

State-initiated Food
Sovereignty:
The Case of Cuba's Special
Period

By

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*I lovingly dedicate this work to my Mother, Robab Haghpanh,
who has dedicated her life to all of us, her children.*

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Abstract

The persistence of the global recession and rising food costs have strengthened the argument that food sovereignty is the solution to global hunger. But is food sovereignty even possible in the context of a globalized free-market world? Has food sovereignty, as it is defined by the Food Sovereignty paradigm, ever been achieved? These are important questions to answer if food sovereignty is to be approached as the solution to the rising social, ecological, and economic issues that have become global concerns. This thesis aims to answer these questions by assessing the degree to which Cuba achieved food sovereignty during its special period of 1990 – 1996, in accordance with the Six Pillars of Food Sovereignty. Additionally, this study operationalizes the criteria for food sovereignty into an analytical framework through Karl Polanyi's concepts of fictitious commodities. This study finds that Cuba achieved a high level of food sovereignty during the special period.

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List of Abbreviations

ACTAF - Asociacion Cubana de Tecnicos Agricolas y Forestales

ANAP - National Association of Small Farmers

CCS - Cooperativa de Créditos y Servicios

COMECON – Council for Mutual Economic Assistance

CPA - Cooperativa de Producción Agropecuaria

CREE - Centros de Reproducción de Entomófagos y Entomopatógenos

GMO – Genetically Modified Organism

HDR– Human Development Report

IAASTD – International Assessment of Agricultural Knowledge Science and Technology for Development

IMF – International Monetary Fund

MDGs – Millennium Development Goals

MINAG - Ministry of Agriculture

SAP – Structural Adjustment Programs

TNC – Transnational Corporation

UA – Urban Agriculture

UBPC - Unidades Basicas de Produccion Cooperativa

UN – United Nations

UNDP – United Nations Development Programme

WB – World Bank

WHO – World Health Organization

WTO – World Trade Organization

Chapter 1

Introduction

We have come to a clear realization of the fact that true individual freedom cannot exist without economic security and independence. "Necessitous men are not free men." People who are hungry and out of a job are the stuff of which dictatorships are made.

In our day these economic truths have become accepted as self-evident. We have accepted, so to speak, a second Bill of Rights under which a new basis of security and prosperity can be established for all regardless of station, race, or creed (Franklin Roosevelt, as quoted by Ziegler 2013, p. 95)

Franklin Roosevelt made this speech in 1945, months before he passed away (Ziegler, 2013) and although his second Bill of Rights never came into being, his speech acknowledged the need to end hunger and to prioritize human wellbeing above all things. This perspective grew out of the experience of vast human suffering that accompanied the global Great Depression; it led to the societal consensus that industrialized societies require stronger regulations to protect society from the volatility of the market (Polanyi, 2001; Saul, 2005; Davidson, 2009; Ziegler, 2013). Consequently, as John Saul (2005) explains, "The unprecedented post-war expansion of public services, egalitarian intentions and economic growth had confirmed that need. Progress and regulations went hand in hand, as they had in every successful long-term civilization in history" (Saul, 2005, p. 72).

Accordingly, many researchers argue that in order to address the current and rising global food crisis, a greater understanding of the relationship between food

insecurity and market-led development is essential (Bello, 2009; Holt-Giménez, 2009a; McMichael & Schneider, 2011). In development studies it is well documented in that societal shifts occur when one development model is replaced by another. For example the shift from the state-led development model of the late 1940s to the market-led development model of the 1970s saw the re-conceptualization of food and food security, which many researchers argue has helped to fuel global food insecurity (Roberts, 2008).

As a consequence of the global recession of 2007-2008, by 2010 almost one billion of the world's population of 7 billion people had fallen into a state of "permanent hunger" (Ziegler, 2013, p.4). The gravity of this situation has not yet been addressed by international organizations, partially due to the common misconception that present-day food crises are the outcomes of global food scarcity and/ or due to growing global populations (Poole-Kavana, 2006; Patel, 2012; Ziegler, 2013). However, researchers have found the opposite to be true on both accounts. Former United Nations Special Rapporteur on the Right to Food, Jean Ziegler (2013) explains that,

"In its current state, the global agricultural system would in fact, without any difficulty, be capable of feeding 12 billion people, or twice the world's current population. Hunger is thus in no way inevitable" (Ziegler, 2013, p. xiii).

Moreover, studies suggest that the roots of food insecurity in the neoliberal era are connected to the market-led development agenda's conceptualization of food as a commodity rather than as a basic human right (Murphy, 2008; Roberts, 2008; McMichael & Schneider, 2011; Patel, 2012). Additionally, the food sovereignty argument, which

was designed as an alternative to the free market-based framework of food security, maintains that there is a direct tie between the rise in global poverty and development agendas. For example, food sovereignty researcher Eric Holt-Giménez (2009a) explains that, “[t]he current global food crisis [was] decades in the making” (2009a, p. 142). He contends that the advancement of the neoliberal development agenda and the amalgamation of the private sector with industrial agriculture, mostly “through the monopolization of input industries, industrial farming, processing, and retailing ...” (Holt-Giménez, 2009a, p.142) have led to the current global food uncertainties. Consequently, the framing of food as a commodity has allowed it to be a subject to market rules as well as its volatilities (Ziegler, 2013) whereas if it were framed as an essential human right, then nations would be obliged to protect their national food sovereignty in order to protect the interest of their populations (Murphy, 2008; Roberts, 2008), as was the case with Franklin Roosevelt’s Keynesian recovery programs during the Great Depression and the state-led development project that was initiated to rebuild post-World War II Europe (Schlesinger, 1958).

As David Harvey (2007) contends, “The corporatization, commodification, and privatization of hitherto public assets have been signal features of the neoliberal project” (Harvey, 2007, p.35). After decades of market-led development, which centers on creating free markets via reforms including deregulation, market liberalization, and decentralization, among other measures, the twenty-first century has been marked by multiple crises (Harvey, 2007) and the largest global recession since the Great Depression

(Bello, 2009a; Gamble, 2009; Bello, 2012). Poverty, unemployment, hunger and food insecurity are growing globally, particularly after the multiple food crises that followed the Great Recession of 2007-8 (Altieri & Toledo, 2011), which further aggravated already persistent conditions of social, economic, and environmental insecurity across the planet (Gamble, 2009; Altieri & Toledo, 2011; McMichael & Schneider, 2011; Ziegler, 2013). It is particularly in countries that have become export-based agricultural producers, where the advancement of neoliberal free-market development has made both food producers and consumers vulnerable to the volatilities of the global market that the worst of the crises are felt (Altieri & Toledo, 2011). Various researchers have observed this to be the case. In fact, the food crises of 2007-2008 and 2010 occurred during periods that saw historically unprecedented high levels of food production across the planet (Holt-Giménez, 2009a; Altieri & Toledo, 2011; Ziegler, 2013), demonstrating that the scarcity of food is not the driving mechanism behind these events. Many scholars point to the lack of economic access, i.e. poverty, to purchase food as the real problem; today most people cannot afford to buy food (Madeley, 2002; Poole-Kavana, 2006; Altieri & Toledo, 2011);

“Even most “hungry countries” have enough food for all their people right now. Many are net exporters of food and other agricultural products” (Poole-Kavana, 2006, p.1-2).

Additionally studies have found birth rates across the world to be dropping and in most countries “abundant food resources coexist with hunger” (Poole-Kavana, 2006, p.2).

Furthermore, Holly Poole-Kavana (2006) explains that population density within countries does not seem to be a factor for the growing level of hunger since even countries with smaller populations, such as the Netherlands, have become food exporters leading to the rise of domestic food insecurity (Poole-Kavana, 2006).

Therefore in order to better understand the relationship between food insecurity and development, a historical analysis is necessary to examine how alternative development agendas have addressed food insecurity in the past. It is for this reason that this thesis will be examining the case of Cuba during its *special period* of 1990-1996, where due to external geopolitical factors the nation became isolated from international trade and had to restructure its agricultural sector in order to meet the populations' dietary needs (Koont, 2009; Febles-González, Tolón-Becerrab, Lastra-Bravoc., & Acosta-Valdés, 2011; Gürcan, 2014). Additionally, Catherine Murphy (1999) explains that within the Cuban context, in accordance with the national development agenda, the state had “established food as a basic human right. Much work was done to develop the national agricultural sector to increase Cuba’s self-reliance in foodstuffs” (Murphy, 1999, p.5). Moreover, the fact that Cuba’s special period took root in the 1990s makes it a particularly unique case study since it was during this decade that the neoliberal market-led development model rapidly grew at the international level, with the assistance of the World Bank (WB), the International Monetary Fund (IMF) and the newly formed World Trade Organization (WTO), which took a special interest in agricultural reform (Roberts, 2008; Gamble, 2009). Furthermore, the 1990s was also when the food sovereignty

movement entered the international stage in opposition to the role of the WTO and its aim to advance neoliberal free market globalization (Holt-Giménez, 2009a; McMichael & Schneider, 2011). Since Cuba was cut off from these international economic institutions and the international market at the time, and was forced to approach development in a new way, particularly in its restructuring of the agricultural sector and the creation of state-supported initiatives to secure a sustainable food supply for its population (Koont, 2008; Gürcan, 2014), it is of particular interest to this study.

The objective of this thesis is to test the hypothesis that Cuba achieved food sovereignty during the special period, the socioeconomic transition from 1990 - 1996, through the adoption of agroecology-based food production. This study will examine several factors including the restructuring of the land tenure system, the use of agroecological practices in substitution for industrial agricultural production, changes in employment trends and work incentives, as well as the introduction of local markets in the field of urban agriculture. The study explores the case of Havana's urban agriculture. In order to evaluate the relationship between these factors and the criteria set forth for achieving food sovereignty by the Food Sovereignty paradigm, the Six Pillars of Food Sovereignty are operationalized into Karl Polanyi's theoretical framework, which outlines the relationship between societies and markets in which the status of land, labour and money are either perceived as commodities or publically owned resources. In this framework, these categorizations serve as analytical indicators for assessing the degree to

which Cuba's social and economic trends during the special period met the criteria fulfilling food sovereignty.

By demonstrating Cuba's achievement of food sovereignty analytically, it is hoped that this study will further the understanding of alternative models of development to illustrate the centrality of human wellbeing to the success of development projects.

Chapter 2

Theoretical and Methodological Framework

This thesis assesses the degree to which Cuba achieved food sovereignty during its special period in accordance with the six pillars of the Food Sovereignty paradigm. However since this paradigm's theoretical foundation is relatively new, this section offers a short comparison between the Human Development paradigm and the Food Sovereignty paradigm in order to explain why the former is less applicable to this study.

2.1 Human Development Paradigm

The Human Development paradigm takes a human-based approach to development; it examines multiple dimensions intrinsic to development. This paradigm was advanced in the 1980s and was greatly influenced by scholars such as heterodox economist Amartya Sen, as well as the emerging United Nations Development Programme's (UNDP) Human Development Reports (HDR) that began to be published in the 1990s (UNDP, 2014). The Human Development approach provides an alternative to the standard argument of development through economic growth; it takes various social factors into consideration including population health, education, and unemployment data (UNDP, 2014).

Although this paradigm is more inclusive of the non-economic factors inherent to development; it still maintains the assumption that economic growth is a prerequisite for human development to occur (UNDP, 2003; UNDP, 2014). From a sustainability

standpoint, reliance on levels of economic growth for the advancement of human development is problematic, it raises concerns about the dependency of populations on economic growth as well as the ecological limitations to economic growth, among other issues, since critics of development schemes argue that the growth model is simply not sustainable (McNally, 2006).

Furthermore, this assumption that economic growth is a necessary component of human development does not account for the human development that occurred in Cuba during the special period when there was very little evidence of economic growth (Aponte-Garcia, 2009). Therefore it is argued that the Human Development paradigm is not well suited for this study since its economic assumptions that economic growth is essential to human development contradict the Cuban experience of human development without economic growth.

2.2.0 The Food Sovereignty Paradigm

Cuba's achievements in advancing societal and ecological welfare during its period of hardship make the Food Sovereignty paradigm particularly well suited for the purposes of this research. Although similar to the Human Development paradigm in its approach to development from a humanist perspective, the Food Sovereignty paradigm differs in that it holds an antagonistic view of the market-led development model. Additionally, rather than assuming that economic growth is a precursor to human

development, the Food Sovereignty paradigm assumes that sustainable agriculture and ecological recovery are precursors to the advancement of *long term* human development (Altieri & Toledo, 2011). Moreover, proponents of food sovereignty acknowledge the growing body of research, which demonstrates that large-scale industrial agriculture is unviable for long term human development; it is argued that small-scale agroecological methods of agriculture are the most effective way to secure national food supplies while stimulating the recovery of ecosystems (La Via Campesina, 2010), and thus advancing human development:

“Agroecology is providing the scientific, methodological and technological basis for a new ‘agrarian revolution’ worldwide (Altieri, 2009, Wezel & Soldat, 2009, Wezel et al., 2009, Ferguson & Morales, 2010). Agroecology-based production systems are biodiverse, resilient, energetically efficient, socially just and comprise the basis of an energy, productive and food sovereignty strategy (Altieri, 1995; Gliessman, 1998)” (Altieri & Toledo, 2011, p.587).

The re-structuring of the agricultural sector from industrial agricultural production systems to agroecological production systems is central to food sovereignty (Holt-Giménez, 2009a; La Via Campesina, 2010; Altieri & Toledo, 2011; McMichael & Schneider, 2011); this focus on environmentally sustainable agriculture as the engine of human development makes the Food Sovereignty paradigm exceptional. In this sense, the Food Sovereignty paradigm differs from other development paradigms that assume economic variables to be the most substantial development factors. The Food

Sovereignty paradigm assumes that the de-industrialization of the agricultural sector, via agrarian reforms in favor of the autonomy of small-scale food producers, coupled with the de-commodification of agricultural products, will advance human development and in doing so will address growing global trends of hunger and poverty (Holt-Giménez, 2009a; Altieri & Toledo, 2011; McMichael & Schneider, 2011);

“Ultimately, to end world hunger, the monopolistic industrial agrifood complex will have to be replaced with agroecological and redistributive food systems” (Holt-Gimenez, 2009a, p. 155).

Additionally, proponents of food sovereignty argue that economic and institutional restructuring is required to emphasize the role of small-scale food producers instead of the role of the financial sector, which has participated in the creation of food insecurity, in development agendas (Altieri & Toledo, 2011).

Food Sovereignty calls for states to re-regulate the agricultural sector, to focus on agricultural production for domestic consumption, to ban industrial agricultural methods (i.e., the use of chemical inputs, petroleum based machinery, genetically engineered seeds, etc.) that threaten ecological sustainability, the stability of food supplies, and population health (La Via Campesina, 2010; Altieri & Toledo, 2011). State-led development prioritizing agrarian reform is essential (Murphy, 1999; Koont, 2008) to the establishment and success of food sovereignty (La Via Campesina, 2010; Altieri & Funes-Monzote, 2012). This is because only the state can protect the agricultural sector and the national food supply macro-level vulnerabilities such as the international free market’s

volatilities, its role in the commodification of foods, and enablement of commodity speculation (Polanyi, 2001; Saul 2005; Davidson, 2009; Ziegler, 2013).

The Food Sovereignty paradigm contains six pillars which are summarized in Table 1 below. Although these pillars may seem normative, and policy-wise daunting, it is worth noting that these propositions have been derived from development agendas of past eras; they are need-based and reflect the recommendations of the United Nation's *International Assessment of Agricultural Knowledge Science and Technology for Development* (IAASTD) 2008 report. Backed by the World Bank and five United Nations organizations, assembling findings from more than four hundred scientists and development researchers (Holt-Giménez, 2009a), this IAASTD report is arguably the most comprehensive study that the international community has released to date, acknowledging the rise of global financial , energy and food crises and the root causes, which are directly linked to industrial agricultural production and the corporatization of the global food supply (McMichael & Schneider, 2011):

“Stating that ‘business as usual is not an option’, given the combination of climate, energy, water and food crises, the IAASTD questions industrial agriculture and GM food as the solution to the social and ecological crises associated with global agribusiness, on the grounds that markets fail to adequately value environmental and social harm In order to strengthen and secure the future for small farming, IAASTD recommends altering institutional arrangements to ensure the multiple functions of agriculture, in addition to a ‘shift

to nonhierarchical development models’, building trust and valuing farmer knowledge and natural and agricultural biodiversity, as well as seed exchange and common resource management systems” (McMichael & Schneider, 2011, p.132).

This IAASTD report’s validation of the central concerns of the food sovereignty argument, along with its recommendations that reflect the six pillars of food sovereignty, are highly significant to advancing the Food Sovereignty paradigm as an alternative model of development. In a sense, this report which was released midst the global Great Recession, acknowledges the failure of free market-solutions to meet global human, social, and environmental needs:

“With respect to ‘multifunctionality’, IAASTD offers a holistic vision of forms of agro-ecology in which regeneration of natural carbon cycles, and goals of food and nutritional security, outweigh the conventional path of agricultural development and its narrow focus on increasing agricultural crop productivity, including the use of biotechnological solutions....IAASTD actually reinforces the critique and advocacy of the food sovereignty movement, by recommending strengthening local and regional food systems, democratising food policy, and prioritising the needs of small farmers by securing access to productive resources (seeds, land, water), credit, information, market infrastructures and fair trade systems.⁸² (McMichael & Schneider, 2011, p.133)

Furthermore, as McMichael and Schneider (2011) explain,

“Under the heading ‘Options Exist’ the IAASTD report maps out a general strategy to strengthen food system resilience in the face of environmental crises—including promoting agro-ecological practices with ‘triple-bottomline’ goals, full-cost accounting to incorporate energy, health and environmental costs and, importantly, a rights-based framework, which is at odds with a market-centric organisation of the agriculture and food system” (McMichael & Schneider 2011, p.133).

This human rights-based framework is what the six pillars of the Food Sovereignty paradigm are designed to ensure. In fact, proponents argue that food sovereignty cannot be achieved unless these six pillars are realized. Moreover, the Six Pillars of Food Sovereignty acknowledge the power dynamics and root *economic* causes shaping the global issues that the paradigm aims to address by offering ecologically sound, culturally sensitive solutions that are anticipated to be modified to reflect the needs and resources of communities within individual countries (Altieri & Toledo, 2011). However in order to successfully implement this food sovereignty model, proponents argue that there needs to be a serious shift in development priorities - to transfer the *onus* of development back to the state because only the state has the tools to manage the market in a way that protects populations’ basic human rights, including protection of national food supplies (La Via Campesina, 2010; Altieri & Funes-Monzote, 2012; Gürcan, 2014).

