The Globalization of the Food Retail Sector in Southern Mexico

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THE GLOBALIZATION OF THE FOOD RETAIL SECTOR IN SOUTHERN MEXICO

by

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THE GLOBALIZATION OF THE FOOD RETAIL SECTOR IN SOUTHERN MEXICO

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Western Michigan University, 2006

The practices and policies of transnational corporations have now taken hold in the geo-economy, and the effects of globalization can be seen worldwide. Current research trends in economic geography focus on these policies and their transformations with regards to specific sectors. These theories predict and explain how transnational corporations should act, interact, and influence host countries. This foreign presence in host countries not only influences the corporate sector, but creates unique changes and challenges for producers and consumers. Consequently, the need to understand how the evolution of the global space affects the transformation of the local space, as well as the livelihoods of local people, particularly in a developing nation, is essential to the topic of globalization.
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CHAPTER I

INTRODUCTION TO THE PROBLEM

The practices and policies of transnational corporations are now entrenched in the new geo-economy, and the effects of globalization can be seen worldwide. Current research trends in economic geography focus on these policies and their transformations with regards to specific sectors and how theories should predict, or explain how these transnational corporations should act, interact, and influence host countries. This foreign presence in host countries not only influences the corporate sector, but sets up unique challenges for producers and consumers. Consequently, the need to understand how the evolution of the global space affects the transformation of local space as well as the livelihoods of local people, particularly in a developing nation, is essential to the topic of globalization. This thesis will look at the local implications of the entrance of Wal-Mart into Mexico. It will also look at the importance of this global retailer in Mexico as its policies and practices influence other retailers, producers, and consumers.

The main objective of this research is to take a closer, more detailed look at how the processes of globalization at work in Southern Mexico have facilitated
changes in the supply-chain linkages in the food retailing sector. By using this more focused approach, this thesis seeks to improve understanding of the specific processes at work, as well as to contribute to the scholarly understanding of the local implications of these global trends. This research will first look at how the presence of foreign retailers affects the landscape of the retailing sector as a whole. The sector is not only following the lead, but in some cases, carving out a spot of its own in response to this competition.

This thesis will also attempt to make explicit the relationships between retail firms and small-scale producers; try to identify the effects of globalization on the supply chain within a region of a developing country, identify how these relationships are configured, and determine the differences, if any, between international and domestic firms. This research will not only look at how supply-chain relationships have been transformed to meet consumer needs within Mexico, but also how the transformation of this supply chain has affected the livelihoods of small-scale producers.

This thesis is organized into nine chapters. The first section, the literature review, will offer an empirical assessment of the retail sector in Mexico and how it has transformed since the 1980s. This chapter provides an overview of recent theoretical perspectives that may be applied to interpret current changes in the retail sector.
and transformations within the supply chain. Subsequently, both methods and procedures will be detailed. The next section will include a brief overview of the particular research site, Yucatán, Mexico, and its unique retailing sector will be explained. This section will also attempt to explain how transformation of the retailing sector in Yucatán follows current research and theory on the globalization of retailing.

Next, a detailed description of the five commodities chosen for the study will be given, followed by an analysis of their current supply-chain linkages with formal and informal retailers within Yucatán. This analysis will facilitate the identification of challenges and implications for local, small-scale farmers. Subsequently, the transformation of supply-chain linkages with retailers and small-scale producers in Yucatán will be interpreted based on the theoretical perspectives outlined in the literature review. Following, both impacts and policy recommendations will be given for the study area. Lastly, challenges to these questions will be posed in the conclusions.
2.1 The Transformation of Retailing

The term globalization has found its way into everyday language, as well as the debate as to how it may or may not be affecting our world. Although controversial, it cannot be denied that we now live in a world where borders are blurred. According to some scholars, this globalized world is in fact a world where separate nation-states no longer compose specific economic units, and the cultures, customs, and traditions of consumers are homogenized into one global preference created by global corporations (Dicken, 1998). The concept of globalization is one that is fundamentally different from that of internationalization. It is one that is driven by transnational practices that drive consumers' needs, wants, and desires to incorporate international activities into their local world. Globalization goes beyond the quantitative processes of a more global geographic economy; it extends to the qualitative process of international preference integration, where consumers actively integrate the 'global' into their lives (Dicken, 1998).

The globalization of retailing is a fairly new phenomenon which is transforming the retail landscape.
While Coe and Hess (2005) note the longstanding history of international retailing research, they also acknowledge the ever-increasing speed at which global processes, such as the influence of transnational practices and concepts of embeddedness, are taking place within the field.

During the early 1960s, research on retailing focused primarily on understanding retailing in the global market, where the United States showed unique advantages (Alexander and Myers, 2000). The concepts of "The Wheel of Retailing" and "Notes on the Retail Accordion" summarized by Hollander (1960, 1966) were dominant in explaining the structure and evolution of retailing (Levy et al., 2005).

The Wheel of Retailing hypothesis contends that new types of retailers will start out as low-status, low-margin operations. Gradually firms will expand facilities and increase investments until finally they mature as high-cost retailers vulnerable to newer types of retailing, that in turn, go through the same process (Hollander, 1960). Similarly, the retail accordion hypothesis states that there is a rhythmic domination of the retail sector, alternating between general, wide-assortment retailers and specialized, narrow-assortment retailers (Hollander, 1966).

Although these theories are now subject to a variety of criticisms regarding their explanatory or predictive power, they form the base of the theoretical retail literature. Levy et al. (2005) note other hypotheses for explaining retail change including the Darwinian approach of natural
selection (Dressmann, 1968; Forester, 1995). This hypothesis follows Charles Darwin's theory of greatest fitness, implying that organisms evolve and change based on survival of the fittest. With regards to retail, only those firms able to adapt to changes in customer base, technology and competition have the best chance of success.

Perhaps most interesting to current retail evolution is the concept of the "Big Middle", introduced to Levy et al (2005) by co-author, Bob Connolly, executive vice president of marketing at Wal-Mart, Inc. This theory describes how firms begin and develop, and helps create a framework to understand the factors that motivate the evolution of retail (Levy et al., 2005). In the global space of retailing, successful firms face the challenges of running many stores spread across large geographic areas, expansions which always include managerial and operational issues (Brown et al., 2005). The cycle of evolution most always begins with innovative or low-price retailers, but transforms as these retailers search for economies of scale, increased revenues, and incremental profits (Levy et al., 2005).

Increased technology and supply-chain management become crucial factors to lowering costs and increasing efficiency. As Brown et al. (2005) maintain, Wal-Mart has been a supply-chain management innovator; leading efforts for collaborative planning, forecasting, and replenishment (CPFR). In 1996, Wal-Mart developed the cross-docking approach to inventory handling, and mandated radio frequency
identification (RFID) from its suppliers. Therefore, the "Big Middle" can simply be described as the portion of market space where the largest retailers compete for consumer expenditures, taking into account the use of advanced technology and supply-chain management techniques to increase competition. It is evident that Wal-Mart has taken on a "Big Middle" of its own; perhaps the "Global Big Middle" (Brown et al., 2005) as it enters into the dynamic global space of retailing. Most importantly perhaps, is the fact that a single firm has been paramount in transforming the global retail system.

The globalization of retailing has resulted in a rapid proliferation of supermarkets throughout Latin America. During the 1990s, expansion from a handful of international retailers (Wal-Mart, Carrefour, and Ahold) began changing the once, only nationally controlled retail market (Wrigley, 2000). Carrefour was the first international retailer to enter the Latin American market. Their 650 stores currently bring in 50 percent of total sales (Coleman, 2003). Ahold, a Dutch retail conglomerate, also has a strong presence in Latin America with more than 750 outlets and seven billion dollars in sales (Coleman, 2003). In 1991, Wal-Mart entered into the international market with both fully-owned subsidiaries or joint ventures in Argentina, Brazil, Mexico, and Puerto Rico (Biles, 2006). In Latin America alone, Wal-Mart operates almost 1000 retail outlets, employing more than 200,000 persons (Wal-Mart, 2005). The rapid global
expansion of these international retailers placed them among the 100 largest multinational corporations in the world (Coe, 2004). Currently, the existing literature neglects the overall effects of this rapid rise of international retailers in developing nations.

As the largest corporation in the world, Wal-Mart is therefore emblematic of the globalization of retail, with more than $312.4 billion dollars in global sales in the fiscal year ending January 31, 2006 (Wal-Mart, 2006). The Wal-Mart model consists of low prices, low wages, avoidance of unions, and the “squeezing” of suppliers. Wal-Mart was a United States based company prior to its entrance into the global market, beginning in Latin America with Mexico in 1991. It can now be found from Brazil to China. Along with Wal-Mart retail outlets, the corporation has also been successful in acquiring local competitors and retaining local retail outlet names (Harris, 1995).

Wal-Mart’s emergence and success in foreign markets has pushed it to the forefront of food retailing. Wal-Mart is now the leader in sales in numerous countries, and many domestic-owned retail suppliers have opted to emulate the “Wal-Mart model” of retailing, described by the “Big Middle” theory (Levy et al., 2005), because without this model, they cannot compete. Many other chains also opt to sell out. Based on the success that this chain achieves, the emulating of tactics by other chains is a trend that is picking up speed (Bush et al., 2004). These changes taking place
within the retail sector can be described as 
"walmartization" (Christopherson, 2001; Biles, 2006).

With the influence of globalization changing the face of retailing, it is important to assess the implications of these changes for retail outlets, producers and consumers. The procurement patterns employed by these corporations have the potential to impact and change the way farmers, producers and retailers interact.

The specific policies of buying and selling goods in accordance to the Wal-Mart model affects those involved in the supply chain, such as local producers and large-scale producers. One example of policy change includes Wal-Mart buying directly from producers. This policy gives Wal-Mart, rather than global commodity markets, the power to set the prices. Moreover, the reforms, policies, and business practices of one corporate giant now have profound effects on the supermarket sector, producers, and consumers in any given region.

Given the two dimensions of internationalization, stores and sourcing, Coe (2004) emphasizes the importance of retail research in economic geography. This research should not exclusively focus on the global space of retailing, but should also take a focused look at local dimensions and implications. Not only has the retail sector experienced changes due to "walmartization", but as Coe (2004) suggests, the local implications that impact small-scale producers are also crucial factors in the transformation of retailing.
The bulk of related research tends to take a 'macro' look at globalization and how it has affected global patterns of change in the food industry (Craig et al., 2000). As Wrigley, Coe, and Currah (2005) recently note, the existing literature in economic geography ignores distribution systems and how these systems affect the transformation of supply chains on firms, workers, and specific regions in their host countries.

International preference integration, or the process of globalization, is driven by both the processes of technology and policy, forces that affect the transformation of food retailing on a global scale (Coleman, 2003). The globalization of retail has been marked by the increased presence and power of international food retailers in Latin America, although it should be recognized that each country has experienced unique changes and adjustments.

