer or more open relations. If the Cuban government itself has made public declarations linking purchase of US commodities with movement to end the embargo, it seems understandable that individual citizens might make the same conclusion. While one could argue that participants were merely being obedient supporters of the party line, their enthusiasm about trade with the US stems from an expressed personal desire for more freedom and choice in their lives. Even if they think the food imported from the US does not make up a substantial amount of total Cuban imports, they think that it symbolizes better things to come in the future.

The Future

Barclay (2003) suggests that trade in agricultural commodities with the US might cause Cuba to resort to the conventional practices that proved unsustainable during the crisis of the Special Period. My findings suggest people hope that will not happen, as they cannot guarantee what the future holds. Participants argue that increased trade with the US will help improve and expand UA. First, farmers think they will eventually be able to import additional inputs from the US, such as irrigation equipment, seeds, or structural implements necessary to improve production. Second, in light of the lengthy benefits afforded by UA to consumers, producers, the Cuban government, and the urban landscape, the values of UA have taken root within the Cuban culture and economy, and will thus continue in the future. The organic farming practices employed in UA are
appropriate to the scale of urban farms, and allow producers to maximize profits while keeping expenses to a minimum. However, I do not believe this to be the case across agriculture in general. Given that agricultural practices in rural areas have yet to evolve to more organic modes of production, I contend that increased trade with the US would instigate further dependence on petro-chemical imports. It is important to note that thus far, the US has only authorized sale of agricultural commodities. While sale of US produced food might increase, I have received no indication that the current administration will expand the variety of goods that Cuba can purchase, calling into question the claim that increased trade will improve UA.

The effects on Cuban culture and society of increased trade with the US present a different reality. Based on my observations and interactions with urban farms, the tourist economy, and the black market, the circulation of US currency has undeniably changed popular mentality in Cuba regarding wealth, possession, materialism, and community. I do not think the revolutionary project will be abandoned in its entirety. However, I suspect that in the future Cubans will take advantage of available opportunities to improve their lives as *individuals*, whereas in the past community values might have received paramount attention. I do not mean to say that the values will no longer be important to Cubans, rather that their practice might not necessarily reflect their philosophy, given the attractiveness of consumerism. Cubans across all sectors of society will likely make decisions on an individual basis that will allow them to expand their ability to make choices in their daily lives.

If access to additional disposable income allows someone to have a little more freedom in the market or at the store, I expect that an individual will do whatever he or
she considers to be within reason to access such a choice. For some, this might mean minor dealings with the black market, whereas for others it might mean engaging in more illicit activities. Whatever the case, the ability to improve one’s lot through accumulation of dollars has increased inequality in Cuban society. This trend is likely to continue, whether or not trade increases with the US. As long as the Cuban government allows the circulation of US currency, some individuals will probably go to great lengths to access it, even if it requires illegal or counter-revolutionary activity. In conclusion, I agree with the statement “the only truth that survives is that Cuba cannot withstand one thing—capitalist intervention” (Universal Press Syndicate, 2003: 54). Whether or not the Cuban government will provide an adequate response to the influence of capitalism remains to be seen. Despite this uncertainty, the most severe threat to the Cuban revolution arrived in 1994 with the decriminalization of US dollars, not with the first bushel of wheat delivered in December 2001. Thus, though imports from the US might displace certain amounts of Cuban production, UA will continue to thrive into the future if for no other reason than through the sale of the food they grow in cities urban farmers improve their lives, are afforded more choice, and thus receive a new sense of freedom and independence.

Cuban Association of Agriculture and Forestry Technicians. 2003. *Quien Somos?* Havana, Cuba: ACTAF.


Funes, Fernando, and Luis Garcia, Martin Bourque, Nilda Pérez, and Peter Rosset, eds.


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APPENDIX A: CREDIT AND SERVICES COOPERATIVE LAS AMERICAS

Carlos Campolongo, America Alarcon

Organic vegetable production

Point of Sale

Intercropping banana and squash

Fruits, condiments, and vegetables

Livestock
APPENDIX B: BASIC UNIT OF COOPERATIVE PRODUCTION LA VEREDA

Ornamentals

Greenhouse

Fruits and Starts

Agricultural Production

Organic Compost Production

Overview of cooperative
Thank you for speaking with me. My name is Joshua Klaus. I am working on a Master’s Degree from the University of Montana. In order to fulfill the requirements of my degree, I have to complete an original research project. I am going to spend three weeks in Cuba in order to investigate urban agriculture.

In the United States, Cuba has received attention due to the changes that have taken place since the collapse of the Soviet Union. The area of reform that most interests me has to do with urban agriculture. In order to better understand some of the changes that have taken place in the last few years, I would like to ask you a few questions. As you are someone with ample experience with urban agriculture, I suspect that you will be able to give me lots of useful information that I would not be able to find in the United States. Please answer in as much detail as possible. If you would like, I can keep your identity confidential. If at any time you would like to end the interview, please tell me. You are under no obligation to participate in this research, and if you leave, you will be able to do so without suffering any negative repercussion. Have you read and signed the consent waiver? Do you have any questions? Are you ready?

1. Describe your experience with urban agriculture.

2. What are the benefits of urban agriculture?
   Probe: How have you benefited personally from urban agriculture?

3. How have you been affected by the United States trade embargo?

4. What do you think about this?

5. What are some of the influences of the embargo on urban agriculture?
   Probe: Would there be as much urban agriculture today if the embargo had ended with the collapse of the Soviet Union?

6. In the last few years, the United States government has allowed multinational agriculture businesses to negotiate with the Cuban government. What do you think about this?

7. Do you think the United States government should continue to weaken the embargo? Why? Why not?

8. If the embargo is weakened, how will urban agriculture be affected?
   Probe: Do you think the Cuban government will continue to allow individuals to benefit from the private sale of foodstuffs?

9. What should people in the United States know about Cuba?