Case Study:
Bangkok and Access to Food for Low-Income Residents

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January 5, 2010
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Overview

Though geographically disparate and culturally very different, Thailand and Colombia hold a number of fundamental characteristics in common, making the comparison of food systems in the respective countries relevant to this study. Both are classified as middle-income developing countries, and hold similar 2008 World Bank rankings in terms of GDP (with Thailand at 34th and Colombia at 36th) and GDP per capita (Colombia at 69th and Thailand at 81st). (World Bank Group 2008) And, as nations within the tropics with relatively similar population sizes, growing export-driven agricultural industries, and an agriculture sector comprising 9% of Colombia’s economy and 11.6% of Thailand’s economy, (Central Intelligence Agency 2008) a number of similarities can be noted when looking at the distribution of food, particularly in the cases of Bangkok and Cartagena. The aim of this study is to better understand the successes and failures of Bangkok in order to provide policy suggestions for Cartagena and its scheduled intervention in Mercado de Bazurto. To do this, we examined a key question: How do low-income people in Bangkok access food? Thus, this study focuses on Thai government interventions in two major areas: (a) Bangkok informal street vendors of food and (b) wholesale food markets.

The study is organized into three sections: (I) Context: Economic Modernization in Thailand’s Food Industry; (II) Intervention 1: Bangkok Informal Street Vendors of Food; and (III) Intervention 2: Wholesale Food Markets.

Methodology

Three methods were utilized in this study’s research of Thailand food systems, food access in Bangkok and government interventions:

1) Literature review
2) Web search
3) Interviews

We conducted a literature review of books and articles on Thailand’s food systems, markets, food habits, nutrition, and agricultural industry. We gave particular focus to academic journals, theses and international organization reports to obtain the most current documents on the topic.

Additionally, we performed a web scan to become familiar with general discourse on the topic, as well as better understand the structure of the major wholesale market in Bangkok.

We initiated interviews over email correspondence with four individuals familiar with food systems in Thailand, and were able to complete two full interviews. This study would not have been possible without the generous help of Dr. Kanchana Sethanan, of the Department of Industrial Engineering at Khon Kaen University in providing a better understanding of the structure of Talaad Thai and Bangkok’s export economy.

Our research captures major themes in the Thailand’s economic development and food systems, policies for street vendors and wholesale markets, and their effectiveness. Our findings were limited by several factors: the timeframe of the project, distance from Bangkok, and language capacities. However, this study aims to showcase lessons learned from Bangkok to the Cartagena municipal government in an effort to inform better policies surrounding the
scheduled intervention in Mercado de Bazurto. Further research could employ in-person interviews of vendors and policymakers to gain a more complex understanding of the impacts of local government interventions.

I. Context: Economic Modernization in Thailand’s Food Industry

Dynamic shifts in Thailand’s economy throughout the 20th century—in particular agricultural modernization in conjunction with rapid urbanization—has led to a major shift in how low-income people in Bangkok access food. From 1985 to 1996, Thailand experienced the world's highest growth rate, averaging 9.4% annually, spawning a massive migration to Bangkok. In the years from 1958 to 2005, Bangkok’s population nearly tripled, from 1.6 million residents to 5.7 million. (Bangkok Metropolitan Administration 2010) Currently, Bangkok ranks as one of the thirty most populous cities in the world, alongside cities such as Bogota. (Wikipedia 2010a) However, increased rural-to-urban migration has led to higher numbers of urban poor, who have increased their consumption of prepared food by informal street vendors. Additionally, the face of traditional wholesale markets has transformed, as the rise of agribusiness and a focus on an export-oriented agricultural model has formalized the food supply chain.

A. Thailand’s Economic Modernization1 and Its Effects on Agriculture

Two major state-guided projects are behind the shift in Thailand’s political economy: the national development project (1930s – 1960s) and the globalization project (1970s – 1990s).