2.2 The Mexican Retail Sector

Prior to the rise of international retailers, the national food retail sector in Mexico went through two stages (Schwentesius and Gómez, 2002). The first period was marked by the presence of supermarkets in large Mexican cities. Widespread consolidation did not occur until Mexico's entry into the General Agreement of Trade and Tariffs (GATT) in 1986, when national retailers began
forming their first relationships with foreign firms (Schwentesius and Gómez, 2002). By the early 1990s, Mexican consumers were reliant on a number of national supermarket chains, as well as several regional food retailers. During this period, supermarkets accounted for a mere 20 percent of all food sales (Reardon and Berdegué, 2002). Upon anticipation of NAFTA, several large international retailers (Carrefour, Ahold, and Wal-Mart) entered into the market. Rather than entering blindly into this unknown market, many firms sought out relationships and strategic alliances with existing successful national firms (Morais, 2004; Chavez, 2002).

The consolidation of neoliberal reforms in Mexico was marked by the signing of NAFTA in 1994. The Mexican economy was rapidly opening, reducing both tariffs and import permits. With low inflation in the early half of the 1990s, a major inflow of foreign investment flooded Mexico (Buitelaar and Perez, 2000). Foreign direct investment reached a cumulative total of US $33 billion by the end of 1991, with 63 percent of the participation from firms in the United States (Lustig et al., 1992). The opening of borders allowed for strong capital investment in the retailing sector; ideas and technology have flown in freely as well, influencing, and setting precedents, for the national retailing sector.
2.3 The "Walmartization" of the Mexican Retail Sector

The only major international food retailer in Mexico today, Wal-Mart, initially entered into a partnership with the domestic retail conglomerate, Cifra, in 1991 (Biles, 2006). When entering the partnership, Wal-Mart held a 50 percent share, which enabled the retailer to launch its Supercenter and Sam's Club retail formats. By 1997, Wal-Mart had acquired a majority stake in Cifra, and in 2000 officially became Wal-Mart de Mexico (Walmex) (Biles, 2006). Today, Walmex operates more than 400 supermarkets and department stores and employs roughly 112,000 people in Mexico, making it the country's largest private employer (Wal-Mart de Mexico, 2005; Lee, 2003). Wal-Mart de Mexico's total sales for the 2005 fiscal year were more than $13 billion, equivalent to two percent of Mexico's GDP and 12.5 percent of all formal sector retail trade (Wal-Mart de Mexico, 2005; Lee, 2003; Biles et al., forthcoming). This retail giant currently controls 55 percent of total sales among Mexico's four largest retailers, which collectively make up 80 percent of all formal food sector sales (Morais, 2004).

The rapid proliferation and unparalleled success of Walmex, along with its role as the only major international retailer in Mexico, demonstrates its power and influence. This not only affects national and regional supermarket firms in terms of technology, policy, procurement practices
and distribution, but also influences the livelihoods of those further up (farmers and food producers), as well as down (consumers) the supply chain. Thus, it is important to understand how this "walmartization" of retail results in changes at the local level. These transformations can further be examined and interpreted within the context of three theoretical frameworks including Sklair's (1995) transnational practices (TNPs); the global commodity chain framework (including Gereffi, 1994); and the notion of embeddedness (Hess, 2004; Mardsen, 1995,2000; Wrigley, Coe and Currah, 2005).

The concept of transnational practices (Sklair, 1995) provides a broad theoretical base to evaluate the transformation, (i.e. globalization) of the retail sector within Latin America. The transnational corporation (TNC) (Sklair, 2001; Dicken, 1998) can be understood as the driving institutional force of globalization in the global economy. Sklair (1995) notes that it is more telling to understand the global system in terms of transnational processes (TNPs), carried out by transnational corporations (TNCs). Within the global system, Sklair (1995) asserts that TNPs are defined by three features; the economic, the political, and the cultural-ideological. The economic feature within global systems theory explains the actions, transactions, and capital flows (all activities of the TNC) across borders.

The political transnational practice gives rise to the
transnational capitalist class (TCCs), which has a more
global, as opposed to local, perspective. Transnationalism,
in a sense, can then be further described as national
capitalists disembedding themselves from their home nation
into a new 'supranational' space of the global economy
(Robinson and Harris, 2000). Geographically, transnational
capitalists are no longer tied to territoriality; they form
part of the global system, the global economy. It is worth
noting that, as Robinson and Harris (2000) assert, the rise
of the TCC is based on the globalization of production. As
commodities are produced around the world, and products now
flow more freely, the rise of a burgeoning capitalist class
has created an environment of global capitalism.

Sklair (2001) acknowledges that this class (TCC) is
based on transnational corporations, which more or less
control the processes of globalization. Political
transnational practices facilitate this communication and
transfer of goods and technology through local elites
(TCCs), the government, and foreign investors. Robinson and
Harris (2000) contend that the analysis of the power of the
transnational corporation cannot be separated from the state
and political process. Therefore, policy, as noted above as
a driving force in globalization, plays an insurmountable
role within the global system. In most cases, worldwide
market liberalization (neoliberal reforms) and economic
integration programs have promoted a supranational
infrastructure of the global economy (Robinson and Harris,
As Wrigley, Coe, and Currah (2005) contend, the entrance of direct foreign investment into the global economy, specifically the retailing sector, has significantly altered the physical and corporate landscape within Latin America. Indeed, these neoliberal policy changes have greatly influenced the face of the Mexican food retailing sector.

Prior to the 1980s, this sector was dominated by small firms, at both the regional and local levels. As previously noted, with Mexico's entry into GATT, national supermarket chains emerged, as well as initial partnerships with international retailers (Schwentesius and Gómez, 2002). In anticipation of NAFTA, many international firms, including Wal-Mart, Carrefour, and Ahold entered into Mexican territory.

The case of cultural-ideological transnational practices can be explained as the globalization of the capitalist system reproducing itself through the profit-driven culture-ideology of consumerism (Sklair, 2001). Beyond the conception of wanting consumers to buy goods, global capitalism persuades the consumer to value their lives in terms of what they possess, and that these goods are best provided by the free market. The focus on consumerism is channeled through advertising and media, defining progress (and development) in terms of "high mass" consumption (Biles et al., forthcoming). It is therefore
compelling to understand the transformations within the retail sector as a function, or more appropriately, a response to these transnational processes.

With regards to its theoretical importance, Dicken (1998) asserts that it is increasingly the transnational corporation that plays a key role in coordinating production chains and shaping a new geo-economy. These commodity chains represent transactionally-linked sequences of activities in which each stage adds value to the production of the goods or services provided (Dicken, 1998). It is useful to note that production chains are not consistent across transnational corporations and geographies. Corporations are dynamic and continuously changing, as are their transactions and linkages.

The global commodity chain approach put forward by Gereffi (1994) and colleagues emphasizes the links between transnational corporations and their increasing procurement within the global system. Gereffi (1994) notes that the global commodity chain perspective not only focuses on the importance of the geographical spread of transnational production, but also on the organizational capabilities which help explain firm stability and change. These commodity chains have three main dimensions: a set of products and services linked in a sequence of value-adding economic activities, territoriality (dispersion of production and distribution networks), and a governance structure which determines how resources are distributed.
throughout the chain (Gereffi, 1994).

Governance structures can be defined as either "producer-driven" or "buyer-driven" commodity chains. In explaining transformations in the retail sector, the buyer-driven model, one which describes large companies playing a pivotal role in organizing decentralized production networks, is fitting. Gereffi (1994) responds directly to this issue while explaining that a buyer-driven commodity chain can explain the specialized forms of production in terms of structural changes within the retail sector.

While the global commodity chain concentrates not only on the opportunities and constraints within the chain, the majority of analysis has been focused on manufactured commodities (Gibbon, 2001). With regards to agriculture, Dolan, Humphrey, and Harris-Pascal (1999), found that the production and distribution of fresh fruit and vegetables are representative of the buyer-driven commodity chain. The size, as well as market power, of large supermarket chains plays an instrumental role in supplying and coordinating goods across large geographical areas. These firms also use this power in terms of dictating what is produced and where; as they use this rapidly changing technology to control logistics and distribution. In short, these large firms wrest market control away from food producers, dictate terms and conditions, and drive down producer margins (Biles, 2006).

The market control held by "Big Middle" firms not only
facilitates corporate competition, with respect to formatting, marketing, and geographic locations, but also affect the corresponding supply chains. The policies, technologies, and sourcing strategies used by "Big Middle" firms affect those upward on the supply chain. Global commodity chains allow firms to receive a consistent quality product, and also offer the alternatives of exotic products that local producers may not have the ability to supply. As noted by Schwentesius and Gómez (2002), this loss of market control and the increase of strict terms and conditions has negatively influenced small-scale lime producers within Mexico. While small-scale producers may be negatively affected, the consumer may reap the benefits of such competition. As Dobson, Waterson, and Davies (2003) note, many of these changes, including lower prices and greater convenience and variety have purportedly been beneficial for consumers.

While both transnational practices and global commodity chain literature offer insights to the dynamic face of the globalization of retail, Wrigley, Coe, and Currah (2005) offer a more specific look into the differences and complexities of the retail sector as they highlight the importance of place-specific geographies of the retail sector. The retail sector differs qualitatively from the manufacturing sector (Dicken, 2003), most specifically with regards to the networks within which they are highly embedded. This in turn influences economic, political, and
institutional contexts, as well as helping to shape strategies used by transnational corporations, both in home and host countries (Wrigley, Coe, and Currah, 2005).

The extent of embeddedness within a host country is relative to the degree of foreign direct investment in these markets, as well as responding to local variations and preferences (Wrigley, Coe, and Currah, 2005). While Wrigley, Coe, and Currah (2005) note the importance of studying the globalization of retail through the lens of the global commodity chain to understand how these chains are used to enhance and protect competitive positioning, they find it to be only one facet of the retailing transnational corporation. Noted by Coe and Hess (2005), the work of Hughes (1999) looks at how many scholars “have a tendency to under-theorize the social and cultural energies which drive many of the changes taking place at the retailer-supplier interface.” Therefore, with a high degree of foreign direct investment, retailers must go beyond distribution and sourcing, they must understand their host markets at a local level, implying a high level of investment of embeddedness.

Hess’ (2004) work on embeddedness helps to draw a more complete definition of this admittedly somewhat fuzzy notion (Markusen, 1999), which attempts to explain societal, network, and territorial embeddedness. Societal embeddedness is based on where the actor is from, and how culture, institutions, and history influence economic activity in and outside of their home societies. From the
perspective of transnational retail firms, societal embeddedness refers to the importance of transnational economic processes within their host country with respect to local (host country) influences, as well as influencing the local. Network embeddedness explains the extent of the linkages, including both functional and social connections, of the transnational corporations with economic and non-economic agents within host countries. This includes the durability and stability of home-host structure networks. Lastly, territorial embeddedness explains how transnational actors are geographically embedded, both place and scale-specific, and how their relationships with other firms and consumers within that space are affected.