Table 1. Six Pillars of Food Sovereignty

	Pillars of Food Sovereignty	Description *	Actions (derived from food sovereignty literature)
1	Food for People	Food sovereignty puts the right to sufficient, healthy and culturally appropriate food for all individuals, peoples and communities, including those who are hungry, under occupation, in conflict zones and marginalized, at the centre of food, agriculture, livestock and fisheries policies; and rejects the proposition that food is just another commodity or component for international agri-business*	<p>De-commodify food and re-define food as a human right (Murphy, 1999)</p> <p>Ensure that policies prioritize the human need and right for food (Murphy, 1999; Murphy, 2008).</p> <p>Officially establish that food is central to human existence and legally protect it from market forces, i.e. from corporate interests (Murphy, 2008; McMichael & Schneider, 2011)</p> <p>Remove food from the realm of commodity speculation (McMichael & Schneider, 2011; Ziegler, 2013)</p> <p>Restore state-run agricultural marketing boards and publicly-owned national grain reserves (Holt-Giménez, 2008; Rosset, 2008)</p> <p>Re-establish floor prices for food products (Holt-Giménez, 2008).</p>

2	Value Food Providers	<p>Food sovereignty values and supports the contributions, and respects the rights, of women and men, peasants and small scale family farmers, pastoralists, artisanal fisher folk, forest dwellers, indigenous peoples and agricultural and fisheries workers, including migrants, who cultivate, grow, harvest and process food; and rejects those policies, actions and programmes that undervalue them, threaten their livelihoods and eliminate them*</p>	<p>Implement national policies that support the livelihoods of small scale, sustainable producers and their right to access land and other resources (Altieri & Toledo, 2011).</p> <p>Implement national policies to protect and promote women's rights (Patel, 2012).</p> <p>Promote societal re-valuation of food providers (La Via Campesina, 2010).</p> <p>Regulate commodities markets to end food speculation (Altieri & Toledo, 2011; Ziegler, 2013).</p>
3	Localize food systems	<p>Food sovereignty brings food providers and consumers closer together; puts providers and consumers at the centre of decision-making on food issues; protects food providers from the dumping of food and food aid in local markets; protects consumers from poor quality and unhealthy food, inappropriate food aid and food tainted with genetically modified organisms; and resists governance structures, agreements and practices that depend on and promote unsustainable and inequitable international trade and give power to remote and</p>	<p>Implement national policies that prevent TNCs from dumping food products in domestic markets (Roberts, 2008; Rosset, 2009c).</p> <p>Implement national policies to protect domestic resources and food supplies from corporate interests (Saul, 2005), in order to prevent the formation of national dependencies on corporations for food security (Holt-Giménez, 2009a).</p> <p>Reduce the distance food travels between food</p>

		unaccountable corporations*	producers and consumers (Roberts, 2008). Establish national initiatives to prevent inappropriate food aid (Rosset, 2009c).
4	Put Control Locally	Food sovereignty places control over territory, land, grazing, water, seeds, livestock and fish populations on local food providers and respects their rights. They can use and share them in socially and environmentally sustainable ways which conserve diversity; it recognizes that local territories often cross geopolitical borders and ensures the right of local communities to inhabit and use their territories; it promotes positive interaction between food providers in different regions and territories and from different sectors that helps resolve internal conflicts or conflicts with local and national authorities; and rejects the privatization of natural resources through laws, commercial contracts and intellectual property rights regimes*	Restructure agricultural schemes to allow control of local resources by local small-scale producers (Altieri & Toledo, 2011). Implement national initiatives to stop and reverse privatization of natural resources, i.e. water, land, seeds (Saul, 2005). End land privatization to prevent land grabs (Torrez, 2011). Land redistribution: Implement national initiatives to enable the return of displaced peasant and agricultural populations to their communal lands (Altieri, Fune-Monzote, Peterson 2012).
5	Build knowledge and skills	Food sovereignty builds on the skills and local knowledge of food providers and their local organizations that conserve, develop and manage localized food	Nationally promote the revival of traditional knowledge, especially in regards to regional food production methods (Altieri & Toledo, 2011).

		production and harvesting systems, developing appropriate research systems to support this and passing on this wisdom to future generations; and rejects technologies that undermine, threaten or contaminate these, e.g. genetic engineering*	<p>Build and expand community resources to advance traditional agricultural skills and knowledge (Pimbert, 2009).</p> <p>Reject technologies that undermine or contaminate local food systems (i.e. genetically modified organisms, chemical inputs, etc.) (Roberts, 2008).</p>
6	Work with nature	Food sovereignty uses the contributions of nature in diverse, low external input agroecological production and harvesting methods that maximize the contribution of ecosystems and improve resilience and adaptation, especially in the face of climate change; it seeks to heal the planet so that the planet may heal us; and, rejects methods that harm beneficial ecosystem functions, that depend on energy intensive monocultures and livestock factories, destructive fishing practices and other industrialized production methods, which damage the environment and contribute to global warming*	<p>Implement agroecology-based food production and distribution systems, which are ecologically sound (La Via Campesina, 2010).</p> <p>End the use of energy and technology intensive monoculture-based, industrial methods of agricultural production, including Green Revolution technologies and methods (Bello, 2009b; Rosset, 2009a; 2009b).</p>

* The *description* column is reproduced from www.usc-canada.org/UserFiles/File/SixPillars_Nyeleni.pdf

Although some countries have made policy changes and reforms that reflect some of these pillars, currently there is no country in the world that fulfills the criteria for

achieving food sovereignty (Rosset, 2009a). This is because international economic institutions, which are working to expand the free market neoliberal agenda, create impediments that prevent nation-states from making the necessary reforms (Harvey, 2005) that would enable national food sovereignty, i.e. structural adjustment programs pressure nations to privatize land, industrialize the agricultural sector, etc. (Veltmeyer, 2007); these issues are further discussed in Chapter three. Arguably the only country that has achieved significant food sovereignty, which was made possible via state-supported initiatives, has been Cuba during its special period.

In order to consider the feasibility of these pillars of food sovereignty, this research will look at the case of Cuba's special period where the country was in a state of disconnect from the global market and from its trading partners and therefore it had to reformulate agricultural food production in order to protect the survival of the nation (Aponte-Garcia, 2009; Altieri & Toledo, 2011; Febles-González, Tolón-Becerrab, Lastra-Bravoc., & Acosta-Valdés, 2011). For this reason, Cuba's special period offers an exceptional case study for the topic of food sovereignty.

2.2.1. The discourse of the Food Sovereignty Movement

The origin of the Food Sovereignty paradigm is rooted in the food sovereignty movement, which consists of small-scale farmers, peasant groups and community supporters, initially in Latin America, joining to form *La Via Campesina*, to find solutions

to the destruction that the free market neoliberal development agenda was creating for small-scale food producers (Bello, 2009b). This movement has grown internationally over the past thirty years as more communities have become affected by the expansion of free market reforms (Altieri & Toledo, 2011). In a very real sense, the food sovereignty position has emerged as a form of grassroots resistance to the market-led neoliberal model of development and its market-solution based food security argument (Bello, 2009b). The food sovereignty argument includes a strong normative discourse which encompasses issues ranging from the working conditions of food producers to the recognition of the cultural significance of food, with the overall aim of transforming the global system of food production, distribution and consumption. However the main emphasis remains that food is a human right and must be protected as such (La Via Campesina, 2010):

“Food sovereignty is the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems. It puts those who produce, distribute and consume food at the heart of food systems and policies rather than the demands of markets and corporations. It defends the interests and inclusion of the next generation.

It offers a strategy to resist and dismantle the current corporate trade and food regime, and directions for food, farming, pastoral and fisheries systems determined by local producers. Food sovereignty prioritizes local and national

economies and markets and empowers peasant and family farmer-driven agriculture, artisanal fishing, pastoralist led grazing, and food production, distribution and consumption based on environmental, social and economic sustainability. Food sovereignty promotes transparent trade that guarantees just income to all peoples and the rights of consumers to control their food and nutrition. It ensures that the rights to use and manage our lands, territories, waters, seeds, livestock and biodiversity are in the hands of those of us who produce food. Food sovereignty implies new social relations free of oppression and inequality between men and women, peoples, racial groups, social classes and generations” (La Via Campesina, 2010).

The issues raised by the food sovereignty movement deal with matters such as poverty, women’s rights, community health, food production, industrial and trade regimes, cultural identity, biodiversity and environmental protection, the role of states, markets, as well as the role of communities in the global food system.

2.3 Parallels between Food Sovereignty discourse and Karl Polanyi’s political economy framework

Taking into consideration that the Food Sovereignty paradigm is a relatively new construct and thus it is still possibly in formation, it is helpful to supplement its approach with that of a critical time-honoured one that can add a comprehensive explanatory

framework for unveiling the structural determinants, such as the expansion of markets, agro-food Transnational Corporations (TNC), and such concerns that have given rise to the issues presented. The production of food in itself for example, raises the question of for whom production is intended, and whether it is for direct use by peoples or for the purpose of exchange in markets. The latter raises further questions about the nature of commodities in general and to what extent food can be treated as a commodity given its centrality to basic human survival as well as to social, cultural and political dimensions inherent to its production and consumption. In order to explore such inquiries, what is needed is a theoretical framework with explanatory variables capable of showing how the descriptive themes outlined above connect with and arise from broader political economy determinants.

In critically examining the six pillars of the Food Sovereignty paradigm and their rationality, it is apparent that there is a central antagonism between the interests of small-scale food producers, along with the interests of the broader segments of society as food consumers and states playing intermediary roles, that is set against corporate interests, free markets and the commercial production and trade of food. From a Polanyian position then, it can be said that there is a conflict between free markets and societies (Polanyi, 2001). In particular, proponents of food sovereignty criticize corporate systems of food production and the exploitative power relations inherent to them, the commodified trade of food to meet global market demands, as well as the ramifications of these practices which undermine the rights of groups to food; it also undermines the cultural values

ascribed to food, as well as the environmental repercussions that this global system of industrial food production generates (McNally, 2006; Murphy, 2008; McMichael & Schneider, 2011). The general theme to be observed from the food sovereignty position is to end the commodification of the production, exchange, and consumption of food, as this process allows for the expansion of markets into the sacred domains of life (McNally, 2006). In accordance with this rationale, this study will utilize the concept of commodity as a political economy heuristic as a starting point to build a theoretical framework which places the Food Sovereignty paradigm within the broader conflict between markets and societies. Such a heuristic in fact can be successfully employed in the social economy framework of Karl Polanyi.

The social economy framework of Karl Polanyi emphasizes the relationship between markets and societies, the framework's clear articulation of the modes of economic integration and its polemic on the destructive effects of the commodification process makes it ideal for conceptualizing the recent ascent of the Food Sovereignty paradigm within a broader political economy perspective. Additionally, Polanyi's perspective on development is reflected in the rationale of the food sovereignty argument; as Kari Polanyi Levitt explains, Karl Polanyi does not agree with the conceptualization of development through an economic lens:

“...the problem, he said, was how to institute a continuous supply of the material requirements of life given our knowledge of industrial technology, without the ‘disembedding’ of the economy from society, which, according to him, was the

prime characteristic of what he chose to call the self-regulating market economy ...” (Levitt, 2013, p.119).

Polanyi’s argument that societies need to be protected from the precariousness of free markets is reflected in the food sovereignty argument as well. Also, Polanyi’s social economy framework offers a broad range of heuristic tools, such as the concept of ‘fictitious commodities,’ which can be used to operationalize the normative themes of the food sovereignty argument in more analytical terms which are often overlooked by conventional economic theories (Polanyi, 1968; Polanyi, 2001).

As Polanyi has noted there is a distinction between the formal economy, which encompasses the subject matter of classical economic theory, and the substantive economy, which encompasses broader socioeconomic concepts such as livelihoods (Polanyi, 1968). Polanyi’s definition of the substantive economy, as stated by George Dalton (1968) in the introduction to *Primitive, Archaic, and Modern Economies*, is “...the need for all communities-whatever their size and technology – to organize material life so as to assure the sustained, repetitive provision of food, shelter, and the items necessary for community life” (Polanyi,1968, p. xv-xvi). Dalton’s emphasis on the irrelevance of a ‘community’s’ size and level of technological development, for this working definition of a substantive economy, which is in line with Polanyi’s broader conception of the economy as a universally invariant framework across societies” (Polanyi, 2001).

Within Polanyi’s framework, for any given society the economy is incorporated into society through one of three universal modes of integration: reciprocity,

redistribution, or exchange (Polanyi, 1968). Traditionally, within any one of these forms of economic integration, the economy is so entirely shaped by the social customs and institutions of a given society that it is indistinguishable from the other culturally-defined components of society. As Polanyi states,

“The human economy, then, is *embedded* and enmeshed in institutions, economic and non-economic. The inclusion of the non-economic is vital. For religion or government may be as important for the structure and functioning of the economy as monetary institutions or the availability of tools and machines themselves that lighten the toil of labour” (Polanyi, 1968, p.148) (emphasis added).

The embedded economy then, regardless of its mode of incorporation, constitutes the most stable social and economic arrangement for a given society. This is because the incentives for engaging in productive activity are mediated through social customs and cultural initiatives rather than through ‘economic’ objectives or through the compulsion of necessity. For Polanyi, of the three modes of economic integration, the mode of market exchange contains the greatest potential for destabilizing the relationship between societies and their economies. This is because markets, as points of “contacts between buyers and sellers” (Polanyi, 1968, p. 31) are economic institutions with the least social obligations, giving them the potential and probability to dis-embed from the rest of society and adopt altogether different initiatives that may not be in the society’s best interest.

When a society begins to separate its sphere of economic activities from its social and political sphere, through what Polanyi refers to as “market elements” (Polanyi, 1968, p.170), there is a transformation of social relations, that reflect the structural changes of the economic sector, which gives rise to a market society that is then capable of creating and fostering a (free) market economy. For Polanyi, a market society, and its ensuing market economy, is inherently unstable because the creation of a self-regulating market results in the dis-embedding of the economy from the social institutions of society (Polanyi, 1968). The economic dynamics of the dis-embedded economy no longer conform to the practical needs of societies, but instead to the laws of supply and demand, thereby forsaking the production of goods for their use-value in favor of production of commodities for their exchange-value in the global market. As Polanyi states, “[t]he extreme artificiality of market economy is rooted in the fact that the process of production itself is here organized in the form of buying and selling” (Polanyi, 1968, p.33). In other words, with the rise of a market economy, the question of what is produced, how much is produced, and the purpose of production come to be determined by the market as opposed to the actual needs of society (Polanyi, 1968).

As discussed earlier, this loss of sovereign decision-making on matters of production and consumption on the part of society are in fact the central issues that the Food Sovereignty paradigm aims to address. The methodological challenge that emerges in examining these issues through a political economy framework is in identifying and recognizing the fundamentally distinctive aspects of a market society in presently existing

societies where people engage in multiple forms and scales of economic activities depending upon their cultural and political environment (Polanyi, 1968). This is particularly challenging when examining societies that are undergoing, or have undergone, an overall socioeconomic transformation such as in our case study of Cuba during the special period. In order to address these methodological issues, we need to frame our analysis of Cuba's socioeconomic transition within an analytical framework in which distinct variables can act as signals, or indicators of a shift in patterns of economic activity.

2.4.0 Polanyi's analytical categories of fictitious commodities

To address such inquiries, Polanyi has expanded upon the concept of commodity as an analytical category for measuring the extent to which societies fall under the directives of the market. This is how Polanyi outlines this empirical framework,

“Commodities are here empirically defined as objects produced for sale on the market; markets again, are empirically defined as actual contacts between buyers and sellers. Accordingly, every element of industry is regarded as having been produced for sale, as then and then only will it be subject to the supply-and-demand mechanism interacting with price” (Polanyi, 1968, p. 31)

For Polanyi then, true commodities are products and services that are originally produced for their exchange-value in the market. But there are many products and services, such as

communally-owned lands or affective care within households, that can be made to respond to the laws of supply and demand but which were never intended to be bought and sold in the market. For Polanyi such products and services are fictitious commodities, or false commodities, because although they can be commodified into exchange-value in the market, the fact that they were never intended for such a purpose in the first place creates unforeseen social consequences should they be turned into commodities (Polanyi, 1968).

In addition, Polanyi distinguishes between two classes of fictitious commodities; land-nature and labour which are inherently tied to people's social identities, and a third, money, which is a medium of transaction that was not meant to become a commodity in-itself (Polanyi, 1968). For Polanyi, the degree of commodification of these fictitious commodities acts as an indicator for the degree to which the economy is embedded in society. This is because the rise of a disembedded self-regulating market economy takes place through this commodification process, i.e. privatization. This commodification of fictitious commodities gives rise to a self-regulating market in property and rent (of land-nature), human activity (labour), and financial capital (money). The full commodification of these fictitious commodities is an indicator of the creation of a market society through the rise of market economy (Polanyi, 1968; Polanyi, 2001).

Polanyi's three categories of fictitious commodities provide the basis for constructing an analytical framework based on the operationalization of the key themes of food sovereignty, into explanatory variables within a broader structural framework of the

modes of economic integration and the dis-embedding of the economy from society. The next section will examine these three analytical concepts more closely and determine their relationship to the food sovereignty argument.

2.4.1. Land - nature

In terms of Land-nature as fictitious commodity, Polanyi explains that, “land is another name for nature, which is not produced by man” (Polanyi, 1968, p. 32); therefore it cannot be viewed as a real commodity. Land-nature is the primary basis for the production of use value for human livelihoods (Polanyi, 1968); furthermore it is the material dimension that social realities of culture, relationships and constructions of reality are rooted in (McNally, 2006). As Polanyi explains, land-nature is autonomous from the exchange-values placed on it by the market, since as an element of nature that is crucial for the most basic subsistence of human beings, its use forms the basis for humanity’s existence. Since it is not “produced for sale on the market” (Polanyi, 2001, p.75) to begin with, it can be used sustainably to meet social needs, or overused to maximize exchange value where it can jeopardize the entire human-nature relationship which markets rely on. As such, land and nature do not fit into Polanyi’s empirical definition of a true commodity (Polanyi, 1968).

The unregulated exchange of land, in the form of rent and sale, in a market economy has the potential to disrupt society at its most basic primary level; the economic

relationship between humanity and nature threatens to become unsustainable when it is put under the command of the market. This disruption applies not only to land itself, but also to the unsustainable extraction of natural resources from the land (Polanyi, 2001; McClintock, 2010). Similarly, two of the key themes of the Six Pillars of Food Sovereignty, localizing food systems and adopting sustainable methods of agricultural production (Patel, 2012), reinforce the intricate relationship between humanity and nature by prioritizing the actual use value of land in localized food production, over its disembodied exchange value in the market, as well as changing the mode of production to sustainable methods in order to harmonize society's material needs for production with the limits of what nature can provide.

On a secondary level, the commodification of land also has the potential to destabilize society by introducing or entrenching social hierarchies through disproportionate ownership schemes for land which can lead to social volatility if land ownership is strictly tied to market prices in land rather than in social institutions (Polanyi, 1968; Polanyi, 2001). Moreover, four of the Six Pillars of Food Sovereignty (food production for human consumption, localization of food systems, local control of resources, working with nature) are rooted in the argument for egalitarian reforms of agricultural lands (Rosset, Sosa, Jaime & Lozano, 2011). Synergistically, this argument for the de-commodification of land also conforms to Polanyi's prescription of re-embedding markets, i.e. land, back into social institutions; in this case the redistribution of land back to small-scale, peasant, and farm family food producers who make actual use

of it by generating use value, i.e. nurturing and sustaining communities, as well as the natural environment (Rosset, 2009a; Patel, 2012).

2.4.2. Labour

In his work Polanyi articulates labour, as well as the concept of class, within the broader concept of culture (Polanyi, 1968). One reason for this is because for Polanyi, labour cannot be reduced to a parsimonious economic variable without reducing its explanatory power in accounting for social phenomena and so he contends that all of labour's social elements must be taken into account, not just its status as a source of economic productivity. This includes subjective values that can include non-economic motives such as a sense of social responsibility, communal pride and human dignity (Polanyi, 1968). This culturalist approach marks a distinction between Polanyi's conception of labour and that of the classical economic theory or other political economy traditions, which focus exclusively upon the economic role of labour in the process of generating profit. Synchronously, Polanyi's culturalist conception of labour corresponds to the other two of the Six Pillars of Food Sovereignty: the legitimization of small-scale food producer's labour (value) and the legitimization of traditional sustainable food production knowledge and skills, along with the movement's broad-spectrum demand for culturally appropriate food and food production methods (Altieri & Toledo, 2011). Within Polanyi's conceptualization of labour, subjective factors such as societal value, communal esteem and pride in food production and consumption are on par with labour's economic

function. The indivisibility of subjective social factors from economic ones is further emphasized by Polanyi's remark that "for the alleged commodity "labour power" cannot be shoved about, used indiscriminately, or even left unused, without affecting also the human individual who happens to be the bearer of this peculiar commodity"(Polanyi, 1968, p.33).

Moreover, Polanyi's articulation of labour through culture reflects his argument that culture is the medium that maintains and reproduces the institutions of society; these societal institutions are fully capable of sustaining peoples' livelihoods and in keeping market forces, should they develop, in check (Polanyi, 1968; Polanyi, 2001). This argument is reflected in the Food Sovereignty paradigm's assessment that sustainable agrarian reform and ecological recovery are the driving forces (McMichael & Schneider, 2011) of development since they strengthen communities; build sustainable livelihoods, as well as larger societies that can maintain human and ecological wellbeing.

Additionally, Polanyi explains that the encroachment of the market economy within the context of any given culture has the potential to unsettle or completely undermine its previous systems of livelihoods and communal practices inherited across generations (Polanyi, 1968). As Polanyi states,

"These institutions are disrupted by the very fact that a market economy is foisted upon an entirely differently organized community; labor and land are made into commodities, which, again, is only a short formula for the liquidation of every and any cultural institution in an organic society" (Polanyi, 1968, p.49).

From Polanyi's position, cultural resources protect societies from the destabilization that market forces introduce. Therefore embedding labour into society as a component of cultural practice, as opposed to relegating it as a dis-embedded unit of the economy, is essential for societal wellbeing. This is why Polanyi finds "cultural degeneration" (Polanyi, 1968, p. 49) through the commodification of labour and the subsequent loss of previous ways of life a greater travesty than the imbalances of economic exploitation, for once "robbed of the protective covering of cultural institutions, human beings would perish from the effects of social exposure; they would die as the victims of acute social dislocation through vice, perversion, crime, and starvation" (Polanyi, 2001, p.76). Cultural and political institutions then, are crucial for keeping the market embedded within society.

Using Polanyi's frame of analysis, Mark Blyth (2005) contends that the underlying basis for the advancement of post-World War II welfare state-led development projects in Western nations was based on a socioeconomic convergence towards social democratic outcomes, where "Social democracy emerged then as a reaction to the market, with decommodification as its core strategy...through the deployment of a series of decommodificatory institutions" (Blyth, 2005, p. 383). While Blyth lists monetary control, credit creation policies and regulations as the key decommodificatory institutions for embedding the economy back into society, a detailed reading of Polanyi's theories, as above, also indicates the centrality of cultural institutions and practices for keeping market forces in check and further engraining these institutions as cultural values. Therefore notions such as communal pride, social dignity in other words, are not

epiphenomenal subjective factors, but rather key components that form the normative basis of values that maintain social cohesion, which people orient their lives around.