All types of embeddedness theory (Hess, 2004) helps to further explain the complexities of transnational retail corporations beyond the global commodity chain approach. All highlight the spatial and temporal dynamics of the internationalization of retailing (Coe, 2004). It is imperative that these relationships be looked at as dynamic as one explores how these theories may help to understand the local implications of transnational firms within their host countries. The concept of globalization, is not a process of disembedding solely based on market transactions and impersonal trust, but a process of transnational network building (embedding) and creating personal trust relationships between actors at interrelated geographic scales (Hess, 2004).
Beyond a formal definition of embeddedness, Wrigley, Coe, and Currah (2005) note three major areas in which retailers are embedded, or ‘close’ to their host countries. First, retailers must be sensitive to local preferences and tastes. Secondly, retailers must invest in local logistical and distributional infrastructure in their host country, connecting them to local markets. Lastly, given the importance of the global commodity chain, retailers should still source a large variety of goods from their host country, referring back to local tastes and specialized goods. Using these three areas, transnational retailers should and do, to differing degrees, localize operations (Wrigley, Coe, and Currah, 2005). As they note, these concepts of embeddedness help create a more complete picture of the retail transnational corporation.

It is useful to note that embeddedness can be viewed from two perspectives, the transnational firm and the local or regional food system. Although the local food system perspective provokes thought as to who are the prominent actors in the commodity chain, this analysis will subscribe to the notion of “walmartization”, and how this firm perspective has influenced and transformed the Mexican retail landscape.

As previously noted, the process of embeddedness can be explained from the perspective of the local embedding itself into the global economy. While most analysts view the globalization of the food sector to be promoted by
transnational practices (TNPs) to create new linkages between actors to push new commodity forms to mass markets (Murdoch et al., 2000); the transformation of the food system tends to follow its own course (Goodman and Watts, 1994 in Murdoch et al., 2000). Marsden and colleagues (1995, 2000) theorize that this embeddedness of the food system comes from the prominence of the role of nature, in both local and regional contexts. A commodity will embed itself into the global chain because of consumer preference for the natural, exotic, or tropical. The selling of these commodities based on these concepts shall always remain, therefore the opportunity for local commodities to embed themselves into global commodity chains will also remain. In short, this complementary view of embeddedness gives perspective into how "globalization should be treated as a 'contested process' in which the disorganizing impact of transnational food actors 'conditions' rather than 'determines' the actions of local producers and consumers (Marsden et al., 1996, 367 in Murdoch et al., 2000). The global market presents challenges for certain commodities entering into the commodity chain, but also offers opportunities for 'specialized' local products to embed.

The proliferation of these supermarkets has been in response to the sole international retailer left in Mexico, Wal-Mart. The policies and procedures that Wal-Mart uses have not only influenced the supermarket sector in Mexico, but also simultaneously affected producers and consumers.
National and regional supermarket chains react, and act upon the competition forced by this retail giant in a number of ways. Distribution centers and procurement procedures, joint buying ventures, similar selling strategies, and varying retail formats are all ways in which national and regional markets are trying to hold ground against this foreign giant. This "walmartization" can be said to set the standard, and the other firms race to keep up, or lose their market share.
CHAPTER III

METHODS AND PROCEDURES

3.1 Study Area

This research was conducted in Yucatán, Mexico, located on the tip of the southeastern peninsula in Mexico (Figure 1). The state of Yucatán is populated by more than 1.7 million inhabitants, 40 percent of whom live within the capital and surrounding municipio of Mérida (Banamex, 2005; INEGI, 2000). Due to its geographic location, Mérida is the center for trade and commerce for southeastern Mexico extending into other parts of Central America. As a retail hub, the wholesale and retail trade sectors in Yucatan employ roughly 100,000 people, and food sales alone make up greater than 35 percent of total commercial activity within the state (Biles et al., forthcoming).

Beyond the growing metropolitan core and retail hub, rural areas and the remaining rural population is fairly marginalized. The state of Yucatán is one of the 12 states in the Republic of Mexico with high levels of marginality, with more than 60 percent of its inhabitants outside the state capital and 35 percent of its total population living in areas of high marginality (Consejo Nacional de Población, 2000). In 2003, the average per capita income was roughly $4700 (US), a mere 80 percent of the national average.
Outside of the city of Mérida, this marginalized population relies on agriculture as the primary economic activity. Nearly 17 percent of total employment and one-third of jobs outside of the capital city involve agriculture (INEGI, 2000).

Although a considerable amount of these inhabitants rely on agriculture for their livelihoods, the majority of their production is for small-scale export, local and regional consumption needs, and subsistence living. Roughly 11.9 percent of the state of Yucatán is represented by agricultural land cover (INEGI, 2006). Of this land, the state continues to manufacture henequén and oranges industrially. Corn, squash, and beans account for the rest of the main small-scale production.

Figure 1. Map of Study Area and Field Research Locations

Source: Biles et al., forthcoming
3.2 Research Design/Data Collection

A largely qualitative approach was employed for data collection in order to understand local-level supply-chain functioning and transformation. Informal interviews were conducted with retailers, producers, governmental officials, and supplementary sources within Yucatán.

Key stakeholders and representatives from all major supermarkets within the city of Mérida were identified upon arrival to the site. Representatives from international retailer Wal-Mart, national retailers Soriana, Comercial Mexicana, Gigante, and Chedraui, as well as regional retailer Super San Francisco de Asis, participated in the study. In-depth, semi-structured interviews were conducted between June and August 2005 with representatives of these firms, to understand changes in procurement and distribution processes, firm specific procurement policies, and perspectives on the retail sector within Mexico.

Specifically, during interviews food retailers were asked to describe their procurement procedures and policies, as well as the locations and importance of distribution centers. Purportedly, as shown in current global market theory and literature, with the increase in neoliberal reforms and opening of borders, globalization should increase the ease of product movement within global commodity chains, allowing retailers to get goods at low prices. This would therefore allow supermarkets to procure
from the wholesale market hub where all goods could be found, as well as offering a greater variety of fresh fruit and vegetables to consumers. To test this hypothesis, we asked representatives to identify the source of their commodities, as well as explain their relationships with fresh fruit and vegetable producers, whether international, national, or local, and how these relationships have remained constant or evolved over time. With respect to variety, fresh produce was counted and noted for all participating supermarkets. In addition to produce variety and sourcing, a standard basket of goods was created based on local consumption patterns (Table 1). From this standard basket of goods, prices were again collected from all participating firm to determine which outlets offered the most economical basket.

Producers of five agricultural commodities, including papaya, citrus, habanero chile peppers, beef, and eggs, were also asked to participate in the study. These commodities were chosen, with the exception of eggs, to assess their supply-chain relationships with retailers because they are commodities which Yucatán's Secretaría de Desarrollo Rural (Secretary of Rural Development) have focused on in their Sistema Producto, a national program to facilitate and strengthen supply-chain linkages and market access for small-scale producers.

Agricultural producers provided information on their product, operations, and final market access of outputs.
These producers were also asked about the role of intermediaries and wholesalers in their production and their relationships with food retailers. Beyond questions of supply-chain linkages, producers also shared information about obstacles within their production and perspectives on the future of their commodities. Both questionnaires for food retailers and small-scale producers may be found in the appendix.

Additional data were collected from intermediaries and wholesalers, both fundamental to the supply chain within southern Mexico. Vendors and representatives of local markets were also interviewed. This supplemental information was crucial to understanding the specifics of these chains, the challenges for small-scale producers from outside perspectives, and ideas for strengthening local supply-chain relationships in the future.

Triangulation method for assessment of data was then used from the three sources: retailers, producers, and other actors involved in the supply chain. Using the triangulation method allows added insight to fundamental research questions. Simply put, triangulation is the employment of different data sources and collection procedures to examine the same research issue (Hogggart et al., 2002). This method allowed a more comprehensive insight into how the relationships had worked, are currently working, and may work in the future in Yucatán.
### Table 1: Standard Basket of Goods

<table>
<thead>
<tr>
<th>Product</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil 1-2-3</td>
<td>1 liter</td>
</tr>
<tr>
<td>Pop/coke</td>
<td>2 liter</td>
</tr>
<tr>
<td>Standard brown sugar</td>
<td>1 kilo</td>
</tr>
<tr>
<td>Pork/milanesa cut</td>
<td>1 kilo</td>
</tr>
<tr>
<td>Chicken</td>
<td>1 whole</td>
</tr>
<tr>
<td>Ground beef</td>
<td>1 kilo</td>
</tr>
<tr>
<td>Avocado</td>
<td>3 whole</td>
</tr>
<tr>
<td>Zucchini</td>
<td>1 kilo</td>
</tr>
<tr>
<td>Onion</td>
<td>1 kilo</td>
</tr>
<tr>
<td>Fresh chile habanero</td>
<td>1 kilo</td>
</tr>
<tr>
<td>Lettuce</td>
<td>1 head</td>
</tr>
<tr>
<td>Lime</td>
<td>1 kilo</td>
</tr>
<tr>
<td>Melon</td>
<td>1 whole</td>
</tr>
<tr>
<td>Papaya</td>
<td>1 kilo</td>
</tr>
<tr>
<td>Cucumber</td>
<td>1 kilo</td>
</tr>
<tr>
<td>Banana</td>
<td>1 kilo</td>
</tr>
</tbody>
</table>

3.3 Formatting, Processing and Analysis of Data

A clear set of interview notes were taken from each participant in the study, including representatives of both food retailers and commodity producers. Following data collection, note transcription provided the bulk of information on the policies, procedures, and relationships between retailers and producers. Produce variety counts were taken at each supermarket and then entered into a spreadsheet to provide a clear picture of which retailers were offering more fresh goods to their customers. With regards to the standard basket of goods and pricing data, three different brand prices were taken for each item to calculate a mean product price (regardless of brand). These prices were then entered into a spreadsheet for price
comparison among retailers.

Upon transcribing interview data, relationships, or lack thereof, could be seen within the retail and production chain. As previously mentioned, the triangulation of data sources showed specific relationships, and it was possible to create a diagram of how each specific commodity makes its way to the market (both formal and informal, small-scale), as well as how each retailer procures each specific commodity. This compilation of data helped to "tease out" the complexities of regional supply chains, and understand the route that each commodity takes on its way to the final market. Beyond supply-chain transformations, it was possible to see how the presence of Wal-Mart has facilitated changes within the retail landscape.

From the given retail interview data, patterns of retail imitation and strategy were seen and could be evaluated. It was also possible to compare prices of each food retailer and see which supermarket chain within Yucatán carried the more economical basket of goods. In addition to pricing, produce variety allowed us to understand who carries what types of produce, and how that may be related to globalization, and more specifically, procurement strategies.
3.4 Research Personnel

This study was made possible through the guidance and coordination of Dr. James Biles. A team of five undergraduate students participating in a National Science Foundation Research Experience for Undergraduates Program (REU), participated in interviews and collected pricing and variety data from June to August 2005. Student researchers also assisted in transcribing interviews and writing progress reports on completed research. Researchers included: Kevin Brehm, Pennsylvania State University; Amanda Enrico, Michigan State University; Cheray Kiendl, Western Michigan University; Emily Morgan, Mount Holyoke College; and Katie Vasquez, Central Michigan University.

3.5 Schedule

Upon arrival at the research site in early May, key representatives were contacted and interest in participation in the upcoming research project was confirmed. When the students arrived on site, a week was designated for orientation and training before initiating the project. Subsequently, interviews with supermarket representatives began and pricing and variety information was collected.

Once the majority of supermarket interviews were conducted, several meetings with government officials led
the team to agriculture contacts. At this stage in the research, the team was split into groups of two assigned to cover a specific commodity. These teams were dispersed around the state. While working to define relationships and transformations within the production chain, interviews with intermediaries and wholesalers helped to give a holistic view of the supply-chain linkages within all of southern Mexico. Although some interviews had to be rescheduled, the team worked to finish any final data collection nearing the close of the program. Lastly, the team worked together to create a final report on all findings throughout the summer research experience. The data collected as part of the REU program form the basis for this thesis research and I wish to recognize their role in this project.
As Biles et al. (forthcoming) have noted, the rapid proliferation of foreign retailers in Mexico following NAFTA (Carrefour, Ahold, and Wal-Mart) has most negatively impacted national and regional chains, rather than small-scale and informal retailers. The pressure exerted on these national chains to compete has sparked widespread expansion and consolidation (Coleman, 2003). Distribution patterns, just-in-time practices, and the volume of supply used by these foreign retailers have forced smaller scale retailers to form partnerships in order to compete. Interestingly, these mergers come from national supermarkets looking to acquire a stake with their foreign competitors. In 2003, the national firm Comercial Mexicana purchased Auchan México, a subsidiary of a French retail chain (Lee, 2003). In a similar move, Chedraui, a large regional chain in southern Mexican, acquired Carrefour's Mexican operations (29 stores) (Biles, 2006). National firms such as Chedraui and Soriana have proliferated across the country and increased their market share as foreign firms have been reluctant to stay in a host market where they are not among the top retailers. This consolidation has led to many changes in the geographic location of supermarkets. Wal-
Mart has followed a hierarchical diffusion pattern throughout Mexico, forcing competitors to service a different type of clientele. Traditionally, the marginal, characteristically poor areas of the city, along the periphery had no access to formal supermarkets. Most shopping was done at specialty stores, corner stores, or local markets. Noticing this lack of supermarket formats, several chains have opted to move out to service a new area with less market competition. According to Biles (2006), the patterns of expansion of national supermarket chains are reflected in a move from shopping malls in affluent and upper-middle class neighborhoods to outlying working class areas. These geographic changes are clearly reflected in the study area of Mérida.

4.1 The Food Retail Sector in Yucatán

Approximately 30 large national, international and regional food retail stores are located in Yucatán, with the vast majority being found in Mérida (Biles, 2006). Prior to the 1990’s, Mérida was almost exclusively served by regional supermarkets, catering to mainly upper to middle-class neighborhoods. The sector experienced a mass expansion between 1990 and 2000, concurrent with the entrance of foreign retailers, as previously discussed. Today, the food retailing sector in Mérida has expanded to serve more
diverse populations in different locations of the city. To date, Wal-Mart, Soriana, Gigante, Comercial Mexicana, Chedraui, and Super San Francisco de Asis have outlets in Mérida. Although these retailers have expanded, there remains a lack of service within the southern, characteristically poor, region of the city (Figure 2).

**Figure 2: Supermarket Distribution**

Source: Biles, 2006
4.2 Retailing Format

Previous research on the retail sector in Mexico (Chavez, 2002) has noted the propensity for national firms to imitate the policies and processes of Wal-Mart. Coe and Hess (2005) acknowledge that foreign retailers bring new formats and pricing arrangements, as well as new management and marketing procedures, which dramatically alter the retailing landscape. This emulating of national and regional firms with regards to retail formatting is widely seen in the Yucatán. The most notable Wal-Mart format, the super-center, is a trend that most local chains emulate to offer their customers the one-stop shopping experience. The transfer of the super-center format, a business structure, now integrated into cultural preference from the United States onto the Mexican retail landscape, is an important example of societal embeddedness (Hess, 2004). As a function of embeddedness, the societal influence comes from the firm’s home country influences and how they interact within their host country. It can be noted that the global format, has now transformed into a local format. Preference among shoppers shows that this global cultural integration has become part of local life and culture.

The concept behind the popular North American super-center format is one-stop shopping, and Comercial Mexicana, Soriana, Chedraui, and Super San Francisco de Asis have all noted that the super-center format is one that is most
appealing to their customers.

Although most supermarkets are leaning towards the super-center format to compete with the format's creator, Wal-Mart, other supermarkets attempt to find a niche that may appeal to a different type of customer. In this sense, one can use territorial embeddedness to describe how one national firm is attempting to geographically embed itself into its home country. Although this interaction is "home country to home country" rather than "home to host country", the basic elements of territorial embeddedness can be applied. The firm is looking for a new geographical space, specifically seeking to fill a niche that was previously unavailable. It is worthwhile to note that while these firms have identified a geographical niche, they have also located a niche that is not tied to territoriality. They are carving out a cultural niche, providing a different atmosphere and different goods (less variety), to a different consumer. Super San Francisco de Asis has created a format to appeal to the customer with a lower income base in neighborhoods that lack access to other large retailers. This store, known as Akí, offers basic goods at lower prices, because less capital is spent on lighting, furnishing, and air-conditioning.

Similarly, the local, once purely wholesale retailer, Dunosusa, is now repositioning itself as lower-end supermarket, similar to Akí, offering only basic goods at low prices. Traditionally located in the downtown areas of
Mérida and the southern area of the city, this firm has realized that large retail formats are still lacking and while competition remains limited, they have made the shift to this niche.

Gigante is one of the only supermarkets that stayed with its original format, the classic supermarket. This firm believes that it does not need to change formats in order to compete, due to its loyal customer base. Although their vision seems ideal, the company did note that they were in talks to move their remaining Super Maz stores (a regional retailer acquired by Gigante) to a new “super-center like” format. The future for Gigante as a classic supermarket appears bleak in a market dominated by consumer preferences for one-stop shopping. Super San Francisco de Asís and Akí on the other hand, have responded directly to the competition of Wal-Mart and carved out a niche market, which presently, is showing promising results. It is therefore imperative to understand that although Wal-Mart’s influence has made retailers rethink formatting and customer preferences, it has also sparked an active movement to appeal to a customer base that Wal-Mart may not appeal or be able to serve, as seen in the case of Akí.

4.3 Pricing and Marketing Strategies

The emulation of Wal-Mart can also be seen in Yucatán
in terms of advertising and consumer preference strategies. The classic phrase from Wal-Mart known to many Mexican consumers, "precios bajos todos los días" (everyday low prices), is a phrase that all supermarkets, national and regional, noted to be the most important strategy for sales promotion. Not only do retail chains carry out price comparisons, mainly with Wal-Mart, they go to such lengths as filling shopping carts with basic food items and listing the total price in comparison to other stores for that week. The strategy of lowest pricing is one that is apparently the most effective way to lure in a price-conscious customer.

Given the importance of pricing to the consumer, we compiled a standard basket of goods, specific to Yucatán, and compared the final total of goods (Table 2). Interestingly, the lowest prices ($263.83 pesos) were found in the municipal market, although many middle-class consumers prefer not shop there because of sanitary and status reasons. Within the formal food retail pricing, Chedraui offered the lowest prices for the basic basket of goods at $265.15 pesos, with a total average of $294.64 pesos. Although famous for "precios bajos todos los días", Wal-Mart had the most expensive price for the basic basket of goods at $334.00 pesos, well above the average. The remaining supermarkets fell slightly above or below the average. Anecdotal evidence shows that due to a rigorous advertising campaign, many Mexican consumers believe that Wal-Mart offers the lowest prices, despite evidence to the
contrary. Although prices may be higher than other supermarkets, Wal-Mart is selling a perceived higher quality, as well as an "American Experience", where customers of higher status prefer to shop.

<table>
<thead>
<tr>
<th></th>
<th>Wal-Mart</th>
<th>Comercial Mexicana</th>
<th>Super Maz</th>
<th>Super San Francisco</th>
<th>Chedraui</th>
<th>Soriana</th>
<th>Market</th>
<th>AVG</th>
</tr>
</thead>
<tbody>
<tr>
<td>OIL (1liter)</td>
<td>10.50</td>
<td>11.80</td>
<td>13.90</td>
<td>12.90</td>
<td>10.50</td>
<td>10.59</td>
<td>13.00</td>
<td>11.88</td>
</tr>
<tr>
<td>POP (2liter)</td>
<td>12.85</td>
<td>13.75</td>
<td>14.00</td>
<td>13.77</td>
<td>13.75</td>
<td>12.30</td>
<td>14.00</td>
<td>13.49</td>
</tr>
<tr>
<td>SUGAR (1kilo)</td>
<td>9.65</td>
<td>9.90</td>
<td>8.75</td>
<td>7.90</td>
<td>9.70</td>
<td>9.45</td>
<td>8.00</td>
<td>9.05</td>
</tr>
<tr>
<td>PORK (1kilo)</td>
<td>48.90</td>
<td>39.90</td>
<td>36.90</td>
<td>40.97</td>
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<td>CHICKEN (1kilo)</td>
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<td>18.90</td>
<td>19.90</td>
<td>19.90</td>
<td>16.00</td>
<td>39.90</td>
<td>19.33</td>
<td>21.83</td>
</tr>
<tr>
<td>BEEF (1kilo)</td>
<td>46.60</td>
<td>39.90</td>
<td>44.90</td>
<td>33.95</td>
<td>39.90</td>
<td>20.90</td>
<td>47.67</td>
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<tr>
<td>AVOCADO (3 whole)</td>
<td>27.00</td>
<td>25.90</td>
<td>15.79</td>
<td>23.40</td>
<td>20.00</td>
<td>11.45</td>
<td>11.0</td>
<td>19.22</td>
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<td>ZUCCHINI (1kilo)</td>
<td>15.90</td>
<td>12.90</td>
<td>12.99</td>
<td>14.31</td>
<td>9.90</td>
<td>11.45</td>
<td>7.50</td>
<td>12.14</td>
</tr>
<tr>
<td>ONION (1kilo)</td>
<td>11.00</td>
<td>8.90</td>
<td>7.99</td>
<td>10.52</td>
<td>11.00</td>
<td>8.95</td>
<td>8.33</td>
<td>9.53</td>
</tr>
<tr>
<td>HABANERO (1kilo)</td>
<td>73.90</td>
<td>49.90</td>
<td>89.49</td>
<td>89.65</td>
<td>57.90</td>
<td>69.90</td>
<td>50.00</td>
<td>68.68</td>
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<tr>
<td>LETTUCE (1kilo)</td>
<td>9.00</td>
<td>5.80</td>
<td>5.99</td>
<td>9.92</td>
<td>4.90</td>
<td>5.45</td>
<td>6.00</td>
<td>6.72</td>
</tr>
<tr>
<td>LIME (1kilo)</td>
<td>2.90</td>
<td>2.90</td>
<td>3.49</td>
<td>3.15</td>
<td>4.85</td>
<td>5.95</td>
<td>2.67</td>
<td>3.70</td>
</tr>
<tr>
<td>MELON (1kilo0)</td>
<td>9.50</td>
<td>6.90</td>
<td>14.49</td>
<td>8.99</td>
<td>5.35</td>
<td>9.95</td>
<td>9.33</td>
<td>9.22</td>
</tr>
<tr>
<td>PAPAYA (1kilo)</td>
<td>8.00</td>
<td>8.20</td>
<td>7.99</td>
<td>8.20</td>
<td>6.30</td>
<td>5.89</td>
<td>8.67</td>
<td>7.61</td>
</tr>
<tr>
<td>CUCUMBER (1kilo)</td>
<td>6.50</td>
<td>6.30</td>
<td>3.99</td>
<td>7.99</td>
<td>6.60</td>
<td>5.45</td>
<td>6.33</td>
<td>6.17</td>
</tr>
<tr>
<td>TOMATO (1kilo)</td>
<td>22.90</td>
<td>16.50</td>
<td>11.90</td>
<td>15.27</td>
<td>10.50</td>
<td>12.45</td>
<td>12.00</td>
<td>14.50</td>
</tr>
<tr>
<td>TOTAL $ pesos</td>
<td><strong>334.00</strong></td>
<td><strong>278.4</strong></td>
<td><strong>312.5</strong></td>
<td><strong>320.8</strong></td>
<td><strong>265.15</strong></td>
<td><strong>287.93</strong></td>
<td><strong>263.83</strong></td>
<td><strong>294.64</strong></td>
</tr>
</tbody>
</table>

Table 2: Basket of Goods and Pricing
4.4 Fresh Fruit and Vegetables

Another common technique that food retailers note to be important is the emphasis on quality and variety of the fresh fruit and vegetable sector. It is not only important to offer fresh, local varieties and appeal to local tastes, but the variety of items offered is a major selling point to consumers. Wal-Mart offers a 200 percent guarantee, which contends that if a shopper is not satisfied with a given produce, s(he) will not only receive money back, s(he) will receive a new product. While other retailers did not mention any specific guarantees, they all noted that fresh produce is imperative to a successful food retailer. As noted previously, research on globalization asserts that with increasing global commodity chains, it should be easier to procure a greater variety of produce.