2.4.3. Money

The third fictitious commodity, money, is a unique topic of discussion. As Polanyi explains, “actual money...is merely a token of purchasing power which, as a rule, is not produced at all, but comes into being through the mechanism of banking or state finance” (Polanyi, 1968, p. 32). This observation is based on Polanyi’s theory of the “purchasing power economy” (Polanyi, 2001, p.206) as an alternative to Ricardo’s theory of money as a holder of gold value in token form that can be bartered and exchanged just like any other commodity (Polanyi, 2001, p. 205). In Polanyi’s ideal-type of an economy based on money, money itself does not hold any value, nor does it exist as a representative token of the value of another commodity such as gold (Polanyi, 2001, p. 205-206). Rather, money is a token for purchasing power, a means of payment, not a holder of commodity value. To illustrate this point, Polanyi presents the following scenario:

“Let us try to imagine a “society” in which every individual is endowed with a definite amount of purchasing power, enabling him to claim goods each item of which is provided with a price tag. Money in such an economy is not a commodity; it has no usefulness itself; its only use is to purchase goods to which price tags are attached...” (Polanyi, 2001, p.206).

Interestingly, the assumptions of Polanyi's purchasing power model, such as the endowment of purchasing power, appear to also correspond to Sen's theory of entitlements, which we will examine in later chapters. Both theories focus on the ways that monetary transactions are used as use values to meet social needs.

From the perspective of Polanyi's purchasing power theory of money then, money as a medium of financial transaction does not possess the qualities of a commodity, as empirically defined by Polanyi as being something that is bought and sold itself. Money is the means through which such a transaction is enabled to take place. In his historical analysis of the crises of the free market order prior to World War II, Polanyi made a distinction between the traditional systems of token money used for exchange in local economies, and the rise of commodity money in the form of the global Gold Standard (Polanyi, 2001). While nations were able to retain control of their domestic currencies in which money did act as a simple token for purchasing power, "foreign trade and the gold standard had undisputed priority over the needs of domestic business" (Polanyi, 2001, p. 203), particularly since the supply of gold within any specific nation could not be increased or decreased at will, but had to conform to global standards through mechanisms such as currency devaluations. For Polanyi this raised a key problem: "commodity money was vital to the existence of foreign trade; token money, to the existence of domestic trade. How far did they agree with each other?" (Polanyi, 2001, p. 203). Polanyi answers this question by noting how "with the disintegration of the gold standard, commodity money practically ceased to exist, and it was only natural that the

purchasing power concept of money should replace it” (Polanyi 2001:206), corresponding to the rise of autarchy during the interwar period. Additionally, Polanyi’s central argument in *The Great Transformation* (1944) is twofold. First, the rise of a disembodied self-regulating global market economy based on the gold standard at the turn of the twentieth century created social tensions which developed into the political crises that gave rise to fascism across Europe. Second, the underlying basis for these crises were due to the fact that any self-regulating market economy is inherently unsustainable (Polanyi, 2001). It is possible to draw parallels between Polanyi’s observations about the ascent of the global self-regulating market economy and the many global crises that have marked the twenty-first century thus far. This has also been the era that saw the birth of the food sovereignty movement, and its demand for regulated markets can be seen as a response to the global monetary order, which is in line with Polanyi’s observations of the societal response that re-initiated the de-commodified token conception of money after the collapse of the gold standard-based liberal monetary order in the earlier part of the twentieth century (Polanyi, 2001).

2.5 Operationalizing the Food Sovereignty Discourse into analytical categories

Karl Polanyi’s theoretical concepts provide a useful framework for operationalizing themes from the Food Sovereignty paradigm. As we have seen the key arguments made by food sovereignty converge on the central antagonism between the interests of small-scale food producers and consumers, set against the commercial

interests of industrial agriculture, open markets and unregulated trade in food as a commodity. Much like the fictitious commodities of land-nature, labour and money, Polanyi's conceptual framework challenges the commodified status of food as it is the very lifeblood for livelihoods. Polanyi's framework also encourages a clearer articulation of this antagonism within a broader structural scope, as the tension between markets and societies. First, Table 2 frames the Six Pillars of Food Sovereignty into the context of Polanyi's fictitious commodities. These six pillars will then be tested in chapter four, to see if during the special period Cuba fulfilled the criteria to achieve food sovereignty.

Table 2. Association between Fictitious Commodities and the Six Pillars of Food Sovereignty

Fictitious commodity	Six Pillars of Food Sovereignty
Land-Nature	Localize Food Systems (local production for local consumption). Put Control Locally (localized, small-scale, sustainable food production). Work with Nature (ecologically sound food production methods only) .
Labour	Value Food Providers (legitimate the role of small-scale food producers to social wellbeing). Build Knowledge and Skills (of traditional cultural practices and agroecological food production methods).
Money	Focus on Food for People (which requires de-linking the value of food as a human necessity from its commodity value that is

	expressed via money and currencies in global commodity market trade).
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Referring to Table 2, it is possible to see that most of the prerequisites for the food sovereignty criteria involve the de-commodification of land, which is central to both the food sovereignty agenda and Polanyi's argument that de-commodification of fictitious commodities is essential to shielding society from the instability of free markets (Polanyi, 2001).

By and large, Polanyi's key heuristic – fictitious commodity – allows for an analytical assessment of the degree to which the market is embedded within a given society and whereby the degree of embedded-ness acts as an indicator of how a given society has been structured, i.e. whether it is structured to primarily meet the needs of citizens or the needs of markets. In order to arrive at such an analytical framework however, we must proceed to further operationalize Polanyi's three fictitious commodities along a scale ranging from examples of full commodification of a given fictitious commodity, denoting its dis-embedment, to the other extreme of full socialization of the fictitious commodity. Table 3 provides an overview of the range of commodification of fictitious commodities.

Table 3. Commodification/Socialization Scale for Fictitious Commodities

Fictitious Commodity	Full Commodification	Semi-commodified /Semi- socialized	Fully De-commodified / Socialized
Land-Nature	Privatization of natural resources (i.e. land grabs)	All public and most private land holdings as state property	Communal property and resource stewardship
Labour	Wage-labour as the primary or only means of livelihood	Wage-labour and public provisions as equal sources of sustenance	Household/communal subsistence production predominate
Money	Money commodity in unregulated stock and financial markets (i.e. speculation, currency devaluation)	Money use limited to investment (industrial capital) and purchasing power	A gift-based economy (i.e. system of exchange) based on the notion of reciprocity

Referring to Table 3, it is evident that the full commodification of all three fictitious commodity categories of land-nature, labour, and money, which is central to the neoliberal market-led development agenda (Harvey, 2005; Saul, 2005; McNally, 2006), is

correlated with Polanyi's market society that he argues is the most volatile of the three society types because the market is fully disembedded and can devastate society (Polanyi, 2001).

It can be argued that this analysis offers a fair explanation for the various crises that have so far shaken the twenty-first century, where most countries have become free market societies to varying degrees. For instance, prior to the special period, Cuba would have fallen under the semi-commodified category. The semi-commodified/semi-socialized manner in which the fictitious commodities of land, labour, and money were put to use in the "actually existing" socialist states, as a defining feature of the system of central planning, hence the term "socialization" as traditionally applied for characterizing the centralization of economic sectors under central planning in fact refers to, in our framework, to semi-commodified/semi-socialized ideal-types. Within our analytical framework, socialization refers to an ideal-type characterized by societies in which the use of the three fictitious commodities is decentralized and often placed under localized forms of decision-making in regards to reciprocal social obligations towards resource allocation. In the case of Cuba's transition away from central planning while formally eschewing the free market, the food shortage crises of the special period did not allow Cuba's transition towards the full socialization of the fictitious commodities since regulated free markets were needed to activate new entitlement channels (Sen, 1981) to allow for the streamlining of resource allocation. These markets were re-opened in 1994 in efforts to undermine the informal economy and offer incentive to agricultural

producers to increase productivity, as they were permitted to sell surplus food products on the free markets (Gürcan, 2014). As for the full de-commodification/socialization of fictitious commodities, there has not been a social system, current or historical, that has been able to conform to this mode where all three fictitious commodities have been collectively maintained; therefore the example for this mode is derived from a cross-cultural example of the gift economy of the Trobriad islanders, which has been intensively analyzed by Polanyi (Polanyi, 2001).

Having further operationalized Polanyi's three fictitious commodities along a scale of commodification, we have constructed an analytical framework for assessing the relationship between markets and societies. Along with our operationalization of the Six Pillars from the Food Sovereignty paradigm into the categories of fictitious commodities, this analytical framework will be used to evaluate the degree to which Cuba's system of urban agriculture during the special period conforms to the mandate set forth by the themes of the food sovereignty argument.

The following chapter offers a literature reviews of the core arguments surrounding the food security versus food sovereignty debate, the causes of food insecurity, as well as central concepts including the concept of food security, food sovereignty, agroecology, and urban agriculture. Finally, the chapter will cover some significant background details regarding the Polanyian framework, followed by an overview of Cuba's historical context and its relevance to the Polanyian framework.

Chapter 3

The Relationship between Food Insecurity and Development Agendas: A Literature Review

This chapter is a literature review examining the relationship between markets, development projects and food insecurity, which is critical for comprehension of the Food Sovereignty paradigm.

3.1 Development Agendas Directly Impact Food Insecurity

The twentieth century saw the growth of a massive surplus in global food supplies, as well as in wealth across nations (Gardner & Halweil, 2000). Paradoxically, this trend corresponded with the rise of global hunger and malnutrition at a pace that had never been seen before, and in 2000, the World Health Organization (WHO) approximated that about 3 billion people from then-global population of 6 billion, lived with some level of malnutrition (Gardner & Halweil, 2000). Having been left unaddressed, a decade and a half later the issue has turned into full-grown global food crises. Many academics contend that these food crises are one branch of the ongoing financial crisis that is rooted in the neoliberal market-led development model (Harcourt, 2008; Roberts, 2008; Bello, 2009b).

In the era of neoliberalism the notion of development is often tied to the advancement of the neoliberal free market agenda, yet this has not always been the case. There are various ways to approach the idea of development; within the field of development studies however it is generally accepted that development is a human-made project, often backed by various forms of capital and special-interests, rather than as an evolutionary process of culture or societal organization (Veltmeyer, 2007). Originally, development was approached as a method to advance the human condition by promoting economic growth (Veltmeyer & Rushton, 2013). The notion of development as project began to take form after World War II as nation-states worked to rebuild war-ravaged countries and to advance particular political aims. Consequently, development projects were initiated by both capitalist and socialist societies, often under the banner of human development (Veltmeyer & Rushton, 2013). As Ha-Joon Chang (2004) explains, the role of the state has been pivotal to the initiation and management of development projects that defined the rationale, structure and direct economic functions of development initiatives (Chang, 2004). The post-World War II era was a time of great change, not only was the first tangible socialist project expanding from within the Soviet Union, but so too were capitalist development projects that aimed to advance capitalist economics (Chang, 2004). The 1950s and 1960s saw massive decolonization efforts take place among countries in the Global South; consequently capitalist nations in the Global North began pushing for the creation of human development projects to offer decolonizing countries an alternative to the socialist development model being promoted (Veltmeyer & Rushton, 2013). Post-World War II governments across the globe were concerned about the

positioning of workers - who became highly prioritized by governments due to the view that the advancement of fascist ideology that had led to the Second World War was rooted in the occurrence of the Great Depression, which had undermined economic and social stability across the world, particularly for the working classes (Chang, 2004). This awareness promoted the utilization of Keynesian economic which aimed to improve living conditions throughout society; this included intervention by governments to promote the availability and accessibility of food within nations, as well as the promotion of public ownership of national resources (Roberts, 2008). Consequently the advancement of Keynesian economics through policy initiatives led to what has been called the “Golden Age” of capitalism (Chang, 2004, p. 19). Within industrialized countries, this economic model was implemented by means of greater regulation of the private sector and market mechanisms (Saul, 2005; Davidson, 2009), government spending on public services, as well as the enactment of higher wages and progressive taxation that not only funded public spending measures but also enabled the majority of the population to participate as consumers in the economic process (Veltmeyer, 2007).

Similarly, the implementation of such measures was quite visible in many industrializing countries where states had become more heavily involved in economic and social organization (Chang, 2004). Consequently in most cases in the Global South, industries and businesses, including banks, were owned by states, i.e. the public sector. Chang argues that the state’s management of the economic sector is a major contributing factor to the high rates of economic growth that occurred during this period of

development within countries of the Global South (Chang, 2004). Development scholar Henry Veltmeyer explains that this was indeed the case,

“In the 1950s, 1960s and into the 1970s, the structured inequalities in income distribution were on the decline, the result of an economic model and developmental states that slowly incorporated workers, producers and the middle class into the economic development process, providing improvements in their access to society’s productive resources and to government social and development programs” (Veltmeyer, 2007, p.30).

The human and social gains made during this post-World War II Golden Age of state-led development were many (Saul, 2005; Veltmeyer, 2007), but did not last after state-led development was abandoned in 1970 and a model of market-led development was embraced, which was then globalized in the 1980s (Petras & Veltmeyer, 2003). As James Petras and Henry Veltmeyer explain,

“Comparing the 1960-80 period (under the old model of state-led development) to 1980-2000 (under the neoliberal order), the Washington-based Centre for Economic and Policy Research looked at changes in economic growth, plus health, education and other social indicators, for 116 countries. After sorting countries into five categories based on common starting points, they found that economic growth rates for all five groups were much lower in the second period than the first. In fact, the poorest group went from average per capita GDP growth of 1.9 to - 0.5 percent a year. ... The study also found that progress in health and

education indicators, so marked in the first period (see Patel 1995) was reduced for most countries, especially those subjected to neoliberal policy and structural reforms. In this connection poverty is bound to rise and has done so, as the state retreats from its economic development and social welfare role, and social programs are privatized” (Petras & Veltmeyer, 2003, p.5).

This point is highly significant since health and education are major indicators of social progress; therefore their global decline suggests living standards are also on the decline, which has been abundantly documented in endless UNDP Human Development Reports (UNDP, 2014). Furthermore, food insecurity is directly linked to poverty, since the well-off rarely face hunger or the fear of hunger (Ziegler, 2013). Some academics argue that the lack of economic growth during this free market era has to do with a shift in priorities, which followed the empowerment of the private sector;

“The shifting of market energy to the servicing of its own debts related in good part to the restructuring of corporate ownership rather than investment in new or developing areas. This may be one of the keys to understanding how little real growth there has been during the era of Globalization in spite of a market awash in money” (Saul, 2005, p.84).

Additionally, Veltmeyer and Rushton argue that a major factor behind this shift was the fall of the Soviet Union in the 1980s, which meant that the capitalist development model did not need to compete with the socialist development model and so it abandoned its human-based state-led development approach and embraced a market-led development

model (Veltmeyer & Rushton, 2013). Consequently the shift from state-led development to market-led development undermined the human development project that had been in place, as new free market policies reduced the role of the state in regulating the economic sector and its role in building and sustaining societal infrastructure, which had acted as the fundamental groundwork in protecting the wellbeing of populations and enhancing human welfare globally (Veltmeyer & Rushton, 2013). Furthermore, the IMF's Structural Adjustment Programs (SAPs) that accompany IMF loans to nations, work to restructure societies to enable free market function; this includes creating free capital flow by deregulating markets, devaluing domestic currencies, dismantling social safety nets, as well as decentralization and privatization of publically owned resources (Harvey, 2005; McNally, 2006; Veltmeyer & Rushton, 2013). As Jean Ziegler, the former United Nations Special Rapporteur on the Right to Food explains,

“Today it is the WTO, the IMF, and the World Bank that determine the economic relations that the dominant countries maintain with the peoples of the South. But in matters of agricultural policy, these organizations faithfully obey the diktat of private multinational corporations. This is why the FAO and the WFP, which were originally founded to combat extreme poverty and hunger, no longer play, in comparison to the corporations, anything but a vestigial role” (Ziegler, 2013, p. 112).

This is one reason why the current food system has been labelled the “corporate food regime” (Holt-Giménez, 2009b, p. 1), because under market-led development the

agricultural sector is no longer structured and maintained by the state but by the private sector; similarly it no longer caters to population needs but to market demand (Ziegler, 2013).

In order to understand the rationale for the priorities leading the neoliberal free market agenda, it is helpful to consider the social and economic assumptions that drive this school of thought. Most academics refer to this market-led development model as neoliberalism, or as globalization (Harvey, 2005; Saul, 2005; McNally, 2006; Veltmeyer, 2007). In general, neoclassical economics aim to reduce the role of the state in order to create free markets (Gamble, 2009). Within neoclassical economic theory, the underlying economic assumption is that the market is autonomous and self-regulating, suggesting that state intervention in the function of the market is a hindrance that prevents the market from functioning at its full potential (Harvey, 2005; Gamble, 2009). However, the assumption ignores the fact that “markets are not neutral” (Murphy, 2008, p. 528).

There are several key features of neoliberal economics; these include deregulation of the economic sector, privatization of state-run institutions and facilities, reduction in state function and the establishment of free markets (Hunt, 1989). Similarly, privatization of state-run services or the public sector is done with the fabricated assurance that the private sector will improve the efficiency of how funds are managed (Gamble, 2009). Proponents of neoliberalism argue that the allocation of public assets to the private sector is the best way to ensure that society’s wealth will be properly invested (Hunt, 1989). However, Veltmeyer explains how this is a fallacy;

“Countries at every level of per capita GDP performed worse during the neoliberal era than in the two preceding decades. The only exceptions to this trend were in a group of Asian newly industrializing countries (the World Bank’s “eight rapidly growing countries,” notably China but also India), whose governments continued to pursue an essentially interventionist approach, eschewing neoliberal policies in their path towards national development” (Veltmeyer, 2007, p. 24-25).

Regardless of the evidence, the neoliberal development model continues to reduce the role of the state, ensuring that the state’s primary function is to establish the prerequisites required to sustain a free market economy, which is done through institutional legitimization of neoliberal values and ideologies where the rights of corporations and other private interests outweigh the rights of individuals or communities (Harvey, 2005).

Critics of the market-led model argue against the neoliberal claim that state intervention is detrimental to economic development by referring to the historical processes through which the state has played a crucial role in economic development (Veltmeyer, 2007). As economist Paul Davidson (2009) contends,

“The existing international trade and payment system permits, and actually can encourage, the spread of such depressionary forces globally. The 1944 Keynes Plan was deliberately designed to prevent the spread to other nations of a recession and failure of financial markets that might occur in any one nation. It is time to think about how we can reform the international payments system to prevent future contagion from occurring” (Davidson, 2009, p. 133).

Likewise, the implementation of such measures was quite visible in many industrializing countries prior to the advancement of neoliberal market-led development. Additionally, Chang's work reveals that since the initiation of development projects after World War II, state intervention has been proven to be necessary for the advancement of public wellbeing (Chang, 2004). Moreover removing the state from the management of basic need resource allocation, in the name of efficiency, is highly problematic if the intention of policy is to improve living conditions (Chang, 2004). Academics also point out that since the globalization of the neoliberal free market development agenda, societal issues such as unemployment, underemployment, poverty, hunger, illness, and ecological devastation have all increased (McNally, 2006; Veltmeyer, 2007; Gamble, 2009). As John Saul explains,

“The most obvious failure of Globalization has been its incapacity to maintain employment. The entire global period has been one of high unemployment, with the numbers running ahead of population growth. In 1973 the OECD had 10 million unemployed job seekers.⁶ By 1979 this was 18 million. Through the 1980s the numbers ranged from 29 to 30 million. During the 1990s it was mainly in the mid-30s. Already in the new century it is rising towards 40 million ... And this is happening even though employment statistical methods have been constantly redefined since the 1970s in order to minimize the figures” (Saul, 2005, p.146).

And in terms of food insecurity, the advancement of neoliberalism has seen global increase in export and import of food products in every country, which according to the food security framework ought to have reduced food insecurity greatly over the last thirty years since it increased food availability year round on the market (Bello, 2009b). However rising global poverty means that many people can no longer afford to buy the food that fills store shelves (Ziegler, 2013). Furthermore the restructuring of the agricultural sector to industrially produce export crops rather than staple food crops for local consumption has led to the loss of local sustainable agricultural food production capacity and the destruction of food producing communities, which has rendered all nations dependent on food imports (Bello, 2009b). This is illustrated by the fact that since the 1990s, regardless of the World Bank and IMF's stance against poverty, global poverty has reached record levels (Veltmeyer, 2007; Ziegler, 2013), and the 21st century has been marked by the largest global recession since the Great Depression of 1929 (Bello, 2009a; Gamble, 2009), which has been accompanied by multiple global food crises (Ziegler, 2013).

Despite neoliberal arguments that these global hardships can be resolved through market-solutions, many academics argue that human development cannot occur without state intervention in market function, through the re-introduction of market regulation (Davidson, 2009; Ziegler, 2013). This approach was untaken during the Great Depression, for example with Franklin Roosevelt and John Maynard Keynes's New Deal, which prioritized the needs of the agriculture sector workers in order to establish an

abundant food supply. Measures such as job creation, heavy regulation of the banking and financial sectors, among others, also helped to alleviate the brunt of the Great Depression (Schlesinger, 1958). This approach was seen again after World War II with the advancement of Keynesian state-led development model to rebuild post-war Europe (Mee, 1984; Davidson, 2009).