Therefore, to assess produce variety, we visited each supermarket and carried out a count of all varieties of fruits and vegetables (Table 3). Wal-Mart offered 89 varieties of produce to its consumers, but Soriana, Wal-Mart's number one national competitor, offered 150 different varieties. Interestingly, the municipal market only offered 53 different varieties, as they mostly carry local specialties.
Beyond pricing and produce quality and variety, food retailers understand the importance of offering local goods which cater to specific regional tastes and traditions. Recalling Wrigley et al.’s (2005) three major areas in which retailers are close to their host countries, both sensitivity to local preferences and tastes, as well as sourcing from the host country, reinforce this importance. In 2005, Wal-Mart, with the help of the state government, initiated a fair of regional producers to offer local products which would potentially be put on Wal-Mart shelves given the amount of sales during a time period. Producers were allowed to display their goods in Wal-Mart over a time period, offering samples, or explaining their product to consumers with the hopes of becoming the top seller. Products included local juices, honey, frozen foods, and clothing. The fair was geared to the traditional Yucatecan, showing what the region had to offer, even being advertised by women in traditional dress. Following the excitement of some local producers getting their goods on Wal-Mart’s shelves, and the tremendous consumer response, other national retailers, including Comercial Mexicana expressed

<table>
<thead>
<tr>
<th>Variety</th>
<th>Wal-Mart</th>
<th>Comercial Mexicana</th>
<th>Super Maz</th>
<th>Super San Francisco</th>
<th>Chedraui</th>
<th>Soriana</th>
<th>Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.5 Local Variety</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3: *Fresh Fruit and Vegetable Variety*
interest in conducting a similar sort of event.

This regional product fair showed the excitement and importance of regional goods to local persons. Their preferences and tastes are a product of their region, and successful supermarkets realize the strength of knowing their local market, examples of both societal and network embeddedness.

To grasp how well these retailers were already offering local goods to their consumers, we carried out a count of varieties of local products. These products included, *Salsas el Yucateco* (salsas), *Condimentos la Anita* (condiments), *pollo/huevos Crio* (chicken and eggs), and *Galletas Donde* (cookies and crackers) (Table 4). *Gigante*, the supermarket that claimed it was frequented by local and loyal clientele, offered the greatest variety of these products (61). Interestingly enough, Wal-Mart had the least variety of local goods (22), which possibly was the reason they initiated the local fair.
4.6 Technology, Procurement, and Supply-Chain Networking

It is evident that Wal-Mart has set the precedent in Mexico with regards to retail formatting, price-oriented advertising, and quality and variety standards. It is also evident that national and regional supermarkets are responding to these standards and trying to adapt them for their own purposes. Another important emulating strategy is related to the specifics of the global commodity chain: technology, distribution and procurement processes, as well as the shortening of the supply chain.

As in all processes of globalization, technology plays an important role in transforming the food retail sector in southern Mexico. The application of just-in-time practices and efficient inventory management within distribution centers help supermarkets to achieve economies of scale and reduce costs (Schwentesius and Gómez, 2002). Understanding the importance of the need for technology in order to compete, and to coordinate distribution as their firms expand nationwide, domestic retailers have imitated Wal-Ma...
Mart's direct procurement practices, implemented centralized information systems, integrated their logistics operations, and established their own distribution centers (Biles, 2006). All participating national firms mentioned the increase in technology that has entered their procurement practices over the last decade. Some specifically spoke to the importance of the internet, as well, when dealing with supply orders with large-scale, local producers.

The role of the distribution center is critical to the supply network. It allows for the movement of value-adding activities such as cleaning, processing, and packaging down the supply chain so the retailer can reduce its operations to a simple 'cross docking' facility where goods are delivered and then sent out to stores (Coe and Hess, 2005). Distribution centers are integral in helping supermarket chains achieve economies of scale.

Interestingly, only two supermarkets have such local centers in Yucatán. Super San Francisco de Asis, the large-scale regional supermarket chain, that procures a large amount of goods locally, including beef, has a distribution center located in the Yucatán. It still supplies the majority of its goods from its distribution center in Mexico City, as well. The former regional chain, Super Maz, acquired by the national firm Gigante, also houses its distribution center in the Central de Abastos (municipal wholesale market) in Mérida. The remaining supermarkets (Wal-Mart, Soriana, Comercial Mexicana, and Chedraui) all
have distribution centers located in Mexico City. These distribution centers are not in close proximity to their retailing outlets in the Yucatán. The strong reliance on the Central de Abastos (CEDA) in Mexico City, the world’s largest wholesale food market, explains their geographic placement. While these firms will continue to rely on supplying the bulk of their goods from Mexico City, some have expressed interest in locating another distribution center closer to the Yucatán Peninsula. Specifically, Soriana noted that they are expecting a new distribution center in the neighboring state of Tabasco within the next few years.

Buying strategies have also been transformed in response to the “walmartization” of retail trade in southern Mexico. Coe and Hess (2005) note that purchasing decisions and procedures of foreign retailers are creating a rapid consolidation in the manufacturing/agricultural production sectors of host countries. By improving logistics, increasing the scale and volume of production, as well as supplying from producers that are capable of providing a large volume of high quality products on a regular basis, retailers are able to cut costs (Schwentesius and Gómez, 2002). In response to Wal-Mart’s large-scale buying processes, several domestic retailers have responded to form a bulk purchasing consortium, known as Sinergia, to reduce costs and exert control over supply chains (Castillo, 2004). According to Castillo (2004), Sinergia is now responsible
for purchasing 30 percent of goods for the three largest Mexican supermarket chains; Soriana, Gigante, and Comercial Mexicana, all from a select number of domestic suppliers.

Bulk purchasing consortiums are represented on the regional supermarket level as well. Super San Francisco de Asis, the only remaining regional supermarket chain in Yucatán, explained the importance of joint purchasing agreements for regional firms to not only compete with Wal-Mart, but other domestic retailers as well. In order to remain competitive, this regional retailer and five other regional firms (from other regions outside of the Yucatán) have combined buying power to purchase in greater volume, enabling them to present their own label of goods, mimarca.

These buying strategies have also influenced retailers’ relationships with local producers, as well as fresh fruit and vegetable suppliers. As Biles (2006) notes, the globalization of retailing has forced these retailers to cut costs, supply a consistent, high quality product, and provide greater product diversity. Research on the relationships prior to “walmartization” suggests that retailers relied heavily on the Central de Abastos in Mexico City and a variety of intermediaries for fresh produce (Schwentesius and Gómez, 2002; Reardon and Berdegué, 2002). Although the use of this wholesale market in Mexico City is still important, retailers have increasingly adopted alternate procurement systems, including distribution centers and direct relationships with small-scale growers.
Direct procurement is an efficient way of cutting costs, allowing savings of 10 to 20 percent (Reardon and Berdegué, 2002). Unfortunate for both retailers and producers, attempts in Yucatán have been less than successful. According to an article which appeared in the “Diario de Yucatán” in December 2004, an agreement was signed between Wal-Mart and a national campesino organization (small-scale farmers) to sell directly to the supermarket chain (Biles, 2006). The purpose of this agreement was to provide fresh fruit and vegetables directly to the supermarket chain, including papaya, squash, cucumbers, tomatoes, and other local produce. Without the use of wholesalers and brokers, both retailers and small-scale producers would benefit. Retailers could cut supply costs and small-scale producers could integrate themselves directly into the supply chain. By June 2005, Wal-Mart representatives explained that the agreement was yet to come to fruition, but they remained hopeful for future collaborations.

The changing of these relationships and procurement systems within the retail sector has many potential implications for small-scale producers. In order to supply this retail giant, these producers must meet strict quality standards that are common among international food retailers including hygiene and large-scale volume. In addition, producers must have the capability to deal with commercial accounting practices that pay suppliers seven to 45 days
after delivery (Schwentesius and Gómez, 2002). These standards in the case of many small-scale Yucatecan farmers, as well as noted by Schwentesius and Gómez (2002) in the case of small scale lime producers in Oaxaca, are often too overwhelming for a smaller level of production. Small-scale farmers tend to lack institutional, technological, and infrastructural capabilities needed to deal with retailers’ procurement requirements (Busch and Bain, 2004).

The effects of the "walmartization" of the domestic retail sector can be seen in formatting, buying and procurement strategies, and technology. As previously explained, some specific strategies also directly affect the livelihoods of small-scale producers in Yucatán. How these producers act, react, and interact with the supply chain will be highlighted in the following section.
To understand how the livelihoods of farmers have changed, and how supply-chain relationships between small-scale producers and retailers function in Yucatán, we also conducted interviews with key agricultural commodity producers. Not only were producers asked to speak about current supply-chain relationships, they also shared information on how these relationships have been transformed in recent years. As mentioned above, five commodities were chosen in order to assess these relationships: papaya, citrus, habanero chile peppers, beef, and eggs. As previously noted, these producers were chosen, with the exception of eggs, to assess their supply-chain relationships with retailers because they have been chosen by Yucatán’s Secretary of Rural Development for inclusion in Sistema Producto, a national program to facilitate and strengthen supply-chain linkages and market access for small-scale producers.

While it may seem that supply chains between small-scale producers and retailers are similar with respect to different commodities, the reality is far different. Each commodity follows a specific chain, ends at a specific market or markets, and relies on intermediaries to varying degrees. To fully understand these different relationships,
complementary data were collected from wholesalers, intermediaries, municipal market workers, and governmental officials.

5.1 Papaya Production

As Biles et al. (forthcoming) note, papaya production is controlled by a large number of growers in numerous municipios, extending from Tizimín in eastern Yucatán to Buctotz, Dzilam González, and Dzidzantún in the north-central part of the state. Roughly 80 percent of papaya grown in the region remains in Mexico, with the remaining 20 percent sent to the United States, mainly as an additive for beauty products. The majority of papaya that remains in Mexico is shipped to the CEDA in Mexico City, via intermediaries. These intermediaries are also responsible for packing and shipping. One farmer noted that during peak season, roughly four trucks of papaya are sent out of the region per week. The remaining production, which is sent to the United States, is also handled by intermediaries, who package and ship the commodity through the northern city of Monterrey.

While nearly all papaya production is handled by intermediaries, a very small percentage is bought directly by supermarket chains. The amount bought directly from supermarkets is reflective of a lack of product received
from their main supplier to fulfill consumer needs. These retailers included the regional chain Super San Francisco de Asis and occasionally Wal-Mart. Overall, papaya production has increased and the market seems to be growing, not only domestically, but internationally as well.

5.2 Citrus Production

Citrus production, mainly oranges and limes, is located in the "southern cone" of the Yucatán Peninsula. Among the municipios of Akil, Dzan, O stkutz cab, and Peto (Biles et al., forthcoming). Citrus is mainly grown on large communally owned lands known as ejidos. The cooperatives that produce citrus lack the capital and infrastructure to increase production, therefore the majority of their product is sold directly to a local juice concentrate plant. This is used for domestic and international consumption. The remaining product is shipped to the wholesale market located in O stkutz cab.

This wholesale market plays a vital role in citrus sales within the Yucatán Peninsula, as many private producers come to sell goods. Wholesalers and intermediaries come to buy goods, and several supermarkets come directly to supply their outlets. Private vendors noted that representatives from Super Maz (Gigante) come directly to the market at O stkutz cab to buy citrus. This
could be most obviously explained because Super Maz has its distribution center in Mérida, and as Oxkutzcab is closer and cheaper than procuring from Mexico City, they transport these goods directly back to their distribution center. It was also noted that the regional chain Super San Francisco de Asis has its own bodega, or warehouse, within the market. Representatives from the store go around to different vendors, negotiate prices, and supply their bodega with goods that will eventually end up on the shelves of their stores.

5.3 Habanero Chile Pepper Production

Habanero chile peppers are grown in the Mérida metropolitan area, the eastern part of the state, and several other municipios in the “southern cone” (Biles et al., forthcoming). Production is focused on more than 2000 small producers within the Yucatán. As one intermediary noted, the soil and climate of the Yucatán allows for the greatest production of chile in the country, and the peppers are also the most flavorful. The majority of habanero chile peppers are processed into paste, powder or dried and sold to domestic salsa companies, as well as international sources including the United States and, increasingly, Japan. Fresh chile peppers follow a complex chain that involves intermediaries, integral in the chain of chile,
whom buy the product directly from producers and then sell it to wholesalers or brokers. Brokers and wholesalers then get the best product and sell it to other wholesalers who finally distribute the product to its final market.

5.4 Beef Production

Beef production in the Yucatán is concentrated in Tizimín and neighboring municipios in the eastern part of the state. Many small and medium-scale producers and a select number of large-scale farmers are responsible for beef, which is mainly consumed locally. With the exception of several wealthy ranchers in the area, the majority of beef is slaughtered and supplied by intermediaries to local municipal markets within the Yucatán Peninsula. Those capable of raising medium to large herds send their cattle off to fattening plants in other areas of Mexico or to larger ranches in the northern part of Mexico, who then sell to wholesalers. The majority of beef produced within Mexico remains in the country, due to several influencing factors including quality standards and consumption preferences among foreigners.
5.5 Egg Production

Eggs are produced in Yucatán by a small number of large-scale agribusiness firms associated with the poultry operations in Mérida and the surrounding areas (Biles et al., forthcoming). These businesses possess both the capital and labor which is required for production as well as the technology. As the main local egg producer was recently acquired by the large domestic firm, Bachoco, they supply directly to international and national retailers. While the market for eggs is controlled by Bachoco, fairly large-scale firms such as Granjas Fernandez also sell mainly to supermarkets and corner stores. A small number of small-scale producers continue to sell their output to intermediaries and wholesalers with the final product ending up in corner stores and municipal markets.

It remains clear that each commodity follows a specific route to its final market. While some products share many similarities, others differ significantly. These relationships in some instances become complicated, and show that some retailers in the Yucatán are still relying on old methods of procurement. In the following section, these linkages will be dissected and explained with respect to each commodity.
CHAPTER VI

FOOD RETAILING SUPPLY-CHAIN LINKAGES IN YUCATÁN

The use of intermediaries, wholesale markets, and distribution centers remain vital to the food supply chain of Yucatán. As discussed in earlier chapters, the presence of intermediaries remains very strong, and virtually all commodity producers send their output to final markets using one or more intermediate source. This has in the past, and can be seen in the present, as the preferred way to procure in this area of Mexico.

According to Biles et al. (forthcoming), part of this reliance on intermediaries can be attributed to the Sistema Producto, initiated by the government to improve the livelihoods of the poor, small scale agricultural producers. In an effort to integrate these poor producers, the government has focused on the strengthening of a handful of intermediaries to improve “market integration”, rather than offering training and resources directly to small-scale producers so that they can integrate themselves (Biles et al., forthcoming). Retailers rely on the majority of goods to come from the largest wholesale market in the world, located in Mexico City. To a lesser degree, supermarket chains also rely on local wholesale markets in Mérida and Oaxtutzcab to fulfill local produce needs.
The linkages between small-scale producers and retailers follow several distinct paths. These linkages are usually complex, and vary according to commodity. Therefore it is helpful to first understand how each commodity makes its way to food retailers, and then to specify how these commodities find their way into municipal markets.

6.1 Formal Retail Chains

The diagram in Figure 3 from Biles et al. (forthcoming), indicates the primary linkages between agricultural producers and food retailers. The relative importance of the relationships is indicated by the thickness of the arrows that connect the various actors. It is worth noting that while this diagram appears relatively simple, the real-world linkages are often quite complex and always dynamic.

Figure 3: Structure of Food Retailing Supply Chains in Yucatán
In the case of papaya, habanero chile peppers, and citrus, each follows a similar path to the food retailer. The role of intermediaries is very important with all three commodities, and therefore the majority of these goods come directly from the CEDA in Mexico City.

Eggs follow a different path because they are produced locally and are a subsidiary of the large poultry firm, Bachoco. The large-scale local firm, Granjas Fernandez also has its own product distribution system. Due to the size, technology, and distribution capabilities of this firm, eggs can be sent straight from the producer to the retailer. This excludes small-scale egg producers, as they supply different markets.

Finally, the majority of beef that is on the shelves in supermarkets is imported, with the exception of some consumer preference cuts. It therefore flows through the CEDA in Mexico City, to the distribution centers, and then to the supermarkets. Small-scale farmers do, in some occasions, sell their product directly to wholesale markets, where quality inspections and hygiene are not important.

The real-world linkages in Yucatán are complex and dynamic. The following Table (5) explains how each commodity has experienced different changes following the opening of borders with NAFTA, and "walmartization". The extent to which each commodity is affected by these changes differs, and it is useful to note the differences when dealing with policy recommendations.
<table>
<thead>
<tr>
<th>Commodity</th>
<th>Preceding Walmartization</th>
<th>Following Walmartization</th>
<th>Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Papaya</td>
<td>Retailers generally relied on intermediaries to wholesalers, or directly from intermediaries to supermarkets.</td>
<td>With an increased international demand (mainly for beauty products), the role of the intermediary was strengthened. At the same time, several larger-scale producers have signed, or are in talks with supermarkets about direct agreements.</td>
<td>Moderate, reinforced role of intermediary observed, but the shortening of the supply chain in some cases observed as well.</td>
</tr>
<tr>
<td>Eggs</td>
<td>The majority of supplying was done by large-scale producers or small-scale producers directly to their market (both formal retailing and small-scale, informal retailing).</td>
<td>Supplying remains national and traditional methods of distribution remain similar.</td>
<td>Negligible, small changes with regards to operation size observed.</td>
</tr>
<tr>
<td>Beef</td>
<td>The majority of large-scale regional beef production sent to fatteners (intermediaries) and then to the CEDA. Small-scale production sent directly to regional municipal markets.</td>
<td>Due to high inspection standards for exportation (TIF), regional beef continues to move through fatteners to the CEDA for national consumption (preferred cuts) and small-scale production is still sent to regional municipal markets. Virtually all beef consumed nationally is imported.</td>
<td>High, no market competition for regional beef due to TIF standards and importations. Only substantial markets available are municipal markets.</td>
</tr>
<tr>
<td>Citrus</td>
<td>Communally-held land sold goods to municipal market and local juice plant.</td>
<td>Due to contract negotiations, relationships with the juice plant over product price is constraining relationships. Goods continue to be sold to municipal market.</td>
<td>Moderate, global commodity chains have affected competition, but regional supermarkets are supplying from the local municipal market.</td>
</tr>
<tr>
<td>Habanero</td>
<td>Many, small-scale producers sold output through intermediaries, who in turn sold to wholesalers.</td>
<td>As international demand increases for this specialty pepper, the role of the intermediary, and extension of the supply chain has increased. Moving from intermediary, to broker, before hitting wholesale markets and finally supermarkets.</td>
<td>Very high, currently only a handful of intermediaries in Yucatán control the production of nearly 2000 small-scale chile producers.</td>
</tr>
</tbody>
</table>

Table 5: Walmartization, Supply-chain Linkages, and Effects
In sum, the supply-chain relationships shown in Table (5) help to understand the transformations that the five commodities have experienced with regards to formal food retailing. The effects on each commodity vary, but in all cases, it is clear that "walmartization" has had an impact on local producers.

6.2 Small-scale and Informal Retailers

The supply chain to the municipal market and small-scale retailers is interesting because it mimics in many ways the similar paths of the large-scale retail sector, but it serves a different type of consumer, therefore influencing product quality and variety. With respect to papaya, citrus and eggs, the majority of vendors are supplied directly from producers or regional wholesale markets. There is a shortening of the supply chain because many vendors do not require such high quality standards nor do they request bulk volume. The supply chain for these three products passes from the producer directly to the public market or through the regional wholesale market on to the public market.

The majority of egg output is sold directly from the producer to corner stores, still important in Mexico, rather than wholesale markets. The presence of intermediaries remains important in the commodity chain to public markets.
for both habanero chile peppers and beef. These two commodities follow one of two paths. In some cases the product passes from the producer, through the intermediary and out to the public market. Alternatively, the product may flow from the producer on to a regional wholesale market, pass through an intermediary and finally reach a public market. Recently, small-scale vendors have been more inclined to buy produce and goods to sell in the public markets from formal retail stores. Quality, price, or the efficiency of one stop supplying may be reasons for this new trend that will be highlighted shortly, but regardless of the reasons, the recent linkages between the formal and informal retail sectors have shown a unique transformation of food retailing in the Yucatán.

6.3 The Role of the Intermediary

The extent to which intermediaries play a role in supply chains in Yucatán varies greatly depending on the commodity. Both papaya and citrus follow varied paths depending on the buyer and the circumstances (i.e. lack of goods) while egg production is largely dominated by two large firms capable of their own distribution.