Despite the fact that the neoliberal argument has failed to produce much evidence to support its claims of improving living standards for the majority, the neoliberal globalization project has been in full force since the 1990s, particularly after the formation of the World Trade Organization (WTO) (Madeley, 2002; Saul, 2005; Roberts, 2008). As John Madeley (2002) explains,

“While WTO rules permit developing countries to place some tariffs on agricultural imports, the structural adjustment programmes of the World Bank and the IMF may prohibit them from doing so. A country’s WTO commitments cannot therefore be separated from obligations to other international bodies” (Madeley, 2002, p. 119).

The inconsistencies between the conditionalities of the international economic institutions have grave implications for countries seeking assistance from them, as they are already in a compromised position economically;

“The full WTO package includes three changes for the worse: deregulation (an end to government laws that favor local companies or restrict competition, for

example); privatization (sell-off of public lands, buying up patents of regional seeds, closing government warehouses that help small farmers, for example); and a distorted form of free trade (exports from government-subsidized farmers in Europe or North America to the Global South are allowed, but many unsubsidized Southern foods are banned in Europe or America for safety reasons). Until the formation of the WTO, no international trade body intervened so extensively in the food and agriculture policies of any country, because food was considered a public security matter that all governments needed to plan for, and because food was so central to the income levels and food access of a huge majority of the world's population" (Roberts, 2008, p.54).

Development as a project requires social as well economic and institutional change (Veltmeyer, 2007). Therefore it is important to examine the institutions and organizations that enable particular types of change, while preventing other forms from emerging. Paul Cammack (2003) makes the argument that the global development project, which is currently underway, is rather singular and that it is being pursued by particular international actors (Cammack, 2003). Additionally, Cammack explains that these international economic institutions are promoting a "global governance" (2003, p. 37) system of finance that upholds the interest of private groups, enabling them to monopolize international markets and establish a hegemonic order through which they can prescribe the economic aims and policies that countries are expected to follow and restructure their economies around (Cammack, 2003). The author explains that these

international institutions enforce the deregulation of markets, liberalization of capital flow, and privatization of publicly owned goods and services, while reducing the states' functional capacities and regulatory powers (Cammack, 2003).;

“The new economic model of structural reform was widely implanted in the 1980s and the 1990s with the promise of a new dawn – entry into the road to prosperity paved by foreign investment attracted by a market friendly approach towards national development. By the end of the 1990s, however, after three rounds and two decades of experiments with neoliberal policy reforms, the Promised Land was receding into the horizon. First, neoliberalism failed utterly to deliver on the promised economic growth. Harvard University economist Dani Rodrik (1997), no radical political economist, cites dismal growth performance during the 1990s as the most damaging evidence of the failure of neoliberalism. The facts are clear: two decades of neoliberalism failed to generate economic growth. Worldwide, an annually averaged per capita growth rate over the preceding period of state-led development and interventionism was reduced by half, from 3 to 1.5 percent in the industrialized countries ...” (Veltmeyer, 2007, p. 24).

Considering the lack of credibility that the neoliberal market-led development model has produced, it is not surprising that many development researchers argue that in practice these international actors are inhibiting sustainable human-based development (Saul, 2005; McNally, 2006; Veltmeyer, 2007; Ziegler 2013). As food sovereignty scholar Eric Holt-Giménez (2013) contends,

“Infinitely unregulated markets would eventually destroy both society and the natural resources that the [food] regime depends on for profits” (Holt-Giménez, 2013, p.2)

Moreover, decades of research demonstrate that there is a causal relationship between the food crises that continue to unfold and the prevailing free market development agenda that has come to define and organize the international market structure.

3.2.0 Causes of Food Crises and Food Insecurity

The period preceding 2007 was marked by global crisis in the energy and financial sectors, as well as in global food insecurity. Although national and international agencies have created programs to address the rising poverty and hunger through the food security framework, these initiatives have called for greater protection of corporate power, for expanding free markets and increasing privatization measures of agricultural lands and other natural resources, which have created the current corporate food regime and the rise in global hunger that has resulted (Holt-Giménez, 2009a). The ongoing global food crisis is the outcome of the interrelating factors, primarily the “economic volatility of the corporate food regime” (Holt-Giménez, 2009b, p.4), which Holt-Giménez contends began to accumulate in the 1980s with the advancement of neoliberal globalization that enabled corporations to monopolize the global food supply, which also intensified social inequality and environmental destruction (Holt-Giménez, 2009b).

As discussed in chapter one, research strongly indicates that the global food supply is plentiful (Poole-Kavana, 2006; Ziegler, 2013); even taking natural disasters into consideration, studies clearly establish that there is currently enough food to end global hunger. Having explained the myths about global hunger in chapter one, this section will look at the causes of the current food crisis and growing global food insecurity.

3.2.1 Market Speculation

One major factor behind the multiple global food and energy crises that have risen since 2007 is the deregulation of international commodity markets, which has allowed for greater speculation of food commodities (Altieri & Toledo, 2011). Food commodities include staple crop foods, which make up about 75 percent of the world's human diet (Ziegler, 2013), and which populations rely on for basic subsistence. Speculators include investment banks and hedge funds, among others (Ziegler, 2013).

In 2008, speculation on food commodities, including staple crops, created an abrupt rise in food prices and drove about 150 million additional people into material devastation, setting record levels of global hunger, which led to protests in thirty-seven countries (Ziegler, 2013). This global food crisis overlapped with “record harvests and record profits for the world's major agrifood corporations” (Holt-Giménez, 2009a, p. 143). Even the World Bank acknowledged that the world's food prices had risen by 83 percent from 2005 to 2008 (Holt-Giménez, 2009a). However instead of acknowledging

that the rise in food prices was rooted in the financial sector, the World Bank argued that it was a sign of global food shortages and proceeded to promote a new Green Revolution (Holt-Giménez, 2009a).

Regardless of the public outcry, in 2011 food speculators did this again, causing the sudden rise of already high food prices (Ziegler, 2013) and destroying the livelihoods and wellbeing of more than 2 billion people who were forced into poverty (UNDP, 2014). Ziegler argues that speculators do not differentiate between agricultural commodities and other commodities; speculators comprehend the possible outcomes of their actions but since their objective is to drive a quick profit, “They show no particular consideration for the consequences that their activity may have on millions of human beings as a result of increased prices” (Ziegler, 2013, p.213). Additionally, Ziegler explains that within a globalized international market structure, the actions taken by food commodity speculators impact all nations;

“And if a billion people suffer from hunger, it is not because the world does not produce enough food, but because the powerful hold a monopoly on what the Earth provides. In this finite world of ours, in which there are no new places left to discover, nor any new lands left to conquer, the monopolizing of the Earth’s bounty takes on new meaning. It is an immense scandal. The lords of the agri-food markets and the agricultural commodities exchanges decide everyday who on this Earth will live or die. They are filled by only one obsession: profit” (Ziegler, 2013, p.243-244).

Similarly, food scholar Peter Rosset explains that speculators profit from the volatile food prices, both when the food price goes up and when it comes down;

“...they bet like gamblers in a casino - gambling, in this case, with the food of ordinary people. These funds have already injected an additional 70 billion dollars of extra investment into commodities, inflating a price bubble that has pushed the cost of basic foodstuffs beyond the reach of the poor in country after country. And when the bubble inevitably bursts, it will wipe out millions of food producers throughout the world” (Rosset, 2008, p. 461).

International organizations have taken notice of the vicious cycles of food commodity speculation, as the European Union has begun to put forth policies to regulate food commodity speculation (Neate, 2014). Ziegler urges for state intervention to protect food agricultural products from market speculation;

“... make the right to food a priority, to remove food from the realm of market speculation, to protect subsistence agriculture in the name of national heritage and invest in improving it worldwide” (Ziegler, 2013, p.247).

This is also the stand that food sovereignty movement has taken, calling for agriculture to be removed from the WTO's agenda (Jonasse, 2008).

3.2.2 Food Prices

Since the establishment of the WTO in 1995, agricultural sectors across the world have been reformed to fit into the free market design. This means that the agriculture sector has been transformed, as the World Bank and IMF, working with the WTO, impose new structural adjustment programs (SAPs) that require loan receiving governments to privatize public assets including agricultural marketing boards, as well as enterprises that oversee grain reserves (Rosset, 2008). This enables the expansion of agriculture-based industries that are owned by private corporations; as a result corporations gain control of not only food production but food processing, packing, and distribution mechanisms as well (Roberts, 2008). As a recent report by *Food First* and *La Via Campesina* explains, this monopoly of agricultural production by a handful of Transnational corporations enables agricultural commodity chains, which control the agricultural market, set prices and dictate costs that reap profits from farmers as well as consumers. Consequently agriculture has become unviable for many farmers (Holt-Giménez, 2008). The outcome has been the loss of national food sovereignty as nations are made vulnerable to the possible occurrence of crisis since they do not have sufficient, if any, food reserves to meet their population needs. Rosset explains that this dependency of nations on imported food to meet population needs has left them exposed to fluctuating food prices, which are set by the agri-business TNCs; this in turn has left populations vulnerable to hunger and national food insecurity (Rosset, 2008).

Furthermore, under the neoliberal globalization model, all nations are impacted by the volatilities of food prices, which are set by a small number of corporations that now are the decision making body that determines the price of food products on the market (Rosset, 2008). The lack of price controls on food commodities is the major cause of the rise of food prices globally (Ziegler, 2013); as research has established, the price has nothing to do with food scarcity. Furthermore, speculation of agricultural commodities is the leading cause behind the rise of food prices (Ziegler, 2013).

3.2.3 Land grabbing

Land grabbing refers to the process of transferring publically owned lands, particularly agricultural land where countless communities of small-scale farmers are situated, to private investors or private interest groups (Holt-Giménez, 2013); leads to the uprooting of food producing communities who then become displaced migrants (McNally, 2006). Land grabs require the commodification of land, which occurs with the creation free markets, through deregulation, and the creation of national laws that allow for communally-owned lands to be expropriated by private investors (McNally, 2006),

“This is the “drilling down” of investment capital in which land grabs—whatever their form— are simply one part of a larger reconfiguration of rules, markets and landscapes. The “grab” is one link in a long chain of larger political and economic transformations called *territorial restructuring*.⁷” (Holt-Giménez, 2013, p.2).

Territorial restructuring refers to the transfer of control from the public to the private entity, which then has control over the institutions, the rules and social relations that influence production. The ultimate goal of this process is “to extract wealth” (Holt-Giménez, 2013, p.2) from the combines of land and labour (Holt-Giménez, 2013).

Additionally commodity speculation, which includes food speculation as well as land speculation, is an integral part of the land grab phenomenon since market demand is believed to be one of the key forces driving land grabs (Holt-Giménez, 2008). Food First researchers explain that during the 2008 food crisis, TNCs began large-scale land grabs, seizing the opportunity to turn a profit from increased market demand for industrial crops and agrofuels (Holt-Giménez, 2008; Holt-Giménez & Shattuck, 2011). Moreover, these land grabs were made possible through the expansion of free market initiatives through national policies, particularly through the privatization of public lands (Holt-Giménez, 2013).

As a consequence of land grabs, subsistence farmers, small-scale family-based food producers and entire communities are displaced, becoming landless peasants (McNally, 2006). This process destroys communities, creating mass migration of populations that had previously existed in established communities for generations; it creates massive unemployment, poverty and hunger (McNally, 2006). Moreover, land grabbing is often done using legitimate free market mechanisms such as privatization of land, land deals, real estate speculation, land allocation for the production of agrofuels and export-based industries, because agricultural lands are treated as a growing market

(Holt-Giménez, 2013), and under neoliberal market-led development, states are not supposed to intervene with market mechanisms (Davidson, 2009).

Furthermore, the World Bank and the FAO promote the acquisition of large agricultural lands by private interests for industrial agrofuel production as well as foreign-owned food production, which they argue are investments that are expected to reduce poverty or build food security. However during 2007, when global food prices shot up, about 83 million hectares of land were grabbed by TNCs and other private interest groups, indicating that there is no evidence to suggest that these initiatives reduce poverty or build food security at all. On the contrary, the crises that followed 2007 raised questions about what happened to the communities that had inhabited those lands after their communities, livelihoods and means for meeting basic needs were undermined (Holt-Giménez, 2013);

“Land, while viewed by the market as a tradable commodity, is the social space where economic and community decisions are made. It is the place of neighborhood, culture and livelihoods. For indigenous peoples, it is their territory. It is home” (Holt-Giménez, 2013, p.1).

Furthermore, Holt-Giménez contends that land grabs are justified with the fictitious argument that land grabs are driven by food, water, and fuel scarcities rooted in the rise of global population levels (Holt-Giménez, 2013). However as discussed in chapter one, researchers have discredited these claims; moreover this argument fails to address the economic and social contexts within which land grabs occur;

“It does not explain how scarcity is produced through inequitable economic growth (leading to hunger during record harvests, for example), or who benefits from scarcity. Nor does this explain how land grabs actually happen, why they only happen to poor and marginalized communities, or why they are often facilitated by public institutions” (Holt-Giménez, 2013, p.2).

Furthermore as numerous scholars have found, there is no evidence to support claims that these misappropriated lands are used in a manner that reduces crises or improves the human condition in any form (Holt-Giménez, 2013).

3.2.4 Agrofuel Production

Agrofuel production, or biofuels as they are also called, is a leading factor behind land grabs (Holt-Giménez, 2013). Agrofuels are being marketed as an environmental solution for air pollution; it is argued that burning agrofuels rather than petroleum-based fuels is less harmful since it reduces the greenhouse gas effect; however this argument fails to take into account the industrial agricultural methods that are used to grow agrofuels, which also lead to vast environmental devastation (Bello, 2009b).

The use of agricultural lands for the production of agrofuels is another reason for increased global hunger. This is because land that would otherwise be used for food production is used to grow agrofuels for export (Rosset, 2008). Agrofuels, which are genetically engineered grains, such as soya or maize, are used as a source of ethanol fuel

for cars, or are exported as cattle feed (Bello, 2009b). Furthermore, agrofuels are produced using concentrated industrial agricultural methods, which raise serious health and environmental concerns; these are discussed below along with the Green Revolution.

3.2.5.0 Green Revolution

Before discussing the details of the Green Revolution, it is important to take a moment to discuss the existence of food systems. Food systems are organized by national or, as a consequence of neoliberal globalization, international entities. As Holt-Giménez explains, *food regimes* are the structures that order food production, processing and distribution,

“A food regime is a “rule-governed structure of production and consumption of food on a world scale.” The first global food regime spanned the late 1800s through the Great Depression and linked food imports from Southern and American colonies to European industrial expansion. The second food regime reversed the flow of food from the Northern to the Southern Hemisphere to fuel Cold War industrialization in the Third World. Today’s corporate food regime is characterized by the monopoly market power and mega-profits of agrifood corporations, globalized meat production, and growing links between food and fuel” (Holt-Giménez, 2009b, p.1).

Since agricultural production is crucial to the development agendas of all societies, it follows that food regimes are built in accordance with the priorities of development models.

The Green Revolution refers to the model of industrial agricultural production that was advanced from the 1960s until the 1980s; it led to temporary increases in crop yields. This method of agricultural production relies on large-scale agrarian reform which entails dispersing small-scale farming communities and reallocating agricultural lands to large-scale industrialized agricultural production (Food First, 2009). Additionally, the Green Revolution is rooted in the creation and utilization of agricultural biotechnology, including inputs such as chemical fertilizers, chemical pesticides and hybrid seeds that are all transformative to food production (Bello, 2009b; Holt-Giménez, 2009b). This technologically intensive method relies on its genetically engineered seeds to yield higher harvests. However, for various reasons this agricultural method has only increased global hunger (Poole-Kavana, 2006). For one thing, the biotechnology that is used in the Green Revolution has long term negative impacts; genetically engineered seeds require excessive chemical inputs which studies have found to cause extensive soil and water degradation. The outcome has been the destruction of agricultural lands that no longer produce food in countries, which have implemented this industrial agricultural method (Poole-Kavana, 2006).

Additionally, even in the phase of production when yields are temporarily high, the surplus in food production does not alleviate hunger within a given region because it

does not change the “concentrated distribution of economic power that determines who can buy the additional food” (Poole-Kavana, 2006, p.2). Consequently, countries that have experienced Green Revolutions, such as India, the Philippines and Mexico, have seen a rise in exports of the abundant food produced while the domestic inhabitants have been come to face severe hunger (Poole-Kavana, 2006).

Regardless of these facts, proponents of the free market neoliberal development agenda, the World Bank in particular via the food security lens, argue for the advancement of agricultural biotechnology to produce more food in order to resolve the rising global hunger (Holt-Giménez, 2009a). In regards to this paradox, Sophia Murphy’s work examines the role of the market in the organization of the agricultural sector, and by extension in the prevention or advancement of a secure and sustainable food production and consumption order, within the context of market-led development. Murphy argues that access to food is the most basic fundamental human right and one that must be protected by governments, against free markets (Murphy, 2008). Murphy argues that the commodification of human needs, especially of food, is problematic since historically human societies have been built around the assumption that it is the collective intention and function to protect the social wellbeing of those who live within (Murphy, 2008). Moreover, many researchers argue that the hyper focus on economic factors to achieve societal wellbeing is unfounded (Saul, 2005), since quality of life cannot be achieved through economic efficiency and cost reduction, since this priority conflicts with the costs of providing basic need - sustaining services (Murphy, 2008). Additionally, Murphy

explains that free markets are characterized by shifting power relations, which are not accounted for by the assumptions that are set forth by neoclassical economists that suggest free markets establish “perfect information flows, no barriers to new entrants in the market, and the capacity to adjust supply smoothly and rapidly with changes in demand” (Murphy, 2008, p.528). Consequently the impracticality of such assumptions often lead to market failures where due to excessive deregulation, the market apparatus fails to produce the preferred or projected results, especially when it is applied to the task of homogenizing the global food supply (Murphy, 2008).

In regards to food production, Murphy explains that the internationalization of private property rights has significantly reduced the rights of food producers globally (Murphy, 2008). The outcome has been the commodification of the food supply and the devaluation of food producers, which has consequently impoverished food producers as “Globalization has also given multinational firms direct access to countries’ agriculture” (Murphy, 2008, p.530). Furthermore, globalization has “significantly strengthened the power of the private sector and reduced the public space available for debate on how best to manage food and agriculture systems” (Murphy, 2008, p.530). The societal and environmental damages, i.e. destruction of small-scale food producing communities, the rise in unemployment, the rise in poverty and hunger, as well as in ecological devastation (Murphy, 2008), that Green Revolutions create are not addressed by market mechanisms;

“The food crisis is bad, but another Green Revolution will make things much worse. The alternative, smallholder-driven agroecological agriculture, was

recognized by the IAASTD as the best strategy for rebuilding agriculture, ending rural poverty and hunger, and establishing food security in the South. To be given a chance, however, this strategy requires a combination of strong political will and extensive on-the-ground agroecological practice to overcome opposition from the well-financed Green Revolution” (Holt-Giménez, 2009a, p.154)

The United Nations 2008 IAASTD report is discussed later in this chapter. The following section offers a crucial illustration of how the use of Green Revolution biotechnology has harmful impacts on multiple aspects of society, and why the food security framing of food-as-commodity further aggravates societal problems.

3.2.5.1 The Impacts of the Green Revolution, Argentina

Argentina has long been viewed as the star-understudy of the IMF for implementing its neoliberal free-market development projects. Case in point was when Argentina's President agreed to sign on with Monsanto and Cargill to shift the country's agricultural sector away from food production and to produce biofuel soya for export in the 1990s (Scholl & Arrizabalaga, 2005). It is noteworthy to mention that before this period, Argentina was known as Latin America's bread basket for its contribution of surplus agricultural food products to neighboring countries, promoting a secure food supply in the region (Brown, 2010). This changed however after Argentina implemented neoliberal policies in line with SAPs that were imposed by the IMF and the World Bank

in return for short-term loans (Bienfeld, 1991). This scenario holds true for most, if not all countries that take this path (Bello, 2009b). During this period, the agricultural sector was completely restructured to promote the production of export crops such as soya, wheat, maize and sunflower production (Tomei & Upham, 2009). Proponents of the neoliberal free market agenda have argued that this was done in response to the international market's growing demand for biofuel and cattle feed; furthermore with access to Monsanto's agricultural technologies it was not long before Argentina began experimenting with genetically modified soybean seeds, which were designed to produce greater product yield (Brown, 2010). These changes in agricultural output severely influenced Argentina's food consumption patterns. National food security came under fire in the 1990s when Argentina's agricultural sector was restructured to replace much of its staple crop, food-based agriculture with extensive cultivation of mono-crops for export.

According to a Food and Agriculture Organization (FAO) report, soya made up more than fifty per cent of the grains that were produced in Argentina in 2008 (Tomei & Upham, 2009). Consequently the production of rice, the nations' most important staple food crop, had dropped by forty seven per cent by 2002 (Pechlaner & Otero, 2011). Not only did this agricultural shift create a food crisis for the nation, but this restructuring of the agricultural sector also displaced much of Argentina's traditional food producers, and small-scale farmers in particular, in the process (Brown, 2010). Many academics argue that the adoption of soybean farming in Argentina has undermined Argentina's food security by displacing local peasant farmers who produced food for communities but

lacked the technology and capital to compete with industrial soy farmers, and by altering the agricultural sector's focus from staple crop production for domestic consumption to cash crop production for export (Wald, Rosin & Hill, 2012).