In contrast, the importance of intermediaries in habanero chile pepper, and to a lesser extent, beef, is vital to the distribution of these commodities.
Perhaps most interesting, is the case of *habanero* chile peppers, because they are gaining popularity worldwide. In Yucatán, a handful of firms, including one which controls roughly two thirds of all *habanero* production, are emerging as true emblems of Sklair’s (1995) transnational capitalist class. Although the market remains strong for chile domestically, it is the increasing popularity of the product in the United States and Japan that drives the market. The chain is the most complex of all of the commodities. Producers sell to intermediaries, who either process and package the goods, or sell them fresh to brokers, who then sell them at wholesale price to outlets and wholesalers, from which retailers supply.

6.4 The Wholesale Market and Distribution Center

Each retailer has its specific procurement arrangement, with the large international (Wal-Mart) and national (*Soriana*, *Chedraui*, *Comercial Mexicana*) retailers relying heavily on the wholesale market in Mexico City. The location of the distribution center is important when determining how each retailer procures its goods. The reliance on food retailers’ distribution centers has become increasingly important to their supplying strategies. In a recent article in "Business Mexico", Buckley (2005) quotes Reardon with respect to distribution centers,
"Centralization increases efficiency of procurement by reducing coordination and other transaction costs, although it may increase transport costs by extra movement of the actual products. The net savings can be substantial."

As the majority of retailers represented in Mérida have distribution centers in Mexico City, and rely on the Mexico City CEDA, the importance of wholesale markets in the Yucatán has decreased. Vendors at these markets have noted that sales have sharply declined in the past years. Only two of the supermarkets, both of which have their distribution centers in the Yucatán, use these local wholesale markets (Mérida and Oxxutzcab). Therefore, it is imperative to realize that the growing importance of the distribution centers and their geographies pose certain challenges for local, small-scale producers. The relationships that these small-scale producers have with intermediaries, wholesalers, and ultimately retailers influence and impact their livelihoods. These linkages can offer opportunities as the supply chain continues to evolve, but they can also lead to negative consequences if the proper assistance is not given.
The opportunities presented to farmers, as highlighted by Schwentesius and Gómez (2002), could have great impacts on local livelihoods. Given the globalization of retailing, and the propensity of firms to shorten supply chains, direct agreements between farmers and retailers could mean an increase in prices for their commodities. It would also mean that these local producers should be able to compete with larger-scale producers of the same commodity. Although this globalization of retailing presents an ideal situation for both farmer and retailer, the reality of direct agreements does not show a promising future in the Yucatán. As mentioned previously, an attempt by Wal-Mart to directly procure goods from producers has yet to bear fruit. It seems, as Wal-Mart noted, that retailers are continuing to figure out the logistics of direct agreements with small-scale suppliers. As analyzed previously, domestic firms are likely to show an interest in following this trend, and if agreements are signed, small-scale farmers could potentially reap many benefits.

While new opportunities could emerge as the food retail sector is changing in Mexico, the challenges faced by small-scale producers are often overwhelming. In the absence of proper programs and assistance from associations and state government, these producers face difficult futures. Small-
scale producers in Yucatán not only lack infrastructure, but they also lack the technology, capital, and credit needed to move production forward. The strict standards set by supermarkets on quality and volume, as well as payment procedures noted by Reardon and Berdegüé (2002), seem overwhelm many Yucatecan producers. Recently, USAID has drawn attention to the challenges these small-scale producers face with the transformation of the Mexican retail sector, and as a consequence are funding a study to identify the winners and losers associated with supply networks (Buckley, 2005).

As previously noted, the Secretaría de Desarrollo Rural (Secretary of Rural Development) has implemented programs intended to help integrate these producers into global supply chains. These programs, unfortunately, have strengthened the role of the intermediary, with the understanding that they will help integrate producers. This not only reinforces the role of intermediaries, but does not give small-scale producers the opportunities to learn new techniques, use new technologies, and build better infrastructure to take their production to new, and/or international markets. Therefore, the same situation is present in the Yucatán as once was years ago. As seen with habanero chile pepper, a small number of fairly influential people are distributing a commodity to the final retail market (in varying supply-chain networks) in which they pay the producer nearly a quarter of its true market price.
The situation of control over markets has been seen in this region in the past century. The current situation runs the risk of emulating the henequen boom which ultimately failed due to its reliance on a single product, sole market, and foreign capital investments (Biles, 2004). This is a trend that is continuing in Yucatán and the barriers of history, tradition, and culture are challenges in breaking the cycle of intermediary control.
To conclude, it is useful to return to the three theoretical frameworks presented in the beginning of this thesis to examine how the transformation of retailing fits into these frameworks, and to determine what these changes mean for the present and future of small-scale agricultural production in the Yucatán.

The broad theoretical base of the transnational corporation (Sklair, 2001; Dicken, 1998) and transnational practices (Sklair, 1995) explain the driving institutional forces of globalization in the Mexican food retail sector. As an extension of Sklair's (1995) features of transnational practices, many economic, political, and cultural-ideological factors influence and shape the Mexican retail landscape. The political economy, with regards to neoliberal reforms and global opportunities, in Mexico is an important driving force in the transformation of the retail sector. Transnational practices facilitate communication, technology, and goods through local elite, the government, and foreign investors.

Moreover, policies play an integral role in the global system. With the pressure of neoliberal reforms mounting in Mexico, Wal-Mart entered the market with a clear vision of the future. These reforms, typified by the signing of
NAFTA, led to further expansion and increasing integration of global commodity chains for this transnational retailer. The political and economic forces at play opened borders and increased trade, but at the local level, small-scale interests were neglected. These challenges can be seen with cattle ranchers in the Yucatán. The importation of beef into Mexico since NAFTA has risen dramatically, and local producers simply cannot compete with higher quality, national certification standards known as TIF (Tipo Inspección Federal). In response, many small-scale beef producers prefer to send their product out to intermediaries who then sell in municipal markets where standards are not as high (Biles et al., forthcoming).

As mentioned previously, local elites play an important role in these transnational processes. These local elite serve as intermediaries in the case of Yucatán. They have been described as the transnational capitalist class (Sklair, 2001) and tend to have a more global, as opposed to local, perspective. As previously noted by Robinson and Harris (2000), over time they disembed themselves from their home nation into a 'supranational' space of the global economy. This can no better be explained than by the case of habanero chile pepper intermediaries in Yucatán. Although these few, but powerful intermediaries control nearly all habanero production in the Yucatán and sell their product domestically, international sales are gaining momentum. The focus has shifted outside Mexico, into the
growing market demand of the United States, as flavor enhancements for snack products in Japan and elsewhere. These intermediaries understand their product demand, and extend themselves into the global economy to maximize all the potential benefits.

Lastly, the cultural and ideological impacts of transnational processes brought into Mexico by Wal-Mart are unprecedented. The propensity of other retailers to imitate Wal-Mart, most specifically in retail formats, has changed the way consumers spend their time, the style in which they shop, and the foods in which they consume. These changes in consumption patterns are effects of transnational socio-cultural changes in host markets (Coe and Hess, 2005). As a result of the option of one-stop shopping, it seems that traditions of daily trips to the municipal market and frequencies to the corner and specialty stores have diminished. Consumption patterns may also change as younger generations are exposed to more international goods.

All of these features defining transnational corporations and explaining their important influences on new local and global geo-economies play a key role in coordinating production chains (Dicken, 1998). The global commodity chain (Gereffi, 1994) that emphasizes the links between transnational corporations and their global sourcing, is more than evident in the food retail sector in Mexico. The ability of Wal-Mart to offer different varieties of produce not native to Mexico has driven other
domestic competitors to increase produce variety as well. This example was confirmed by the outnumbering of produce varieties offered by Wal-Mart's main domestic competitor, Soriana. Mexican consumers are increasingly getting used to the ease and convenience of being offered exotic goods, all thanks to NAFTA, Wal-Mart, globalization and the world's largest wholesale market, the CEDA, in Mexico City.

Conceivably the most fitting theoretical framework for this research would be the concept of embeddedness (Hess, 2004; Wrigley, Coe, and Currah, 2005). The strategies by which a foreign firm interacts with, and responds to local preferences and variations within a host market is imperative because of their strong capital investment in these markets (Wrigley, Coe, and Currah, 2005). The societal, network, and territorial functions of embeddedness are key to success, as in the case of Wal-Mart, a front-runner in the food retailing sector of a host country. It is surely a concept that other foreign firms that were once present (Ahold and Carrefour) did not grasp, as they pulled out due to heavy competition. Upon entrance into the foreign market, Wal-Mart entered into a joint partnership with a national firm, (CIFRA); took several years to understand the market; and eventually bought out their national partner. In response to local tastes and preferences, Wal-Mart has taken significant steps ahead of domestic retailers to offer Yucatecan made products, as shown in the regional fair. It also appears, as the
agreement has been signed, that they are interested in
direct procurement with local, small-scale producers.
Consequently, it is evident that Wal-Mart; whether knowingly
or not, continues to have a clear vision of its place in the
food retailing sector in Mexico.
"Walmartization" has not only had a profound effect on the food retailing sector, but has influenced consumer traditions and preferences, and the livelihoods of local, small-scale producers. While the new geo-economy offers innumerable opportunities, it also presents challenges to those who are at the entry point of the supply chain. As we are all part of the global community, questions related to how local producers fit into a global commodity chain are quite significant. Although global procurement practices and distribution strategies allow firms to achieve economies of scale, there is still a need to remain embedded within the host country and appeal to local needs and preferences. Thus, the niche of local, specialized commodities shall always remain. As previously noted by Marsden and colleagues (1995, 2000) consumer preference allows local products to embed themselves into global commodity chains because they represent the natural, exotic, and tropical. Embeddedness may become a key element in regional economic growth and in capturing these global opportunities (Hess, 2004). Although this embeddedness may offer opportunities, it also presents challenges to policy making. The opportunity is still presented to small-scale producers in the Yucatán to insert themselves into global commodity chains, but the importance of strong government planning,
assistance, and training is vital to give them the tools to understand the global market as well as to comply with strict standards found in today’s supermarkets.

As previously discussed, state government programs intended to facilitate the process of integration are misguided, and therefore it should be of great interest to the state to reevaluate local economic development programs as well as the needs of their citizens’ livelihoods. While programs may be misguided, the characteristics of embeddedness on policy seem challenging.

The only major transnational food retailing firm in Mexico, Wal-Mart, has firmly embedded itself into the retailing landscape. Societal embeddedness has brought home influences such as cultural preferences and institutions (as seen in the super-center, product variety, and the “American experience”). Network embeddedness has been successfully established as Wal-Mart had made unique ties with domestic firms before creating Walmex, and has created stable relationships with large-scale wholesalers and producers due to its market share and power. Lastly, the mark of territorial embeddedness, where these stores are anchored, can be seen from the Paseo de Montejo (Mérida’s main street) to the edges of the Aztec ruins of Teotihuacán. With Wal-Mart’s presence, power, and influence in not only the retailing sector, but Mexico as a nation, the challenges of creating policies around embeddedness prove to be a difficult task. If opportunities for professional training
in marketing and technical aspects of production for small-scale farmers, as well as innovative ideas for financing these projects were found (Schwentesius and Gómez, 2002), then the concept of embeddedness would become less of a problem, and more of an opportunity to integrate as shown by Marsden (1995, 2000) and Hess (2004).