Such restructuring eventually took its toll and by 2002, Argentina's unemployment rate had hit a new high of twenty-five percent (Buono, Alan, & Bell Lara, 2007). Additionally, after the 2008 global recession and following food crisis, things only got worse. The government took some initiatives to regulate trade through the implementation tariffs and quotas on export crops, to better regulate agricultural trade and to strengthen local economies. Despite these state-initiatives however, the issue of food insecurity continued to be a problem since there is a need for land reform and agricultural production reform to enable farmers to produce food crops for domestic consumption, using sustainable methods, rather than industrial biotechnology used to produce cash crops for export (Scholl & Arrizabalaga, 2005).

Although the establishment of tariffs and quotas impacted trade dynamics, without allocation of farmland to domestic food production, other issues arise, such as the domestic population turning to the consumption of biofuel crops for food. This has been the case in Argentina where high national food insecurity has led the Argentine diet to accommodate the flood of genetically modified soybeans, i.e. agrofuel crops, in domestic markets. As Ann Scholl and Facundo Arrizabalaga (2005) explain,

“Never missing an opportunity to expand its profits, Monsanto subsidiary Cargill Seeds and the ChevronTexaco oil company have teamed up with the Argentine

Association of Direct Seed Producers to promote soya as the solution to the malnutrition problem in the country. Their aim is to integrate the bean into the Argentine diet and change people's eating habits to suit their business interests...The Soja Solidaria (Solidarity Soya) project is ruthlessly promoting GM soya as a viable alternative to traditional forms of nutrition among the poorest communities, which is creating a nutritional apartheid" (Scholl & Arrizabalaga, 2005, p.1).

This change in diet, replacing food crops with agrofuel crops, has been extensively noted by researchers. According to the United States Department of Agriculture, since 2001 Argentina's population's consumption of genetically modified soya has increased dramatically – from 325 metric tons to 1192 metric tons in 2013 (United States Department of Agriculture, 2013). This change in consumption patterns raises the issue of the safety of consuming genetically modified soya, knowing that it is produced for the purpose of biofuel and not human consumption. Scholl and Arrizabalaga elaborate,

“Monsanto's GM beans have been highly exposed to agrochemicals containing glyphosate. Glyphosate is soluble in water and in order to make it penetrate the plant, a surfactant is added. Glyphosate is therefore present in the very core of the soya bean. Washing the bean is not sufficient to prevent the consumption of glyphosate. Glyphosate can be harmful to the eyes, causes skin inflammations and is linked to a variety of lymphoma cancer” (Scholl & Arrizabalaga, 2005, p. 2).

This point clearly illustrates the issue of addressing food insecurity through market-based solutions via the food security framework discussed below.

3.3 Food Security

The food security framework was established by the Food and Agriculture Organization (FAO) of the United Nations. Food security has been defined as

“The availability at all times of adequate world food supplies of basic foodstuffs to sustain a steady expansion of food consumption and to offset fluctuations in production and prices. (United Nations 1975 cited in FAO 2003)” (As quoted by Patel, 2009, p. 664).

This conceptualization is not all-inclusive; it fails to address how the method of food production impacts communities and the environment, the cultural appropriateness of foods to regions they are imported to, the right of populations to consume domestically produced foods, the right of small-scale farmers to their livelihoods as the advancement of corporate-run industrial agriculture displaces entire farming communities, among other issues such as the quality of food produced.

As Argentina’s experience demonstrates, the food security framework does not address the human impact, the population health impact, or ecological impact of the edibles that are dumped into domestic food markets by agri-businesses (Bello, 2009b; Rosset, 2009a). That is, the food security framework does not address the multiple facets

of food as central to culture and wellbeing; this framework only focuses on the quantity of food stuff produced and consumed (Patel, 2012). Within this framework, the consumption of biofuel crops by local communities that lack economic access to food is not seen as a problem but as a solution to the issue of hunger (Rosset, 2008; Patel, 2012).

Furthermore, the food security framework fails to protect the world's food producers, which are predominantly small-scale family farmers and peasant communities, while promoting industrial agri-business who are in the export business, and are not invested in food production for domestic consumption where demand is high but purchasing power is low (Rosset, 2008). These concerns are minimized within the food security framework but are indispensable within the food sovereignty argument. As discussed in the previous section, the food security position has been found to be problematic to achieving hunger alleviation since it has promoted market-solutions that have enabled the expansion of free market neoliberal policies, which have effectively destroyed the sustainable agricultural infrastructure of practically every nation in the Global South, in order to create markets for agri-business TNCs (Bello, 2009b; Rosset, 2009a).

While the importation of food products have indeed increased availability year round for those who can afford them, the loss of local sustainable agricultural food production capacity has rendered nations dependent on foreign food imports, undermining the food security platform (Bello, 2009b). Furthermore, the quality of imported food stuff is suspect, as the majority of products are chemically flavoured,

processed and preserved. There is also the concern that the import of food stuff has changed the dietary intake of local populations, as is demonstrated by the case of Argentina, which has been framed as an attack on the cultural identities of populations since food preparation and consumption patterns are based on cultural practices (Roberts, 2008).

The food security framework is relevant to this study only from the position that it has contributed to the aggravation of hunger and loss of national food sovereignty, resulting in under development. Interestingly, it is often proponents of the neoliberal market-led development model who falsely claim that the food security framework, which promotes the creation of free markets and the deregulation of sectors, will end hunger (Bello, 2009b). These food security arguments contradict development studies that have documented the trends that have come to define the neoliberal globalization era; "...rising inequality is strongly linked to neoliberal policy reforms adopted in industrialized, transitional and developing countries alike" (Petras & Veltmeyer, 2003, p.6). Furthermore as Gardiner and Halweil argue,

"Today our food supply is nothing less than cornucopian, favoring the world with unprecedented quantities and varieties of food. Yet more people and a greater proportion of the world today are malnourished – hungry, deficient in vitamins or minerals ..." (Gardner & Halweil, 2000, p.10).

And regardless of all of the research showing that food crises are the outcome of free market policies and not food scarcity, under the food security framework international

institutions still continue to argue that greater investment and research in biotechnology will provide global hunger solutions by finding new ways to increase agricultural yields (Holt-Giménez, 2009a).

3.4.0. Food Sovereignty

The concept of food sovereignty grew as a global response to the large-scale devastation brought on by decades of free market food security initiatives that were imposed on people across the globe. As mentioned in chapter two, the United Nations 2008 IAASTD report argues against the market-solution framework of food security and promotes the adoption of propositions made by proponents of food sovereignty, "... adoption of locally appropriate and democratically controlled agroecological methods of production, relying on local expertise, local germplasm, and farmer-managed, local seed systems" (Holt-Giménez, 2009a, p. 148). This is important to highlight because there needs to be a distinction made between the food security and the food sovereignty positions, particularly since before this 2008 IAASTD, the United Nations supported the food security framework.

The theoretical basis of food sovereignty was created as an alternative to the food security framework since the latter failed to address rising global hunger (Rosset, 2009a; Rosset, 2009b). And although food sovereignty is conceptually tied to food security, the techniques of addressing hunger and food insecurity are completely different because

while the food sovereignty framework identifies food as central to the human existence, and as such, as a human right (La Via Campesina, 2010), the food security framework identifies food as an essential commodity bound within the laws of the free market (Bello, 2009b; Ziegler, 2013). The discrepancy lies in the fact that the food security approach is rooted within the neoliberal framework, which propositions the market as the engine behind development, while food sovereignty rose as an alternative to the market-led development model (Patel, 2009). Additionally, proponents of food sovereignty contend that food security's pro-corporate stance undermines its aim to end global hunger;

“First, global corporations are structures designed to consolidate what they control. They automatically empty activities out of smaller or more isolated communities, unless there is some quite remarkable reason to stay. This presents a challenge for democratic systems, which cannot function if large parts of their nation-states are abandoned economically” (Saul, 2005, p.126-127).

Contrary to the food security framework, the ideological origins of food sovereignty are rooted in the concerns voiced by small-scale producers, indigenous and peasant communities in Latin America; the food sovereignty movement argues that food is a basic human right and therefore must be de-commodified (La Via Campesina, 2010).

Furthermore, advocates of food sovereignty argue against repeating the Green Revolution through the use of agro-chemicals and genetically modified seeds; they advocate a return to culturally rooted, local, environmentally sustainable methods of agricultural production that meet the needs that are unique to each region, and to focus on small-scale

agroecological food production for local and domestic consumption rather than industrial agricultural production for export (La Via Campesina, 2010).

This focus on small-scale polyculture food production contrasts the industrial agricultural methods championed by the Green Revolution and the current food security framework. In order to achieve this goal of transforming industrial agricultural production to agroecological production, the Food Sovereignty paradigm requires that redistributive land reform be undertaken by the state;

“Redistributive policy implies, above all, the expropriation of private lands that serve no social purpose. The goal should be to redistribute land and power, altering the relations of power in society in favour of farmers and the coalitions that support them. Such an agrarian reform cannot be carried out through market mechanisms ... an agrarian reform that guarantees communal land ownership and that is designed to resist the threat of counter-agrarian reform ” (Torrez, 2011, p.51).

This prerequisite for achieving food sovereignty, that is the conversion of land to agroecological food production, was undertaken by Cuba’s government during the special period, which is discussed in greater detail in the next chapter. By the time that the food sovereignty discourse reached the international arena, Cuba’s special period was already under way and before food sovereignty was fully conceptualized, Cuba’s national development agenda was reflecting some of the discourse’s defining elements.

Arguing that the market-derived food security model was failing to address the root causes of hunger, to secure sustainable food production, to promote access to local and culturally applicable food, and to reduce global hunger in general, collectives of small-scale farmers, peasant farmers and various societal groups designed and put forth the food sovereignty framework, which various scholars and food advocates formulated into a paradigm (Rosset, 2009a; Rosset, 2009b). Access is a point of contention in the food sovereignty discourse (Rosset, 2008; Rosset, 2009c) not just access to food, land and non-genetically modified seeds, but also to water, community, and other publically owned resources that are increasingly becoming privatized and inaccessible for many (McNally, 2006);

“According, again, to WHO, one-third of the world’s population still has no access to safe drinking water at an affordable price, and half of the world’s population has no access to sanitation and sewage facilities” (Ziegler, 2013, p.182).

Such trends of growing inequality are what proponents of food sovereignty aim to address; this is not really plausible through the market-led development model where only large economic actors, i.e. international economic institutions and transnational corporations, hold monopoly on decisions regarding all aspects of development including the agricultural sector (Aliteri, & Nicholls, 2008; Holt-Giménez, 2009b). It is for this reason that the Food Sovereignty paradigm requires a state-led development model in order to achieve its objectives; because only states can re-embed markets back into

societies and implement even-handed land reforms to protect sustainable food production methods and small-scale food producers (Polanyi, 2001; Poole-Kavana, 2006).

Moreover, food sovereignty prioritizes each nation's right to produce its own food supply and for nations to protect it autonomously from external volatilities, for the sake of national interest (Rosset, 2009a; Rosset, 2009b). However since nations are predominantly integrated into the international free market and have incorporated free market policies within their agricultural sectors, including privatization of land schemes and the replacement of traditional small-scale agricultural communities with corporate-owned industrial agriculture (Roberts, 2008), there is no known nation to achieve full food sovereignty in the twenty-first century. However, Peter Rosset (2009) explains that;

“Under the Food Sovereignty paradigm, La Via Campesina and a growing number of progressive and semi-progressive governments, in Venezuela, Bolivia, Argentina, Cuba, Ecuador, Nicaragua, Honduras, and elsewhere, propose that we not only reregulate the food commodity markets that were deregulated under neoliberalism, but regulate them better than they were before, with genuine supply management, making it possible to set prices that are fair to farmers and consumers alike. That necessarily means a return to protecting the food production of nations, both against the dumping of artificially cheap food and the importation of artificially expensive food, which we face today. It means renationalizing and rebuilding national grain reserves and parastatal marketing boards, in new and

improved versions that actively include farmer organizations as owners and administrators of public reserves. That is a key first step” (Rosset, 2009c, p.20).

Additionally, limiting or eliminating industrial food production and the production of mono-crops would allow for increased food production. Accordingly, an increase in the production of staple food crops for local consumption would help alleviate domestic food insecurity (Bello, 2009b). Moreover, development scholar Michel Pimbert (2009) agrees that in order for food sovereignty to be realized at the national level there needs to be congruence between grassroots efforts and state efforts to reform legislation and policies in favor of protecting national food producers and the nation’s food supply (Pimbert, 2009). Pimbert argues that there are several steps that governments can take to help establish food sovereignty, such as policies to “ re-introduce protective safeguards for domestic economies to guarantee stable prices that cover the cost of production, including quotas and other controls against imports of food and fibre that can be produced locally” (Pimbert, 2009, p.10). Furthermore, Rosset argues that in order for nations to regain food sovereignty within the global free market context, governments need to re-invest in restructuring the agricultural sector to promote and protect small-scale food producers, rather than support the expansion of agro-business oriented producers who mainly produce for export (Rosset, 2008; Rosset, 2009a; Rosset, 2009b).

3.4.1. Agroecology

Agroecology refers to the utilization of ecological understanding to agricultural production (Koont, 2009). Agroecology is an ecologically sustainable method of food production that utilizes renewable resources, including the replacement of chemical fertilizers or pesticides with natural ones. Furthermore agroecology relies on the use of the natural environment where the food production site is situated and the application of the skills of local small-scale producers to pass on methods and knowledge (Altieri & Toledo, 2011). Proponents of agroecology oppose the use of Green Revolution biotechnology, such as chemical inputs and genetically modified organisms (GMO) in agriculture (Rosset, 2009b).

Agroecology is an essential component of the Food Sovereignty paradigm (Altieri & Toledo, 2011; McMichael & Schneider, 2011; Torrez, 2011); it is sustainable, safe, culturally appropriate, and produces high quality products, while restoring the health of agricultural lands;

“Agroecological initiatives aim at transforming industrial agriculture partly by transitioning the existing food systems away from fossil fuel-based production largely for agroexport crops and biofuels towards an alternative agricultural paradigm that encourages local/national food production by small and family farmers based on local innovation, resources and solar energy. This implies access of peasants to land, seeds, water, credit and local markets, partly through the creation of supportive economic policies, financial incentives, market

opportunities and agroecological technologies” (Altieri & Toledo, 2011, p. 587-588) .

The advancement of this agricultural model requires state intervention in markets to protect the agricultural sector from privatization, to protect small-scale domestic food producers and facilitate their access to local markets and to invest in the necessary infrastructure that would enable them to meet domestic population and domestic market demands (Rosset, 2009b). In this sense the agricultural sector needs to be disconnected from the international markets to allow for the establishment of national food supplies and national food sovereignty.

Agroecology requires the application of diverse knowledge of small-scale farming communities to develop agro-ecosystems to work within the demands of production lands, to utilize natural remedies for obstacles to food production, rather than use chemical inputs; with the aim of restoring and reviving the land’s food production capacities (Altieri & Toledo, 2011). Additionally, through their research Altieri, Fune-Monzote and Peterson (2012) have found that small-scale farming communities are more productive than large-scale industrial farms;

“The inverse relationship between farm size and output can be attributed to the more efficient use of land, water, biodiversity and other agricultural resources by small farmers. So in terms of converting inputs into outputs, society would be better off with small-scale farmers. Building strong rural economies in the Global South based on productive small-scale farming will allow the people of the South

to remain with their families and will help to stem the tide of out-migration”

(Altieri, Fune-Monzote, Peterson 2012, Pg.5).

This cannot happen within the context of large-scale industrial agriculture on privatized lands and it cannot happen within a development agenda that prioritizes profits over human wellbeing, and by extension ecological wellbeing (Rosset, 2008; Rosset, 2009b). This does not mean that agroecology is unfeasible in free market societies, but that state intervention is required to reverse the privatization of agricultural lands and to set up protection mechanisms to safeguard national food production (Saul, 2005; Roberts, 2008; Rosset, 2008; Rosset, 2009a; Torrez, 2011).

In the context of Cuba, the post-revolutionary agrarian reforms of 1959 and the early 1960s placed firm limits on the scale of private holdings. Furthermore, expropriation of large-scale private land titles under the pre-existing *latifunda* ended the potential for private land grabs. Insuring food sovereignty had already been rehearsed in 1962 in response to the trade embargo that led to food shortages and the introduction of a new entitlement to food scheme, the food rationing scheme was introduced by the Cuban government. Through post-revolutionary agrarian reforms, the government acquired full autonomy to allocate land for agroecological production at the onset of the special period (Alponte-Garcia, 2009; Koont, 2009; Koont, 2011; Febles-González, Tolón-Becerrab, Lastra-Bravoc, & Acosta-Valdésd, 2011; Gürcan, 2014). Moreover, it is important to note that human development was the top priority of Cuba’s national development agenda

(Murphy, 1999), making the transition from large-scale industrial agriculture to small-scale food production more manageable via state support;

“Given the economic, energy and climatic conditions facing the island, the Cuban peasantry supported by agroecological strategies exhibits today the highest indexes of productivity, sustainability and resiliency in the region. Agroecology, as being promoted by Campesino a Campesino movement, is proving to be the most efficient, cheap and stable way of producing food per unit of land, input and labor. As this process advances, more small farmers join this agroecological revolution (the government now is giving up to 13.5 hectares to families interested in becoming farmers: so far there are 100,000 petitions for this land), and the goal is to reach 1.5 million hectares under agroecological management, enough to make the island food sovereign (Funes, 2009; see also Rosset et al. 2011)” (Altieri & Toledo, 2011, p.601).

As Altieri and Toledo explain, through state-supported land reforms Cuba’s agriculture moved away from large industrial state farms to small-scale agroecology-based food production schemes (Altieri & Toledo, 2011); through such state-initiatives Cuba was able to achieve a high level of food sovereignty. However, it is important to note that achieving food sovereignty is a long-term process and although Cuba did reduce its import of food stuff from 1993 – 1997 (Altieri & Fune-Monzote, 2012), it has yet to achieve full food sovereignty, which entails the ability to meet the national population’s

dietary needs exclusively through domestically produced foodstuff, without the need for imports.

3.4.2. Urban Agriculture

Urban Agriculture (UA) refers to the process of agroecological and organic production methods used within the urban context for the purpose of enhancing the local food supply, as was the case in Cuba (Gürcan, 2014). Efe Gürcan (2014) elaborates,

“Broadly speaking, the practice of urban agriculture in Cuba was built on three basic principles: the use of environment friendly organic methods, the rational use of resources, and the direct marketing of produce to consumers (Companioni et al., 2002, p. 220)” (Gürcan, 2014:9).

Cuba’s achievements in urban agriculture have seen the ultimate agricultural restructuring from industrial, export-oriented agriculture to organic and semi-organic agriculture (Gürcan, 2014). Gürcan explains,

“Cuba has shown that it is possible to shift emphasis from global food to local agriculture in line with the needs of people, communities, and the environment (Gorelick, Merrifield, and Norberg-Hodge, 2002, p. 112). With policies built on a vast network of cooperation and interactions between domestic and transnational actors...” (Gürcan, 2014, p.3).

Additionally, Cuba's urban agriculture has seen the use of public space, such as community gardens and old lots, as well as private spaces such as privately owned patios, transformed into community gardens. Other examples of urban agriculture include the operation of roof tops to grow food for family and community consumption. This is in addition to the food produced on state farms, or later on agricultural cooperatives in rural communities, as well as on state enterprises where food is produced to be consumed by the labour force (Koont, 2009; Febles-González, Tolón-Becerrab, Lastra-Bravoc, & Acosta-Valdés, 2011; Altieri & Funes-Monzote, 2012). As various food sovereignty scholars have noted;

“Cuba's achievements in urban agriculture have also grown and are truly remarkable: 383,000 urban farmers farm more than 50,000 ha of otherwise unused land and producing around 4 million tons of vegetables (top urban farms reach a yearly yield of 20 kg/m² of edible plant material using no synthetic chemicals) enough to supply 40–60% or more of all the fresh vegetables in cities such as Havana, Villa Clara, and others (Koont 2009)” (Altieri, Fune-Monzote, Peterson 2012, Pg.7).

This is significant because although urban agriculture initiatives are becoming more common globally, researchers argue that Cuba is the only country to be so highly successful in achieving and maintaining environmentally sustainable urban agriculture; it is the position of this study that Cuba's success is in large part due to the state's initiatives to promote national food sovereignty.

3.5 Background on Polanyian framework:

In the previous chapter we developed an analytical framework for assessing the relationship between markets and societies using Karl Polanyi's heuristic of fictitious commodities as well as his theory about the embedment of economy into society. This section will focus on applying a Polanyian framework to the modern history of Cuba, with the aim of assessing the forms of economic transformation that Cuba has undergone. This section provides the background for understanding the transformation of social relations in Cuba leading up to the special period, which have provided the basis for the advancement of food sovereignty in Cuba.