Policy decisions, given the current situation in Yucatán, are difficult, yet not impossible, as different commodities are integrated into supply chains in varying manners. Policy recommendations should then follow each commodity in which the Secretaria de Desarrollo Rural (Secretary of Rural Development) defined as important Yucatecan products. Both eggs and papaya do not need special assistance and policy integration because they both have significant linkages. The market for papaya, as highlighted previously, is dominated by a few larger-scale producers who have linkages with intermediaries, but have also laid the ground work for direct procurement with supermarkets. In the case of eggs, most production is carried out by large-scale producers, and any small-scale production that cannot compete with these large-scale firms finds its way into specific niches such as corner stores and municipal markets.

The greater question, therefore, lies in the specific markets for habanero chile, beef, and citrus. To be integrated into the local economy, or perhaps even the global economy, policy makers must focus on capacity
building, rather than strengthening relationships between intermediaries and producers. This capacity building should provide training on new techniques and infrastructure building, as most small-scale producers lack the proper resources to provide a consistent harvest. Beyond technique, training and infrastructure, it should provide the education needed to understand the business processes that lie behind procurement issues. In a sense, it seems that policies that promote capacity building in the form of cooperatives would achieve better results in integrating small-scale farmers into the supply chain.

In the case of habanero chile, only a handful of intermediaries control the output of over 2000 small-scale producers. It would therefore seem intuitive for policy to focus on uniting these producers so that they have some sort of power in a market where control of their product is a virtual monopoly. Beef production follows a very different path, and policy recommendations for this commodity seem challenging. This commodity is one that simply cannot compete with imported beef regardless of the ranch size. Although it may not compete on a national level, the local beef product does have a regional niche, that of the municipal market. Regardless of the size of the ranch within the Tizimín area, improvement of infrastructure is imperative for ranchers to keep conditions stable for their commodity.
Lastly, the citrus production located in the southern cone of the Yucatán would also benefit from infrastructural, as well as capacity building programs. While the majority of their product is farmed by the local cooperative, educational programs about integration into the system for members of the cooperative would prove successful as they negotiate with intermediaries and juice companies.

Each commodity differs with respect to policy recommendations. What remains the same in all cases is that the current program continues to sustain the old methods of procurement by emphasizing the role of intermediaries. With globalization comes new opportunities for small-scale producers, but without the proper skills, knowledge, and infrastructure, they may never benefit from new procurement processes. Ultimately, national and state government officials should be advocating for small-scale producers and their livelihoods, and presently, the conditions that bar them from direct procurement agreements with retailers remain the same.
10.1 General Conclusions

The globalization of the food retailing sector is an interesting facet of the ever-changing global economy. While globalization offers many new opportunities and challenges to players in global markets, it is worthwhile to understand how these players either succeed or fail in the evolving economic landscape. The resulting changes may perhaps be stronger, or more appropriately, have a greater impact on economic players with small roles, specifically in developing nations. This research explores how small-scale producers' livelihoods are affected by the globalization of food retailing.

Presently in Yucatán, the lack of knowledge, capital, and infrastructure hinders small-scale producers from achieving one of the most promising opportunities of the globalization of the food retail sector for small-scale farmers, a direct procurement agreement with supermarkets. Due to this lack of resources, small-scale producers simply cannot comply with quality and quantity standards that supermarkets demand. Only a few local commodity producers have been able to directly integrate themselves with retailers, and these relationships tend to be unstable. The
remaining commodities continue to rely on the importance of intermediaries to gain access to supply chains.

This outcome exemplifies the important role of intermediaries in Yucatán for commodity integration. Not only does this research focus on how these changes have affected small-scale producers, it highlights the changes of the retailing sector in Mexico, which perhaps has started the ball of global commodity chains and their impacts rolling.

As the only major international retailer in Mexico, Wal-Mart is emblematic to this globalization (walmartization) and its effects on national retailers as they struggle to compete with this worldwide giant. Walmart de México understands the importance of integrating the local, appealing to national and regional tastes, as well as networking themselves into their markets.

It can be said, as previous research suggests (Chavez, 2002) and shown in this thesis, that the processes and procedures that Wal-Mart makes influence the decisions of national and regional retailers. Not only have these retailers emulated strategies and distribution techniques, but they have also responded against this pressure, as shown in the case of the niche format, Akí, of Super San Francisco de Asis.

It is clear that the retail sector in Mexico has evolved, and will continue to evolve as the geo-economy changes. While national and regional supermarket chains
seem to be holding ground with their international competition (whether it be following Wal-Mart's lead or creating new niche markets), the local implications on small-scale producers remain at stake. In order to remain an integral part of the local economic development, policies needed which advocate for the small-scale producer, not the intermediary, whom is already fully integrated into the global commodity chain. Current policies and programs set up by the Secretaria de Desarrollo Rural, for example Sistema Producto, lack focus on the essential problems of integrating small-scale producers. As highlighted earlier, this is not a simple task as one faces the challenges presented by the entrance, and market power of the global leader in retailing, Wal-Mart. Effective policy should be more focused on the skills needed beyond capital, credit and infrastructure. While these remain important, programs such as educational training on business transactions and the building and strengthening of cooperatives are vital for change. Capacity building will allow producers to have the proper tools to make their own decisions as to how to integrate with global supply chains.

Moreover, as the global economy evolves, both the opportunities and challenges can result in winners and losers. Politics play an essential role in mediating the effects that its citizens are faced with, and with improper, or misguided policy, the losers will continue to lose. Therefore, policy, as noted previously as a driving force in
globalization, plays a crucial role within the global system. Political transnational practices will facilitate this communication and transfer of goods and technology through local elite (TCCs), the government, and foreign investors.

10.2 Limitations

Several limitations were presented in this research project. Due to lack of time, only several interviews were done within the supplemental research portion and constraints were put on the amount of producers we were able to talk with. This project was also regionally focused, so travel due to lack of funds was not available.

Given the nature of the research, interviews were set up after connecting with a key informant. If more time had been available, it would have been beneficial to speak to more intermediaries that deal with each specific commodity to see how they view the supply chain and where it may go in the future. It would also have been beneficial to locate more than two to three producers of each commodity to see how their perceptions of the market, their product, and the integration of their products are functioning.

It would have been extremely helpful to visit each chain's buying representatives and view each distribution center. Due to time and budget constraints, as most
distribution centers are located in Mexico City and the research site was based in Yucatán, this aspect of the research was not carried out.

10.3 Suggestions for Future Research

This study offers some insights into the complex and changing nature of supply-chain linkages and how they affect retailers as well as small-scale agricultural producers. While it brings into question opportunities and challenges, these must be met by local governmental policies to continue to promote regional economic growth. Beyond this look into the supply chain and its impacts on retailers and producers, many other influences of the globalization of the food retailing sector could be further studied.

With respect to the changing landscape of retail outlets due to pressure to compete, a whole other market that is changing to compete seems to be emerging. It would be worthwhile to understand in greater detail how the municipal markets and neighborhood corner stores, traditional shopping methods in Mexico, have evolved. Previously, many stores and outlets supplied directly from wholesalers for a variety of goods from cookies and candies to fresh produce. An interesting trend emerging is their propensity to now supply their stores and markets from formal supermarkets themselves. The degree to which this is
changing and the role that supermarkets play in supplying the informal sector would show interesting results and conclusions on how globalization has integrated the formal and informal sectors in Mexico.

The influences of globalization on the retail sector may be complex to explain, and the conflict between change and tradition always remains central within the debate. Interestingly, in the case of Mexico, the growing presence of large retail chains has undoubtedly changed patterns of consumption. With access to greater varieties of goods and the concept of one stop shopping, traditional preferences such as daily visits to the market and specialty stores including fruit markets and bakeries have most obviously changed. It would therefore be worthwhile, as the argument between tradition and change within the realm of globalization literature remains central, to understand to what extent these changes are occurring and how people perceive these changes, as possibly or possibly not, influencing the traditional shopping rituals.

Similarly, using perception research, it would be worthwhile to understand why and where citizens shop at certain retail outlets. If answers included ideas such as price, variety, and local product assortment, then the concepts of embeddedness (Hess, 2004; Wrigley, Coe, and Currah; 2005) would be fitting to understand how these retailers are responding to their markets. It would also give further information on what types of clientele each
store may have, and show how neighborhood differences influence buying patterns.
REFERENCES


Biles, J.J. et al. 2006. Walmartization of Food Retailing in Mexico: Challenges and Opportunities for Small-scale Agricultural Producers. Submitted to Environment and Planning A.


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Appendix A

Retailer Questionnaire
Retailer Questionnaire

1. How many stores do you have in Mexico? In Yucatán?
2. What types of retail formats do you have in Mexico? In Yucatán?
3. Where are your headquarters or main offices located?
4. How many employees do you have in Mexico? In Yucatán?
5. What percentage of your employees works full time?
6. What are your total annual sales in Mexico? In Yucatán?
7. How do you buy your products?
8. At the national or local level?
9. Do the managers have the responsibility for buying products?
10. What Yucatecan products do you sell?
11. How do you buy your fruits and vegetables?
12. Where are your fruits and vegetables from?
13. What local varieties of produce do you carry in your supermarket?
14. Does your firm buy Yucatecan products? For example?
15. How do you find these local producers?
16. Which firms do you compete with?
17. What strategies do you use to compete?
18. How have your relationships/linkages with producers changed?
19. Where is your distribution center located?
20. What percentage of processed food comes from that
distribution center? What percentage of fruits and
vegetables?

21. Explain your relationship with the wholesale market
in Mérida.
Appendix B

Producer Questionnaire
Producer Questionnaire

1. What do you produce?
2. How much do you produce each year?
3. What are the markets for your goods? Local, regional, national, and/or international?
4. Where do you sell your products?
5. What percentage of your products do you sell to large producers as inputs?
6. Do you sell directly to the public, to the markets, or the supermarkets?
7. How do these interactions function?
8. At what price do you sell your goods?
9. Who sets the price?
10. Do you use intermediaries?
11. How do you sell your goods to intermediaries?
12. Are there rules of sale?
13. Have you always sold your good to the same outlets?
14. Have the rules of sale changed in the past years? How?
15. Has your relationship with large-scale producers, intermediaries, supermarkets changed in the past years? How?
Appendix C

Human Subjects Institutional Review Board
Date: April 12, 2005

To: James Biles, Principal Investigator
    Alexandra Teachout, Student Investigator

From: Mary Lagerwey, Ph.D., Chair

Re: Approval not needed

This letter will serve as confirmation that your project "Globalization of Food Retailing" has been reviewed by the Human Subjects Institutional Review Board (HSIRB). Based on that review, the HSIRB has determined that approval is not required for you to conduct this project because you are gathering data about organizations and not about individuals. Thank you for your concerns about protecting the rights and welfare of human subjects.

A copy of your protocol and a copy of this letter will be maintained in the HSIRB files.