As mentioned earlier, Polanyi's political economy framework is designed to address the relationship between markets and society through the means by which the economy is incorporated, or 'embedded' into society. Since a given society is necessarily bounded territorially by the parameters of the nation-state, Polanyi's framework would seem to be limited to the analysis of individual cultures or societies. However, Polanyi's framework is able to bridge the chasm between the local, national economy and the global economy through the mediation of the state. In his analysis, not only does the state act to mediate the conflicting socioeconomic interests within the nation, but it also plays a role in the formation of regional economic blocs which constitute the political infrastructure of the global economy. Given this emphasis on the state as a principle agent of intervention between local economies and the global economy, Polanyi's political economy framework at the macroeconomic level has been characterized as Neo-

mercantilist (Hettne, 2006). This section will provide a theoretical overview of Polanyi's political economy framework both at the national scale of economic organization of society, and at the international scale of mercantilism, followed by a historic overview of Cuba's economic transformation under mercantilism.

3.5.1 Economic Organization of Society

Polanyi's political economy framework is centered on the question of how the economy is incorporated into society through institutions, and in turn, how the social relations of a society are organized to allow for the incorporation and operation of economic activity. As discussed earlier, societies in which the economy is securely embedded are the most stable, whereas the disembedding of the economy, and the emergence of a self-regulating market detached from pre-existing social relations, creates the most unstable configuration between the market and society (Polanyi, 1968; Polanyi, 2001).

In order to better comprehend how economies are incorporated into societies through analytical categories, Polanyi relies on invariant modes of economic incorporation encountered across cultures, as documented through economic anthropological research. Tanya Chavdarova (2006) has described these invariant forms of economic incorporation as "basic patterns of economic integration" (Chavdarova, 2006, p.146), which she describes as consisting of "reciprocity, redistribution and market

exchange... It is these modes that are the major determinants of the specific forms of economic organization and their historical changes” (Chavdarova, 2006, p.146). With this in mind, a more concise overview of the nature of the three invariant modes of economic incorporation is needed.

Anthropologist Marvin Harris (1989) provides an overview of the reciprocal and redistributive modes of economic activity. Harris recognizes the reciprocal mode of integration as the form of material exchange with the greatest social customs attached to it (Harris, 1989). In other words, it is not a simple form of instrumental economic exchange deduced from a priori rational calculation, but one in which, “people do not specify how much or exactly what they expect to get back or when they expect to get it. That would besmirch the quality of that transaction and make it similar to mere barter or to buying and selling” (Harris, 1989, p.345). In such a system of exchange where precise monetary value is indeterminate, costs and benefits are established under explicitly social or even ‘immaterial’ conditions including communal principle, personal pride, etc. This is the essence of the gift economy where the social obligations that accompany economic exchange over-determine any personal monetary incentives that are characteristic of the market form of exchange. Societies where the reciprocal mode of economic integration is dominant have been relatively rare (Harris, 1989). This may be due to the nature of reciprocal exchange, which requires close communal bonds, social relations that tend to recede with the rise of complex industrial societies (Polanyi, 2001). Yet these reciprocal forms of exchange persist even in industrial societies, albeit through informal practices

such as social gift exchange or volunteer-based community activities (Harris, 1989). This realm of the social economy is distinct from rational market exchange, and we can get an intuitive sense of this difference if we recall how in many cultures receiving money as a substitute for a gift is considered vulgar because it inappropriately blends the impersonal realm of market values with the personal realm of social norms (Harris, 1989; Polanyi, 2001). Based on the distinction between the social economy and the market, we would expect that societies in which the reciprocal mode is dominant would also be ones where the market economy is the most limited.

As discussed however, the likelihood of encountering a modern industrial society that is rooted in the reciprocal mode of integration is highly improbable, since as populations grow along the widening division of labour, the allocation of wealth and resources across the various strata of society, as well as across the different sectors of the economy, become too alienated to sustain the intimate social bonds that are required to maintain the reciprocal mode as the dominant mode of economic integration (Harris, 1989). The development of the modern state has played a mediating role in the organization of social relations and the growing complexity of industrializing economies. As such, states are responsible for overseeing the smooth flow of capital investments across the different sectors of modern economies, as well as for redistributing a portion of the national wealth back into communities to ensure the social reproduction of societies (Saul, 2005; Davidson, 2009; Gamble, 2009).

In regards to free market societies where the market-exchange mode of economic integration is the dominant mode of economic integration, states manage a unique set of relations between the self-regulating market on the one hand, and civil society on the other (Veltmeyer, 2007). Within this mode of integration, the allocation of capital resources and investments is determined through the mechanism of market prices set through the laws of supply and demand (Polanyi, 2001; Veltmeyer, 2007; Davidson, 2009). The uniqueness of this mode of integration is that since prices follow the logic of exchange-value, which further expands and interlinks markets across a variety of commodities (as well as fictitious commodities), the allocation of resources directed by the market does not necessarily reflect the actual need for making use of these circulating commodities by consumers (Polanyi, 2001; Chavdarova, 2006). That is, the market exchange mode does not reflect the actual use-value of commodities, and through its self-expansion the market runs the risk of disembedding from society with catastrophic consequences by not responding to the actual population needs for resource allocation (Polanyi, 2001).

For Polanyi, the rise of market societies in the late 19th century was unprecedented because for the first time in human history, the creation and growth of the self-regulating market allowed the economy to separate from society; this led to a disconnect between the market interest and societal interest, as the exchange value in market transactions came to dominate over the physical and social needs of communities (Polanyi, 2001).

Although as we have seen, the reciprocal and redistributive modes constitute entirely different modes of economic integration and reflect the economic organization of societies that are vastly different, the firm entrenchment of the economy into social or political relations within these societies makes them distinct from market societies where the self-regulating market is given the power to re-configure societal relations rather than the other way around (Polanyi, 2001). On a global scale, the market mode of economic integration has become hegemonic, particularly following the expansion of neoliberal globalization. As we have seen, the central goal of the food sovereignty movement, as well as its overall *raison d'etre*, is to amend the misdirection that the global food regime has taken with the intensification of market logic in regards to food and agricultural production (Altieri & Toledo, 2011; McMichael & Schneider, 2011).

The three modes of economic integration, reciprocity, redistributive, and market-exchange, constitute Polanyi's invariant economic categories across cultures (Polanyi, 2001; Chavradova, 2006). While in any given society one mode will be predominant, all three modes of economic integration can potentially exist across different levels of society. Chavradova's observation provides a succinct summary of the characteristics and interrelations of these modes of incorporation:

“The social economy, as linked to reciprocity, is dominated by the principle of adequate response and has validity within community structures: family, neighbourhoods, relatives, friends and colleagues. The command economy implies the dominance of political authority, administrative decision-making, and

application of political criteria to economic activities which results in the parallel existence of forcibly created formal structures and informal institutions. The market economy is the background for the flourishing of formal organizations, individuals and free associations. All these types of economy have their place and could be found in each society. The socio-economic specifics come from the way they are combined and relate to each other in a particular historical period.”

(Chavdradova, 2006, p.146)

This summary indicates that in industrializing societies, the three modes of economic integration co-exist in various degrees, from family and communal networks in which reciprocity is practiced, to the demands of the global market at a much broader scale of society. Furthermore, as Chavdradova highlights, the relative dominance of one particular mode over other existing modes of economic integration comes to define a specific epoch in a society's history (Chavdradova, 2006).

The three modes of integration presented by Chavdradova provide an analytical framework for characterizing the relationship between economies and societies across cultures. Unlike the market mode of market integration, with its links to the global market economy making it a macro-level occurrence, the scope of the reciprocal and redistributive modes of integration are limited to the micro-level of the national economy. More specifically, the reciprocal and redistributive modes of integration articulate the role of the economy in relation to predominant cultural practices and the degree of state intervention which characterize a given society. The manner in which the reciprocal and

redistributive modes of integration interact at the global scale needs further articulation since unlike the market mode of integration, the reciprocal and redistributive modes do not directly link to the global economy. In the case of the latter, such non-market global linkages are achieved through trade regimes.

On that note, the following section articulates Cuba's economic system both at the domestic level, in terms of its mode of economic integration, and at a global level, in terms of its trade regime. This requires the operationalization of the normative term "socialism", which has characterized the central planning of Cuba's national economy under the COMECON trade regime, into the two analytical categories presented above; the mode of economic integration and the characteristic trade regime.

3.5.3 Trade Regime

As previously discussed, from the three modes of economic incorporation, market-exchange is the only mode of integration that directly extends from the domestic societal context to the broader scale of the global economy (Polanyi, 2001). This is not surprising since according to Polanyi, the growth of a self-regulating market, whether in the development of a local labour market or a global stock market, bypasses state mediation and control in ways that other forms of economic integration, such as communal reciprocal exchange or state-redistributive allocation schemes, cannot achieve due to their self-limiting institutional framework. The institutional framework for market

exchange however, encourages its expansion and interlinking on ever larger scales, making the market mode of economic integration the only one capable of dis-embedding from society (Polanyi, 2001). To see how ‘socialist’ societies, as characterized by the redistributive mode of economic integration under central planning (Chavdradova, 2006), are integrated into the global economy, we need to look at their trade regimes. Table 4 presents the three modes of economic integration that characterize a given national economy in parallel with its mode of integration into the global economy through a trade regime.

Table 4. Three Modes of Economic Integration and the Corresponding Trade Regimes

Mode of Economic integration (national-scale)	Market-exchange (i.e. market economy)	Redistributive (i.e. centrally planned)	Reciprocal (i.e. gift economy)
Trade Regime (international-scale)	Market-exchange (i.e. Free trade)	Mercantilist (i.e. COMECON system)	Symmetrical (i.e. Kula trade)

Moving from the national scale of economic integration towards integration into the global economy through a trade regime we see that through trade, market-exchange is an extension of the market-exchange mode of integration of the national economy. For example, the Kula ring trade among Trobriand islanders of Western Melanesia, which Polanyi documents in his work, follows a unique non-market trade regime that also extends beyond the domestic scale and into a regional scale - without market institutions. Within this system, members of a given tribe form trade links with members of other

tribes on distant islands, based on the trade of foodstuff and highly prized Kula rings. What makes this trade regime unique is that each tribal member has a counterpart on a distant island to which such exchanges are made ‘symmetrically’, i.e. without profit or surplus gain, mirroring the reciprocal patterns of exchange that take place within one’s own tribe at home (Polanyi, 2001, p. 51-52). This is foreseeable since the underlying logic of the trade regime is to preserve inter-tribal bonds rather than to exact a trade surplus.

Of particular interest for our case study of Cuba’s socioeconomic transition during the special period is the redistributive mode of economic integration on the national scale, along with its integration into the COMECON trade regime on a global scale, which characterized the elements of most socialist nations prior to the onset of the special period. Having examined how central planning corresponds to the redistributive mode of economic incorporation under Chavdarova’s take on Polanyi’s framework, the next section will expand on the details of Cuba’s system of agricultural production and mercantilist trade prior to the collapse of COMECON.

3.6 Cuban Agriculture under Mercantilism

Following the revolution of 1959, Cuba embarked on ambitious agrarian reforms to dismantle the *Latifundio* system of oligarchical agriculture that it had inherited from colonial times (Palma, Tora, Vázquez, Fuentes, & Hernández, 2013). Following the

closer political ties that Cuba established with the USSR, Cuba formally joined the Eastern bloc trading regime COMECON in 1972, and restructured its economy to embrace the industrialization of its agricultural sector. This strategy was in accordance with Cuba's agricultural history and its vast potential for producing export-oriented mono-crops such as coffee, citrus fruits, and cane sugar in particular which supplemented Cuba's pre-established sugar refining capacities (Aponte-Garcia, 2009).

Embarking on such a strategy of industrial agricultural production, as a member in the COMECON trading bloc, required Cuba to organize its system of production and its labour force under the highly centralized bureaucratic model that the other COMECON states had conformed to (Koont, 2011; Palma, Tora, Vázquez, Fuentes, & Hernández, 2013). Cuba's adoption of this model of development transformed it into a centralized redistributive state in terms of the national scale of the mode of economic integration. This was deemed necessary to meet its economic obligations under the COMECON trading regime based on export-import quotas in exchange for investments; this made the COMECON highly interdependent. Under this trading regime for instance, Cuba had to subspecialize its agricultural sector for the production of mono-crops rather than diversify this sector for domestic food production. This made the country highly dependent on COMECON-based trade not only to import vast quantities of fuel, chemical fertilizer, and pesticides necessary for industrial agricultural production, but it also made Cuba highly dependent on the importation of foodstuff to feed its population (Koont, 2011; Palma, Tora, Vázquez, Fuentes, & Hernández, 2013). Given the significant influence that the

COMECON trading bloc exerted on the transformation of Cuba's mode of economic integration at both the national and international scale, it is important to further analyze the COMECON trading bloc.

As discussed above, the COMECON trading regime was not based on free trade. In fact, the terms of trade were politically negotiated under bilateral terms and most of the trade itself consisted of trade in commodities, with the central COMECON bank overseeing currency-based trade for investment purposes (Aponte-Garcia, 2009). Björn Hettne (2006) provides a description of contemporary forms of mercantilism in international relations and trade;

“Mercantilism is the ideological expression of the nation-state logic, operating in the economic arena and violating the liberal principle that free trade in the long run is for the benefit of all. Neomercantilism retains a similar suspicion of free trade, but transcends the nation-state logic in arguing for a segmented world-system consisting of largely self-sufficient blocs big enough to provide “domestic” markets”” (Hettne, 2006, p.62).

From Hettne's definition, it is apparent that mercantilism in its contemporary form, i.e. neo-mercantilism, consists of a trading bloc which limits the market function within the boundaries of the bloc. While the COMECON nations went beyond this definition to include limiting the transfer of currencies within the COMECON trade regime, the COMECON trading regime still fits better within Hettne's description of mercantilism as the alternative to free market-based trade regimes or autarky. Thus it can be argued that

Cuba's mode of economic incorporation at an international level, prior to the 1990 -1996 special period, was mercantilist.

Chapter 4

Empirical Study of Cuban Urban Agriculture

4.1.0 Fictitious Commodity: Land-Nature

This section will examine how land utilization underwent a tremendous transformation in Cuba during the special period in terms of land access, property relations, and how these changes shaped urban agriculture. Such an analysis will allow for an assessment of how land use fits within the study's commodification scale. This section will also assess the status of nature, in the form of natural resource utilization and management, during the special period when Cuba underwent a shift from large-scale industrial agricultural production to small-scale agroecological food production. The aim of this section is to arrive at an assessment of the status of land- nature as fictitious commodities in the context of Cuba during the special period. Moreover, this chapter will also examine to what degree Cuba fulfilled the Food Sovereignty paradigm's Six Pillars criteria for achieving national food sovereignty.

4.1.1 Land reform

As discussed in earlier chapters, when Cuba entered the special period it faced a crisis in agricultural production and food provisions due to its agricultural sector's dependency on the importation of heavy inputs of petroleum fuel for mechanized food

production, chemical fertilizers and pesticides (Aponte-Garcia, 2009; Febles-González, Tolón-Becerrab, Lastra-Bravoc, & Acosta-Valdésd, 2011). Furthermore, Cuba's specialization in mono-crop production, namely in sugar, coffee, and citrus fruits, had created food insecurity that left the country dependent on food imports to meet the population's dietary needs (Altieri & Toledo, 2011). The state's response to the emerging food crises in 1990, the early phase of the special period, was too focused on maintaining rural agricultural production by substituting labour-power and animal traction for tractors and other mechanized systems that required high inputs of petroleum, which Cuba lacked (Koont, 2009).

At this early stage, the urban agriculture movement had not yet been established in urban centers to meet the food rations set for urban dwellers, and so agricultural production in rural areas were redirected from mono-crop production to emergency food production for domestic consumption (Koont, 2011). For this purpose, volunteer brigades were established to mobilize an urban labour force into rural areas (Deere, 1992). This early emphasis on diverted rural production was counter to the urban agriculture principle, but it was a necessary provisional solution until social infrastructure could be constructed through which to reallocate resources to urban centers to enable urban agriculture as a more sustainable solution to the crises. This is highly significant because before the special period, as a part of Cuba's economic growth driven modernist development agenda, industrialization of the agricultural sector and the ensuing migration

of rural communities to urban centres had marked Cuban development. Consequently, by the 1990s, about 95 percent of Cuba's population lived in urban centres (Koont, 2011).

What was needed was a new set of economic and agrarian policies that would allow Cuba to overcome the deficiencies it had inherited from the system of industrial agricultural production, since it could no longer allocate scarce resources to maintain it. Consequently, the Cuban government passed the comprehensive Decree Law Number 142 in 1993; this effectively dissolved the major state farms, particularly ones that had been geared towards sugar production to fulfill COMECON quotas, and established agricultural cooperatives or *Unidades Basicas de Produccion Cooperativa* (UBPC) with the aim of regionalizing production decisions to members of cooperatives in order to fulfill local food needs (Koont, 2011). The assets of the state farms were redistributed as credit for co-operative members, and idle public rural spaces were redistributed as usufruct for those wishing to engage in small-scale agriculture (Febles-González, Tolón-Becerrab, Lastra-Bravoc, & Acosta-Valdésd, 2011, p.727).

4.1.2. Land metrics and distribution

The comprehensive agrarian reform law of 1993 effectively amounted to a decentralized redistribution of land and property titles, since due to limited resources the state sectors could no longer fulfill such redistributive functions as maintaining food rationing quotas for the population (Gürcan, 2014). By this point, urban agriculture had

significantly grown in cooperation with the Ministry of Agriculture (MINAG). And while the redistribution of land following the 1993 decree did provide increased free access to public lands, the title of ownership, with exception of private home gardens remained under the jurisdiction of the state, substantially restricting any real privatization of public spaces (Febles-González, Tolón-Becerrab, Lastra-Bravoc., & Acosta-Valdésd, 2011; Koont, 2011). Under the 1993 agrarian reforms, the agricultural sector as a whole devolved from the pre-existing system of centrally planned industrial agricultural production, whilst urban agriculture took off as a parallel food production and self-provisioning initiative in urban centers. Cooperatives played a crucial role in this process of transition, both in the restructuring of the agricultural sector – with the consolidation of the *Unidad Básica de Producción Cooperativa* (UBPC) cooperative units and *Cooperativa de Créditos y Servicios* (CCSs) - as well as in the expansion of *Cooperativa de Producción Agropecuaria* (CPAs) in urban communities in parallel with the more individualized means of urban agricultural production through private patios and *parcelas* utilization (Koont, 2011).

The categories of land usage by urban agriculturalists, as listed in terms of scale can be classified as follows: patios (home gardens), *parcelas* (usufruct spaces), CCS (individual credit cooperatives) and CPA (collective cooperatives), along with the creation of more large-scale cooperative units in the form of UBPCs which are collective co-operatives in the agricultural sector (Koont, 2011, p.33). Whereas the small-scale home garden patios pre-dated the special period when urban agriculture was fairly

neglected, the agrarian reform of 1993 allowed for the devolution of the state farms under the command of ministry of agriculture (MINAG) and ministry of sugar (MINAZ) into UBPCs, large-scale cooperative units within the agricultural sector (Koont 2011, p.19). It is argued then that the redistribution of land in urban spaces was multi-scalar, which suggests a plurality of social relations ranging from the individual to group initiatives. The metrics of smaller –scale land use for urban agriculture generally fell below 1000 m² for patios and *parcelas* (Premat, 2005). A breakdown of the metrics of small-scale urban agricultural production in Havana is presented in Table 5:

Table 5. Main food-oriented urban agricultural sites in Havana

Production sites	Land tenure	Area Occupied	Commercialization as main objective	Year of creation
Farms	Private-state	NA	Yes	NA
Popular organoponics (m ²)	State	2000-5000	Yes	1993
Intensive organoponics (m ²)	State	1000-3000	Yes	1991
High-yield Organoponic plots (ha)	State	>1000	Yes	1994
Factory/enterprise self-provisioning gardens (ha)	State	>1000	No	1989
Usurfunct plots (m ²)	State (Some	>1000	No	1991

	private)			
Patios (m ²)	Private	>1000	No	NA

Note: Reproduced from Table 6.1; Premat 2005, p. 155.

Table 5 is not exhaustive, it provides a general overview of some of the metrics and urban land tenancy schemes that were prevalent in Havana, without the inclusion of cooperative schemes such as CCS and CPAs. We can see from Table 5 that the scale of private patios fall well below 1000m² while popular organiponics function on a much more expanded scale, ranging from 2000-5000m². It also should be noted that commercialization motive listed in the table refers to exchange within local markets (Premat, 2005).

4.1.3. The social production of communal space

In addition to the vitally urgent function that urban agriculture fulfilled for securing local food provisions during the special period, the space of urban gardens fulfilled additional, often unexpected, social functions as well. The first steps taken by individuals and communities to make urban agriculture viable were to clean up the urban usufruct spaces that became available through the redistribution of public spaces. This was a challenge because many such spaces had previously been used for waste disposal (Premat, 2009). However, communal efforts had tremendous effects in transforming the urban landscape and fostering civic pride (Premat, 2009). In later phases of the special

period when the function of providing local food provisions had become largely consolidated and stabilized through the state's allocation of resources towards urban agricultural extensions and inputs, urban gardens became more about social space where the elderly could volunteer at leisure and children had school visits as a part of their civic education (Premat, 2009).

4.1.4. Assessment of the fictitious commodity: land

The land reform policies inscribed into the 1993 decree transformed property relations and the usage of public lands. The decree made land much more accessible to citizens, and the decentralization of urban agricultural production meant further socialized the usage of land, whether on an individual basis in patios and *parcelas* or on a more collective basis through cooperatives. Continued state retention of formal ownership of these decentralized redistributive lands prevented the privatization of such public spaces (Premat, 2003; Koont, 2011).

The 1993 agrarian reform initiated two trends which, in our scale of commodification are a blend between semi-commodification and full socialization. On the one hand, the decentralization of land and its extension to the citizenry for the purposes of food production at the onset of the special period, places the status of land use within our commodification scale at approximate the fully de-commodified ideal-type. On the other hand however, the state's retention of formal ownership suggests the

semi-commodified/ semi-collective type of organization that is characteristic of the redistributive ideal-type. The reason why the redistributive mode of economic incorporation is not fully collectivized is because of the highly rationalized social relations that it encompasses through bureaucracy and centralization (Chavradova, 2006). In order to overcome this impasse in our assessment of the status of land, we must extend our analysis of the social-human relations entailed by the distribution and functional use of land to the social-ecological relations entailed by the manner in which land and the resources it encompasses are utilized.

As discussed earlier, the status of land as fictitious commodity falls between a hybrid range between the semi-collective type of organization and the fully universalized type within our analytical framework. In order to assess the status of nature, otherwise characterized by the utilization and management of natural resources in agricultural practices, as a fictitious commodity it is necessary to delve further into the theoretical relationship between society and the natural world. This is necessary because conventional economic analysis tends to treat the exploitation of nature in abstraction; as an inexhaustible source of resources. The Food Sovereignty paradigm however takes into account the environmental costs associated with industrial agricultural practices (La Via Campesina, 2010), thereby reconfiguring the notions of productivity, efficiency, and sustainability in terms of the ‘marginal’ costs that need to be factored in. Moreover, the impacts of human exploitation of nature are not immediately realized as ‘social’, (Poole-Kavana, 2006; Murphy, 2008).

4.1.5. Agroecological practices adopted during the special period

It has become a truism that the adoption of agroecological practices were compulsory for Cuba as a result of calamitous circumstance; the economic shock and resource scarcity following the collapse of COMECON necessitated such a strategy. However, Cuba rose up to the challenge and gradually introduced many innovations in agroecological practices (Koont, 2009; Koont, 2011). One of the key innovations which may have saved Cuba from devastation (Febles-González, Tolón-Becerrab, Lastra-Bravoc, & Acosta-Valdésd, 2011) was the creation of *Centros de Reproducción de Entomófagos y Entomopatógenos* (CREE), which are world leading centers for biological pest control that have been characterized as “the base of the national biological control program and are considered a true revolution in semi-industrial production of biopesticides and entomophagus for the control of agricultural pests (Febles-González, Tolón-Becerrab, Lastra-Bravoc, & Acosta-Valdésd, 2011, p.729). Other agroecological innovations include expanded bio-diversification through the decentralization of national seed banks into municipal branches that enabled greater access to biodiverse seed selection inputs for urban agriculturalists (Koont, 2011).

With the shortage of chemical fertilizer imports, it became crucial for Cuba to switch to the utilization of alternative natural fertilizers. These included minerals such as zeolites and dolomites and the cultivation of permaculture and sugarcane bio-products. Consequently, there are 173 permaculture production centers in Cuba with the potential to increase agricultural productivity by 20 percent (Febles-González, Tolón-Becerrab,

Lastra-Bravoc, & Acosta-Valdésd, 2011), and green manure from a variety of herbivorous animal sources (Fusco, 2008; Febles-González, Tolón-Becerrab, Lastra-Bravoc, & Acosta-Valdésd, 2011). During the early phase of the special period, the scarcity of oil also forced Cubans to switch to animal-based traction in the countryside to make up for the loss of mechanized traction, a practice that significantly reduced greenhouse gas emissions (Koont, 2011). Additionally, the success of the agroecological transformation of food production in Cuba has rendered it a world leader in sustainable development studies, particularly in terms of ecologically and culturally sound food production, which has been noted by various researchers, “Sustainable agriculture, organic farming, urban gardens, smaller farms, animal traction and biological pest control all became part of the new Cuban agriculture” (Altieri & Toledo, 2011, p.600).

4.1.6. Assessment of fictitious commodity: nature

As demonstrated by the description of Cuba’s agroecological practices adopted during the special period and the positive impact that such practices exerted on the environment in terms of reducing greenhouse gas emissions, the recycling of bio-matter, promoting ecological recovery and improving the means of agricultural productivity without excessive inputs, the transformation of Cuban urban agriculture to agroecological practices promoted the advancement of *long-term* human development, which is in accordance with four of the Six Pillars of the Food Sovereignty paradigm. Food sovereignty researchers argue that the agrarian reforms that the Cuban government

endorsed during the special period have led Cuba to become a world leader in sustainable agricultural production and have validated and advanced the science of agroecology and global agroecological food production efforts. This is because in order for food sovereignty to be realized, there is a strong need for the state to support the food sovereignty agenda, as well as for consensus among food producers and consumers (Altieri & Toledo, 2011);

4.1.7. Conclusion

In the Cuban context, the status of land-nature fell between the semi-collective and fully universalized organization types, as outlined in chapter two, due to a combination of factors such as decentralization and increased accessibility of land that contrasted the formal ownership of the land by the state. This assessment was extended to the status of natural resource management within the context of Cuba's adaptation of agroecological practices.

Additionally within this framework, four of the Six Pillars of Food Sovereignty fall under Polanyi's fictitious commodity of land-nature. Research collected about Cuba's agrarian reforms and the state campaign for reallocating land extensively for food production for domestic consumption then fulfills the following pillars of food sovereignty: *Focus on Food for People* (food production for human consumption) and *Localize Food Systems* (local production for local consumption). Furthermore the

utilization of organic urban agriculture food production schemes, along with the all-encompassing agroecological food production methods also fulfill the food sovereignty pillar: *Work with Nature* (food production through methods that are ecologically sound). As Altieri and Toledo (2011) explain;

“The growth of the agroecological movement can be partly linked to the training, extension and research activities of the *Asociacion Cubana de Tecnicos Agricolas y Forestales* (ACTAF) in its goals to promote agroecology throughout the island. But what constitutes the soul of the Cuban agroecological revolution are the efforts of about 100,000 families – almost half the population of independent small farmers in Cuba – who are members of ANAP (National Association of Small Farmers). These peasants practice agroecological diversification methods on their farms, thereby producing much more food per hectare than any commercial, industrial agriculture farm. These family farmers, many of whom are part of the *Campesino a Campesino* (farmer-to-farmer) movement, produce over 65 percent of the country’s food, on only 25 percent of the land (Rosset et al. 2011). The recent study of Machin-Sosa et al. 2010 revealed that in less than a decade the active participation of small farmers in the process of technological innovation and dissemination through farmer-to farmer models that focus on sharing experiences, strengthening local research and problem-solving capacities has produced a major impact” (Altieri & Toledo, 2011, p. 600).

From this description, it can be concluded that creation of farmer organizations such as Campesino a Campesino, which put food production decision-making rights in the hands of farmers and promoted the expansion of small-scale, ecologically sound food production methods – fulfills a fourth and fifth of the Six Pillar of Food Sovereignty: *Put Control Locally* and *Build Knowledge and Skills* (refer to Table 2, Chapter 2).

4.2.0 Fictitious Commodity: Labour

As noted in earlier chapters, Polanyi characterized labour within broad societal terms rather than merely as a category of class or only within the narrow economic function as a generator of profit through employment. For Polanyi, the social character of labour, including the cultural and subjective needs that it fulfills both for individuals as well as for a given society, is just as significant as the economic purpose that it serves (Polanyi, 1968; Polanyi, 2001). This section examines the fictitious commodity of labour within the Cuban context in order to assess the degree to which labour is socialized according to the Commodification/Socialization Scale for Fictitious Commodities. Following Polanyi's conception of labour then, labour is categorized according to analytical variables used by conventional economists, which includes variables such as employment and work incentive schemes, as well as normative variables that are not covered by conventional neoclassical economics, such as cultural practices, social cohesion and communal participation. The latter are based on our earlier operationalization of the food sovereignty discourse into normative factors constructed,

which did not fit into the analytical framework of the Commodification /Socialization Scale for Fictitious Commodities.

4.2.1. Analytical variables:

Analytical variables refer to the conventional economic variables used to analyze employment trends, such as wages, labour productivity across various sectors, labour demographics, as well as more theoretical socio-psychological variables used for economic analysis, such as incentive schemes.

4.2.2. Employment

During the special period in Cuba, employment trends underwent a massive shift due to the transformation of broader macroeconomic relations between Cuba and the COMECON trading bloc, which propelled the urban agricultural movement that had been fairly marginal to Cuba's economy until the special period, to take a central role in the re-organization of work and job creation (Cruz & Medina, 2003). With 155 000 people unemployed in the early phase of the special period, and a looming food crisis on the horizon as a result of projected decline of oil, fertilizer, and foodstuff imports from the COMECON nations, the Cuban state initiated a strategy to tackle the unemployment crisis and emerging food crisis by mobilizing the urban population to work in the countryside as labour contingents (Cruz & Medina, 2003; Koont, 2011). This category of

contingent employment consisted of volunteer work for a two year period, twelve hours a week, in which workers were provided with accommodations and access to agricultural produce and imported foodstuff (Deere, 1992). The payment component of this contingent labour scheme was based on a 100 peso delimiting mark. Those who previously earned more than 100 pesos retained their prior earning rate, while those who earned less than 100 pesos experienced a gradual increase in their salary during their two year term (Deere, 1992). The passage of agrarian and employment reforms in 1993, which legalized self-employment, contributed to the decentralization of the labour market in urban areas where food retailing jobs then began to complement the rise of urban agricultural production (Cruz & Medina, 2003).

As the economic crises intensified with the rising scarcity of oil and imported foodstuff, urban agriculture emerged as a complementary solution to the crises by providing the necessary labour power in a labour -intensive field that is non-mechanized urban agriculture, in a time of high unemployment in urban areas. During this early period, alternatives to the wage form of remuneration were deployed to entice volunteer brigades with the promise of good food, accommodations and a vibrant cultural life engaged with civic duty (Deere, 1992).

The demographic profile of the urban gardeners has varied highly. The great majority of urban gardeners were over thirty years of age; a significant proportion had experienced rural agricultural work at some point in their lives (Deere, 1992; Moskow, 1999). Most urban food producers earned between 75 to 250 pesos a month, the

distinction in pay was not marked by the level of education or occupational experience (Premat, 1998). Gradually, through the state's establishment of institutional support for urban agriculture, and civic committees connected with the Ministry of Agriculture, participation in urban agricultural production increased to include more voluntary and leisure forms of engagement, such as sustained school projects in urban agriculture for children, as well as the participation of the elderly as an alternative form of leisure socialization (Premat, 2009).

The labour intensity of urban agriculture, particularly in the early phases of the special period when innovative agroecological techniques had not yet been introduced, involved the recruitment of a massive supply of local labour. The localism of hired labour was particularly important at the time because the petrol fuel crises limited both the migration of labour across excessive distances, and the transportation of agricultural produce from the rural areas to the urban centres – an important factor which in itself necessitated the emergence of urban agriculture to sustain local food consumption (Koont, 2011).

In addition to the job creation that resulted from the mobilization of contingent labour in the early phase of the special period, and the more established community agriculture that grew in urban centers later on, jobs were also created in the knowledge economy of agricultural research which propelled the necessary agroecological innovations to make urban agriculture both sustainable, and viable on an expanded scale. Unlike corporate practices of research and development however, scientific innovation

was achieved through farmer consultations, such as those of *Campesino a Campesino* networks (Altieri & Toledo, 2011), as well as through the establishment of scientific networks with global agricultural research associations and academic centres (Fusco, 2008; Koont, 2011). In terms of the utilization of farmers' integral knowledge, Audrey Fusco explains that,

“...the farmers did more than train each other; they assisted the government in research of agroecological techniques. Techniques passed down through farmers for generations helped solve many problems; for instance, the discovery that ants are a successful control for the sweet potato weevil was found through recovery of peasant knowledge” (Fusco, 2008, p.104).

The influx of such solid, grounded knowledge and skill in agriculture instigated a permanent change in the academic curricula of Cuban agricultural studies, which saw a shift from the teaching of industrial agricultural techniques and practices to ones rooted in agroecology (Fusco, 2008).

The socialization of labour during the special period is clearly demonstrated by two trends, the creation of new incentive for citizen engagement in the self-provisioning schemes of urban agriculture and by the expansion of worker cooperatives as socialized labour throughout the two phases of the special period. During the onset of the special period, marked by the acute food shortage prospects, the mixture of formal payment schemes along with informal volunteer-based incentives helped mobilize masses of the unemployed urban workforce into a conditional workforce in the countryside to engage in

food production (Deere, 1992; Koont, 2011), of which many of the working contingent units later returned to the urban centers to become a permanent pillar of urban agriculture (Koont, 2011) Furthermore, in parallel with the development of urban agriculture, many of the CPAs and CCSs further expanded during this period with the help of the state in providing technical as well as material assistance in the form of agricultural inputs (Koont, 2011). The agrarian reforms of 1993 further consolidated the prominence of cooperatives in the agricultural sector of the economy through the creation of more large-scale cooperative units in the form of UBPCs (Koont, 2011). Together, the development of urban agriculture as a means of communal engagement and employment, in parallel with the expansion of agricultural cooperatives as firms based on socialized labour, indicates an overall socialization of the fictitious commodity of labour during the various phases of the special period.

4.2.3. Incentives

The profit motive has always been a central factor in free-market based commodity production (Schumpeter, 1994) and it was also a significant factor in the case of Havana's urban agriculture (Koont, 2009; Gürcan, 2014). However profit alone cannot be the driving motive when the work promotes creativity in method and social rewards in participation;

“Profits become the basis for incentive payments, which bring average incomes in urban agriculture well above nationwide averages for state employees. Also, various “moral” incentives exist for urban agriculturalists. On an individual level, these incentives offer ample opportunities for further formal education and a healthy, supportive, and dignified work environment. On a societal level there is an effort to “dignify” urban agricultural work and workers” (Koont, 2009, p.4).

Similarly, Polanyi did not subscribe to the economistic view of humanity; rather for Polanyi, subjective motives and incentives that have to do with the individual or cultural needs play as much of a determining role in economic behaviour as more material based motives and incentives such as the fear of scarcity or a drive to accumulate wealth (Polanyi, 1968; Polanyi, 2001). Such a debate regarding the role of ideal or moral incentives and material incentives actually took place rather early on, following Cuba's 1959 revolution. This debate was prefigured around the existing tension between Cuba's revolutionary aims of creating a society centred on reciprocity and ethical incentives, and the realization that the realpolitik of transforming work relations and production goals along the bureaucratic lines of other COMECON countries that occurred after Cuba began to pursue an eastern bloc model of development based on industrialized agriculture (Aponte-Garcia, 2009). Within organization type approximations, the latter approximates the rationalized bureaucratic work relations characteristic of the redistributive mode of economic incorporation, while the former approximates socialized communal and workplace relations characteristic of the reciprocal mode of economic integration.

During the special period, Cuba encountered a turning point where it was forced to adopt a mixture of moral and material incentives as an alternative to both the defunct COMECON system of labour organization and the full embrace of the free market mode of economic incorporation (Deere, 1992; Premat, 2003). The moral incentives for engaging in volunteer agricultural work in the countryside, and communal urban agriculture in the cities, differed in accordance to the shifting social and economic relations between the early and late phases of the special period. During the early phase of the special period, both new material incentives in the form of engagement in private agriculture production and marketing surplus production emerged, as well as alternative moral incentives. Critics feared that the state's allowance of self-employment and the marketing of surplus agricultural production as an incentive to increase productivity would lead to an individualistic, market-based ethos (Premat, 2009).

Additionally, the urban agriculture movement did encourage private and co-operative producers to compete for the award of being officially recognized. These competitions however, were not market competition, rather they were competition to increase productivity where rewards consisted of immaterial motives such as pride and prestige, as well as some material but non-economic motives such as acquiring social capital with the municipal and state authorities, which often came with access to innovative new production inputs (Premat, 2009). So while in the early phase of the special period moral incentives were limited to communal cooperation, induced by the fear of the coming scarcity, the latter phase of the special period saw the emergence and

consolidation of more sustained altruistic motives where people engaged in urban agriculture not only to increase productivity, but to enjoy the socialization process itself, characterized by friendly non-market competition and the expanded participation of children and the elderly in urban agriculture as a form of participatory education and leisure activity (Premat, 2009). Adriana Premat (2003) captures this new "civic ethos" (Premat, 2003, p.85) with the following observation:

“All material benefits aside, many producers seemed to contribute to their community out of a genuine conviction in the correctness of their actions. The sharing of outputs, particularly when it involves total strangers, is striking when one considers that sale of these products is legal and could supplement the income of producers many of whom are already obliged to work after retirement to make ends meet...it would seem that Che Guevara's ideal of an *Hombre Nuevo* who "would become a stranger to the mercantile side of things, working for society and not for profit (Dumont, 1972, 52) is embodied in many of the producers with whom I worked” (Premat, 2003, p.94).

Premat makes an important observation because the shift of values that accompanied the advancement of state-supported urban agriculture, in the form of changing social functions and organization, indicate a cultural shift towards greater reciprocity.

4.2.4. Assessment

McClintock (2010) has connected the intensity of human labour involved in urban agriculture and the necessity of communal support to make it viable, as a uniquely socialized form of labour used in urban agriculture that contrasts the general alienation of labour which occurs in other sectors of work. This is because a return to the land and the manual engagement of cultivation overcomes the two forms of alienation that are prevalent in industrialized societies, alienation from the products of one's labour and alienation from nature as the provider of the raw materials to be worked on (McClintock, 2010). In the case of Cuba, Sinan Koont (2011) describes this trend as the "labour-intensive paradigm" (p.174) in which, "[d]ue to the nature of the technologies it employs, urban agriculture is quite labor intensive...[and] the management of crops is once again returned to the meticulous attention of human beings" (Koont, 2011, p. 174).

Within our Commodification/Socialization Scale then, the labour deployed in urban agriculture in Cuba during the special period, both manual and knowledge-based, clearly approximates the full socialization organization type that is promoted by the Food Sovereignty paradigm, which argues against the commodification of labour. But what about the other normative concerns of the food sovereignty argument, how do they relate to the fictitious commodity of labour? In order to address these enquiries, it is necessary to consider the normative variables of the cultural and civic-participation dimensions of the socialized labour in the context of Cuba's urban agriculture. By the later phase of the special period then, the material incentives for engaging in urban agriculture, which had

expanded opportunities, increasingly became subordinated to communal expectations signifying the consolidation of new cultural norms based on moral incentives (Premat, 2003).

4.2.5. Normative Variables:

As we saw in chapter one, normative factors such as egalitarian values and the communal dynamics of societal organization that resist operationalization into formal analytical categories are crucial to human development and societal consistency (Murphy, 1999; Murphy, 2008; Roberts, 2008). The importance of cultural integrity and civic engagement are matters that Polanyi addresses directly in his polemics where he demonstrates the disproportionately destructive effects that market domination asserts over entire societies through cultural erosion, effects that are far more destructive in the long-term than mere economic exploitation (Polanyi, 1968; Polanyi, 2001). For Polanyi then, alienation is not merely a dimension of the formal commodification of labour, but the commodification of an entire cultural ethos that creates a variety of forms of civic disengagement that clear the way for the creation and perpetuation of a market society.

In the examination of Cuban society, the question of egalitarian values must be put in context. Catherine Murphy (1999) explains that human development has been central to Cuba's post- 1959 revolution development agenda, therefore community participation is encouraged (Murphy, 1999). For example in May 1959, the new Cuban

government established Agrarian Reform Law that limited private landownership and “redistributed land to squatters, sharecroppers, and landless farmers. Fifty percent of the land in Cuba was nationalized, and more than 100,000 landless peasants became landowners overnight (Diaz et al, 1995)” (Murphy, 1999, p. 7). As this example demonstrates, in order to explore how egalitarian values are practiced and sustained in the context of Cuba, we need to look at civic engagement in terms of participation at a grassroots level.

The urban agriculture movement began as a grassroots civic interest group that wanted to expand using urban spaces for the purposes of urban agriculture, often against the directives of municipal urban planners (Koont, 2009). The onset of the special period shifted the balance of power in favor of the urban agriculture movement, as the Ministry of Agriculture sought to further empower these grassroots movements whilst providing logistical support (Cruz & Medina, 2003). The urban agriculture movement was supported and promoted by local initiatives including the Committee for the Defense of the Revolution and the People’s councils (Cruz & Medina, 2003), transforming it into a wide reaching movement representing the interests of urban dwellers who had to contend with prospects of acute food shortages. From its beginnings then, the urban agriculture movement had all the attributes of local engagement in the sphere of production, as mandated by state organizations (Koont, 2009; Koont, 2011).

The urban agriculture movement presents an ambiguous case of state-led grassroots mobilization. On the one hand, the movement preceded the special period era,

which restructured agricultural production and represented grassroots interest groups set against urban planners (Koont, 2009). On the other hand, its promotion and expansion by various state organizations into a medium for civic participation in food production makes its overall function closer to those of state organizations. The role of state organizations cannot be overemphasized since they actively transformed the existing centralized political structure to meet the needs of the urban agriculture movement and realized early on that if the challenges of the special period were to be met head on, they needed the active support and engagement of the Cuban people (Cruz & Medina, 2003).

4.2.6. Conclusion

This section examined the status of labour as a fictitious commodity within the context of Cuba's special period. The status of labour, taking into account both analytical variables such as employment trends and incentive schemes, as well as normative variables such as civic engagement, reveal that labour in Cuba during the special period did conform to the full socialization ideal type of reciprocity. This is the most unique finding of this study because according to Polanyi's framework, Cuba achieved what every "actually existing" socialist state, within the COMECON trade regime, had aspired to but fell short of due to the over-rationalization of labour relations. In terms of food sovereignty, it is evident that state instigated reforms to promote worker engagement and the promotion of social value for urban food producers meets the sixth pillar, *Value Food Providers*, of the Six Pillars of Food Sovereignty.

4.3.0. Assessment of fictitious commodity: Money

The fictitious commodity category of money reaches the heart of Karl Polanyi's entire framework of fictitious commodities because it determines the mode of economic integration. For instance, the absence of money in a given society signals the absence of a market society, whereas the extension of money beyond its function as a medium of payment and into the realm of profit generation, i.e. commodity speculation, signals the presence of a self-regulating market economy (Polanyi, 1968; Polanyi, 2001).

This section examines Cuba's mode of economic integration, both at the national level as well as the international level, during its period of transition in the special period. This section provides a theoretical analysis of entitlements to food through market channels and the role that non-commodified money plays in Polanyi's theory of the purchasing-power economy. Additionally, this section analyzes the role of markets during Cuba's special period.

4.3.1. Transitions in the mode of economic integration

As discussed in earlier chapters there are two levels of economic integration, the domestic or national level that involves the integration of the economy into society, and the international or global level that is a characteristic of geopolitical and trade relations between nations (Polanyi 2001). Moreover, only the market mode of economic integration spans across both the domestic and the global scale; as Polanyi contends, the

market is the only mode of economic integration that has the potential to dis-embed from society (Polanyi 2001).

At the onset of the special period, Cuba encountered a turning point. Prior to this point, at the domestic level Cuba's economy had been incorporated into Cuban society through the redistributive mode, while at the international level it was incorporated into the mercantilist COMECON trading bloc (Cruz & Medina, 2003). With the failure of central planning at the heart of COMECON, in which the USSR had politically subsidized the nations within this trading bloc, the majority of the COMECON member states including the Soviet Union itself moved towards market reforms, thereby undergoing a transition to market economies (Aponte-Garcia, 2009). Cuba opted for an alternative form of decentralizing its redistributive-mercantilist economy. Based on our examination of the fictitious commodities of land-nature and labour up to this point, it has been shown that the alternative to the market economy, which Cuba followed during the special period, can best be characterized as a reciprocal mode of integration with regards to the variables of decentralized land distribution schemes, sustainable resource management, and the further socialization of labour and incentives in the urban agriculture sector. Furthermore, the decentralization of agricultural production, both in terms of the agricultural sector itself as well as the local level of urban agriculture through the land reforms of 1993, overtly expanded Cuba's food production under the new post-COMECON trade regime (Aponte-Garcia, 2009).

Due to various challenges, including the collapse of COMECON mercantilism during the early phase of the special period, necessitated emergency measures included the introduction of market-based incentives to further promote food production and to allow for self-employment, and most crucially, to activate alternative channels of food distribution to mitigate the emerging food crises (Deere, 1992; Koont, 2011). In its most explicit form, dollar store markets for grocers, utilizing U.S. currency, opened to complement the existing peso markets (Ross & Mayo, 2003). Furthermore the state permitted the surplus of agricultural produce, which increasingly was associated with urban agriculture, to be sold in local farmer's markets that opened in 1994, after the Council of Ministers agreed to it. This enabled the opening of new, but still regulated, commercial prospects within domestic markets (Alvarez & Messina, 1996).

Therefore, while land reforms, the adaptation of agroecological resource management practices, and communal urban agricultural production all signified a transition towards greater socialization of labour and resources through decentralization towards communal reciprocity, the proliferation of alternative monetary currencies along with new commercial opportunities revealed an opposite trend; the commodification of money.

4.3.2. Critical assessment of role of money and entitlements in society

As noted earlier, the introduction of alternative currencies and monetary motives was necessitated to mitigate the scarcity of food supplies during the early phase of the special period. Amartya Sen (1981) has shown that in periods of political or economic instability, it is often failure to recognize people's existing entitlements to the available food supplies, rather than shortcomings the supply of food itself that leads to calamitous consequences. Sen views entitlements as a set of conditional factors such as commodity endowments or the right to exchange such endowments in order to meet one's needs, as determined by an individual's place within the given economic and political context (Sen 1981, p.435). In other words, entitlements are the tokens within a given context that enables efficient resource allocation. In the case of Cuba during the onset of the special period, both the supply of food and channels of access to food were endangered (Deere, 1992; Koont, 2011). During this time, with the limits of the food ration system, many people had to turn to alternative channels of food procurement to supplement their nutritional needs, for example by purchasing fruits and vegetables from farmer's markets, meat and dairy from filial connections and black market networks for those who could not afford to pay the high farmer's market prices, and cooking oil from dollar store markets (Paponnet-Cantat, 2003, p.20). As this example illustrates, food procurement strategies involved access to alternative entitlement channels. In other words, monetary pluralism may be necessary for opening channels of entitlement and resource distribution.

How would the development of such tendencies be addressed by Polanyi's economic framework? As discussed, Polanyi was not averse to the co-existence of elements of the market alongside other societal institutions. In fact, Polanyi believed in a plurality of motives and incentives, which determined the behaviour of individuals and societies. Polanyi's concern with markets had to do with their potential to dis-embed from society (Berthoud, 1990). This concern was expressed not only within acute contexts, such as global economic crises, but also with the gradual and insidious commodification of 'fictitious commodities' and social life as a whole. Within Polanyi's theory of the purchasing-power economy, where the function of money is limited to purely a means of payment, we can see that although money may be used as a medium of market transaction, it functions as a token of exchange and not as a commodity in itself (Polanyi, 1968; Polanyi, 2001). This is why Polanyi was highly averse to the commodification of money for generating profits through the exchange of currency differentials. It is within these latter, expanded capacities of money which generate a self-regulating market in money as a commodity which can threaten to dis-embed from societal institutions (Polanyi, 2001).

4.3.3. The status of markets in Cuban society during the special period

As discussed, market incentives and alternative currencies were introduced in Cuba during the special period to open channels of entitlement for alternative means of resource distribution as a substitute for the inadequacies of the existing rationing system.

For Polanyi, the co-existence of markets alongside other societal institutions is reasonable so long as these societal institutions can ensure that the market remains embedded in order to meet societal needs. We can discern three factors that have ensured the embedding of local markets into Cuban society: 1) the local scale of the markets, 2) state oversight of the market sphere, and 3) the emergence of counter-tendencies during the special period.

During the special period, markets were limited to local scales (Alvarez & Messina, 1996), and as such served a social function as an alternative means of resource distribution, as well as the expression of market motives by urban agricultural producers who wished to expand their income by marketing the surplus of their production. The local function that such markets fulfilled then was a limiting factor for their activity. The creation of a self-regulating market entails either the pre-existence of a market society or vast capital reserves to expand into economies of scale (Polanyi 1968; Polanyi 2001), neither of which exists in the Cuban context.

A further market-embedding factor is state oversight, most commonly in the form of taxation. Taxation rates varied from 8 percent of the commodity price to 15 percent, depending on the geographical location of the dollar markets (Alvarez & Messina, 1996; Fusco, 2008). Through such geographic channelling via taxation rates, the state was able to direct supplies through the markets (Fusco, 2008), further demonstrating the embeddedness of these local markets. Finally, the trends towards the expanded socialization of land use, resource management, and communal labour in urban

agriculture indicate that counter-veiling relations of reciprocity managed to keep the local markets embedded. This point is emphasized by Premat's (2003) observation that:

“Whereas Special Period reforms in other sectors of the Cuban economy may indeed be leading to the re-construction of ‘Capitalist – Man,’ government institutions and policies affecting small scale urban agriculture appear to be keeping in check the individualistic behaviour associated with capitalist societies. As shown, the continuing dependence of producers on the state...partly explains why, while showing definitive signs of ‘privatization’ and segregation, the parcelas turn out to be closely linked to an ideal notion of community where sharing and cooperation are underscored as vital, even when individual needs and dimensions are acknowledged and practiced” (Premat, 2003, p.95)

Premat's final point on the compatibility of communal and individual dimensions resonates with Polanyi's satisfaction with the existence of plural motives in society.

Interestingly, unlike the fictitious commodities of land-nature and labour, the status of money within the context of Cuba's special period approximates the fully commodified ideal-type within our Commodification/Socialization Scale for Fictitious Commodities. Despite these trends, the threat of developing self-regulating markets in money, which Polanyi warns of, do not apply to the Cuban special period context due to multiple factors that had ensured that the existing local markets remained embedded within Cuban society.

4.4.0. Discussion

In order to test the hypothesis regarding the degree to which Cuba achieved food sovereignty during its socioeconomic transition in the special period, this study operationalized the working tenets of the Food Sovereignty paradigm into Polanyi's economic framework, which frames the issue in terms of the tension between markets and societies, where food sovereignty can be seen as having been achieved through the de-commodification (socialization) of land, natural resources, labour, and money, which are used for agricultural production. The operationalization of the food sovereignty argument involved the use of Polanyi's three fictitious commodities of land-nature, labour and money as indicators, in which the degree to which these resources have become commodified or socialized, in accordance to the scale of pre-established ideal –type references, indicates the degree to which their usage approximates the Six Pillars of Food Sovereignty. This framework also allowed for the characterization of the transitions between Cuba's political and economic system according to its mode of economic incorporation.

In this study of Cuba's experience with urban agriculture during the special period, it was found that the agrarian reforms passed during the onset of the special period allowed the public greater access to land for the purpose of urban agriculture, allowing for more efficient food production, as well as the expansion of entitlements that were overseen by the state's retention of land titles. The decentralization and fair distribution of access to land combined with the adaptation of agroecological practices, transformed the

agricultural sector, moving away from industrialized agricultural production, which also narrowed the metabolic rift between resource utilization and its ecological impact and indicate a balanced equilibrium between economic activity and the utilization of natural resources. These factors indicate that land-nature as a fictitious commodity was put into environmentally balanced use to meet social needs, indicating its full socialization.

In regards to the fictitious commodity of labour, this study found that Cuba's land and agrarian reforms that were passed by a decree in 1993, led to the decentralization of agricultural production and expanded entitlements for private and communal plots to be used for urban agricultural production. Furthermore, the emergence of relations of reciprocity and civic engagement at the community level, as well as the emergence of a plurality of material and moral incentives towards urban agricultural production indicated that labour, as the fictitious commodity, approximated the fully socialized ideal type during the special period, more so than it had under central planning. This was indicated empirically in the expansion of formal and informal employment in urban agriculture to meet the needs of localized food production. With the de-automation that resulted from Cuba's transition away from industrial agriculture to agroecology, along with increased civic engagement in communal decision making, the fictitious commodity of labour overcame the forms of alienation that are integral to industrialized labour, thereby demonstrating its full socialization.

The most urgent problem that Cuba faced during the onset of the special period was the need to ensure adequate resource allocation in essential items such as foodstuff to

the public, while structurally the economy underwent a process of decentralization. Under these conditions, the Peso was supplemented by the Dollar in a scheme of parallel currencies that emerged with the establishment of dollar stores, where consumers could purchase items at higher prices that were not available through state-distribution schemes, as well as the rise of farmers markets where any produce surplus from private or communal urban agricultural production could be marketed at profit.

Within this study's socialization/commodification scale, developments such as the introduction of a plurality of currencies and monetary incentives clearly indicate a trend towards the commodification of money in Cuba during the special period. This study found however, that overall this commodification of the fictitious commodity of money was kept in check by three factors that ensured that the local markets remained embedded towards serving socialized functions within Cuban society: 1) the local scale of the markets, 2) state oversight of the market sphere and 3) the emergence of counter-tendencies during the special period, which as we have seen, pertains to the full socialization of the other two fictitious commodities, land-nature and labour.

Overall, the findings demonstrate that during the special period, Cuba transitioned from a redistributive mode of economic incorporation, which was dominated by state planning, to a reciprocal mode of incorporation that required the active participation of citizens at a communal level, a plurality of moral and material motives, as well as the expansion of entitlements to allow for acute resource allocation at the site of urban agricultural production. As food sovereignty scholar Peter Rosset (2009a) explains,

“Whereas Cuba’s original revolutionary land reform took place in the 1960s, a later “reform within the reform” allowed Cuba to escape from a food crisis in the 1990s, in what may be the closest example of a true transition from agro-export toward a more food sovereignty-centered model of the kind called for by Vía Campesina” (Rosset, 2009a, p.3).

This observation matches the findings of this study; the overall human development inherent to the Food Sovereignty paradigm was indeed observed in Cuba during the special period. Analytically, this study revealed that developments in the area of urban agriculture corresponded with the full socialization of two of Polanyi’s fictitious commodities, land-nature and labour, alongside a trend of further commodification of the fictitious commodity of money. Since the latter was kept in check through a multitude of factors to meet social needs however, it did not act as a true commodity under the circumstances of the special period, in its function of expanding entitlements for acute resource allocation. The overall interplay between the three fictitious commodities, as geared towards meeting societal needs during a period of acute crises, confirms the hypothesis that Cuba achieved a high degree of food sovereignty during the special period.

Chapter 5

Conclusion

The objective of this thesis was to assess the hypothesis that Cuba achieved a high degree of food sovereignty during the special period through its adoption of agroecological practices. This objective was met by operationalizing the criteria for food sovereignty into an analytical framework through Karl Polanyi's analytical concepts of fictitious commodities and through the construction of ideal-types for a scale of assessment. Assessment of the status of the three fictitious commodities land-nature, labour, and money within the context of urban agriculture in Havana during the special period revealed that two of the three fictitious commodities (land-nature and labour) approximated the ideal-type for full socialization, which demonstrates their non-commodified status within Cuban society during the special period. The use of the fictitious commodity of money on the other hand, had become more commodified as a result of the reforms that took place during the special period to allow for greater flexibility in the emergency allocation of scarce resources, such as food through the expansion of entitlements, although money remained embedded within local markets and thereby still fulfilled social needs. The urgent need to introduce flexibility to resource allocation whilst at the same time ensuring that the economy remained embedded to meet the needs of society without transforming into a force of disequilibrium itself was a dilemma that Cuba experienced during the special period.

Moreover, re-embedding markets into the larger societal structure is a fundamental component of the Food Sovereignty paradigm; as Cuba's context illustrated, it is possible to achieve this by ensuring that the state regulates markets and endorses the introduction of localized markets, which remain limited to serving societal needs. This was a critical factor in Cuba's success with urban agriculture.

The results of this analysis, combined with the examination of the relevance of Cuba's agricultural and food policies and practices during the special period with the criteria set forth by the Six Pillars of Food Sovereignty, demonstrate that Cuba achieved a strong degree of food sovereignty during the special period. Since the special period was a time of crises and transition that required substantial reforms, for example state-led land reforms and policies that dismantled previous large-scale industrial agricultural land schemes and established small-scale agroecological food production systems, Cuba did not fully realize food sovereignty in terms of establishing abundant food reserves (Altieri & Funes-Monzote & Petersen, 2012).

There are several factors to influence this outcome, the main being that Cuba has historically been a food importing nation that lacked sufficient food reserves (Murphy, 1999; Altieri & Funes-Monzote, 2012). Second, during the special period state-supported reforms were undertaken to implement, support and expand agroecology; by definition agroecological food production is a long term investment and since Cuba was lacking in food reserves, it would not be feasible for the nation to build bountiful food reserves within six years.

Moreover, it is significant to note that Cuba's food self-sufficiency was much higher during the special period of the 1990s than it had been in the 1980s. By the mid-1980s, Cuba's imported more than 50 percent of its food supply in order to meet population needs (Murphy, 1999). The evidence clearly indicates that the agrarian reforms and legislative changes that the Cuban state undertook during the special period greatly reduced the nation's food import dependency (Altieri & Funes-Monzote, 2012). By 2003, it was observed that "import dependency, however, [was] a mere 16 percent" (Altieri & Funes-Monzote, 2012, p. 3).

Taking into account Cuba's history, the fact that the special period was by definition a time of crisis, as well as the rising trends of global food insecurity during the time of Cuba's special period, food sovereignty researchers argue that Cuba's successes in food sovereignty are nothing short of magnificent. Furthermore, according to researchers;

"No other country in the world has achieved this level of success with a form of agriculture that uses the ecological services of biodiversity and reduces food miles, energy use, and effectively closes local production and consumption cycles" (Altieri and Funes-Monzote 2012, p.1).

According to the Food Sovereignty paradigm, within the globalized neoliberal context, food sovereignty is only achievable if nations shift priorities and undergo certain types of reforms (La Via Campesina, 2010; Altieri & Funes-Monzote & Petersen, 2012); many of these reforms are expressed in the action column of Table 1. The Six Pillars of Food

Sovereignty. One recommendation is the substitution of the market-led development model with a state-led development model, particularly one with a strong emphasis on the adoption of agroecology-based agrarian reform (Koont, 2009; La Via Campesina, 2010; Altieri & Toledo, 2011; Altieri & Funes-Monzote & Petersen, 2012). It is important to note that agroecology – based food production can only be successful if the state takes an active role in protecting the interests of small-scale food producing communities and their access to land, water, seeds, and local markets (Rosset, 2009b; La Via Campesina, 2010; Altieri & Toledo, 2011; Altieri & Funes-Monzote & Petersen, 2012).

Additionally, state intervention is also required to protect the national food supply from international vulnerabilities, from the market's commodification of food, and from market speculation (Polanyi, 2001; Saul, 2005; Davidson, 2009; Ziegler, 2013). Moreover, state-intervention is also required to protect nation's food production capacities, i.e. the agricultural sector, from market forces, via regulations (Altieri & Toledo, 2011; McMichael & Schneider, 2011; Altieri & Funes-Monzote & Petersen, 2012; Ziegler 2013). In this sense, market reforms are needed to remove land and agricultural products from commodity speculation (McMichael & Schneider, 2011; Ziegler, 2013).

These are some of the reforms recommended by food sovereignty proponents and these require a shift in development agendas, to transfer the *onus* of development back to the state since the state is equipped to re-embed markets back into societies, so that the market reflects the needs of society rather than service itself (Harvey, 2005; Polanyi,

2001; Rosset 2011; Gürcan, 2014). Moreover, state-led development prioritizing agrarian reform is central to successfully establishing food sovereignty (La Via Campesina, 2010; Altieri & Funes-Monzote, 2012). Some suggested reforms for the agricultural sector include de-privatization of agricultural lands, market and land reforms to dismantle industrial agricultural complexes, and the establishment of small-scale agroecology-based farming communities across nations (Koont, 2009; Altieri & Toledo, 2011; Torrez, 2011; Altieri & Funes-Monzote & Petersen, 2012). It is also recommended that states establish local agricultural markets within communities in order to make locally produced food accessible to local populations (Altieri & Fune- Monzante, 2012); this was observed in the Cuban context. As Faustino Torrez (2011) explains,

“It must be an agrarian reform that gives legal guarantees to peasants who have occupied lands to survive; an agrarian reform that guarantees communal land ownership and that is designed to resist the threat of counter-agrarian reform ”
(Torrez, 2011, p.51).

This is an important point that highlights the proposition that governments promote the formation of, and provide support for, local agricultural associations within farming communities to ensure the protection and autonomy of farming communities (Altieri & Fune- Monzante 2012). In the Cuban context, this was found to be the case; Cuba’s development agenda has conceptualized food as a human right since 1959 (Murphy, 1999) and the state undertook reforms to achieve its aims to meet this population need (Murphy, 1999; Altieri & Fune- Monzante 2012).

Still more, proponents of food sovereignty recommend that market regulation measures be taken to “stabilize and guarantee fair prices to farmers, workers and consumers by re-establishing floor prices and publicly-owned national grain reserves at home and abroad” (Holt-Giménez, 2008, Pg. 13). This is because the advancement of the agroecology-based agriculture model requires state intervention to protect small-scale domestic food producers and facilitate their access to local resources and the necessary infrastructure to enable them to meet domestic market demands (Rosset, 2009b). In this sense, the Food Sovereignty paradigm requires state-intervention to re-embed markets within society and to formulate regulations that also marked Franklin D. Roosevelt’s state-led development model (Schlesinger, 1958; Davidson, 2009; Ziegler, 2013).

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