National Development Project (1930s – 1960s)

In the period from the 1930s to the 1960s, the state played a dominant role in moving Thailand’s economy toward increased industrialization. The economic push was the development of the manufacturing sector, and in this context, agricultural development was pushed to the background in favor of urban industrialization. With the army emerging as a leading political force in the country after the 1947 and 1951 coups, it sought to participate in business groupings traditionally dominated by ethnically Chinese businessmen and create parallel public enterprises. (Goss and Burch 2001, 972) By 1960, “there were 100 state and public enterprises, 37 of which were established between 1953 and 1956.” (Goss and Burch 2001, 972)

International investment also played a huge role, as the United States became a massive investor in Thailand’s economy because of its interest in the Vietnam War. “Between 1958 and 1967, US$797 million in direct economic and military aid was channeled to Thailand.”(Goss and Burch 2001, 974) These international aid policies heavily pushed Thailand to diversify its agricultural sector, with rice historically dominating its monocrop agricultural economy. (Goss and Burch 2001, 975) This was seen as a way to “fund and create the conditions for continued urban industrialization as such policies were seen to increase food and labour supplies, offer an increased market for industrial output (tractors, fertiliser, etc) and increase domestic savings

1 For the purposes of this study “economic modernization” describes Thailand’s shift away from a primarily agricultural economy to an industrial economy. This is illustrated in the growth of agribusiness, the expansion of the export economy and increased urbanization.
and foreign-exchange earnings.” (Goss and Burch 2001, 975) Between 1960 and 1969, while manufacturing’s share of Thailand’s GDP increased from 13.1% to 16.4%, agriculture’s share of GDP declined from 38.1% to 30.5%. (Goss and Burch 2001, 975)

As a result of these government policies, land ownership in the countryside became more concentrated, and rural poverty began to steadily rise, as the disparity in wealth grew between urban and rural areas. In fact, “by the mid-1970s 48% of Thailand’s 5.5 million agricultural households owned only 16% of cultivated land.” (Goss and Burch 2001, 977) A rural rebellion in mid-1965 exemplified this disparity (Goss and Burch 2001, 977); yet, for Thailand’s planners, this was seen as a security threat rather than a social problem, and solutions to this disparity were addressed “within a framework of modernising agriculture via industrial expansion.” (Goss and Burch 2001, 977)

Globalization Project (1970’s – 1990’s)

In contrast, the state’s role in agricultural development from the 1970s to the 1990s shifted toward promoting a project of globalization. Rural areas shifted to become the subject of intense development planning, and led to a major growth in agribusiness. (Goss and Burch 2001, 978) The impact of structural adjustment under International Monetary Fund and World Bank loans signaled an overall turn towards export orientation. With reductions in tariffs and removal of price controls, the need to meet an increasing foreign debt and the devaluation of the baht by almost 15%, the national economy shifted toward a model that “allowed for the fluctuations of the world market to penetrate all productive relations in Thailand.” (Goss and Burch 2001, 980, 982)

During this period, the Thai economy experienced incredible growth and also extreme fluctuation. From 1985 to 1996 it experienced the highest growth rate in the world, at an average of 9.4% a year. (Wikipedia 2010b) However, the collapse of the Thai baht prompted the 1997 Asian financial crisis, which had huge ripple effects throughout Asia, and was considered the worst economic crisis since the 1930s. “After contracting by over 10% in 1998, Thai GDP slowly recovered and moved into positive growth;” in 2005, 2006 and 2007 growth hovered around 4–5%. (Wikipedia 2010b)

In the agricultural sector, Thailand’s food industry has shifted to become primarily an export economy. It is the world’s highest exporter of rice, “exporting more than 6.5 million tons of milled rice annually...About 55% of [Thailand’s] available land area is used for rice production.”(Wikipedia 2010b) Overall, these structural changes have led to a change in food access.

B. The Urban Poor and Food Access

The modernization of Thailand’s agricultural economy led to increased rural to urban migration, and a shift in food access for low-income communities. Currently, most of Thailand’s poor continue to be rural, with 5.4 million people (86% of the total poor) living in rural areas, and 3/5 of the poor located in the Northeast. (Vyas et al. 2005, 84) However, “economic growth has led to increased urbanization and industrialization, causing migration from rural to urban areas and
creating a number of new crowded communities in big cities, particularly in Bangkok.”(Piaseu 2003, 3-4) According to a study on food security in urban areas:

“On the national scale, there are approximately 3,000 slums and poor urban communities, including 25 million people throughout Thailand. Bangkok is the capital city with a population of 10 million people currently. It contains the oldest and largest overcrowded area, close to the Port Authorization of Thailand. This congested area consists of 18 low socioeconomic communities and cover and area of 320 acres. These areas include approximately 70,000 households with 320,000 individuals who are suffering from overcrowding, poor housing, poor hygiene, and poor sanitation.”(Piaseu 2003, 3)

The urban poor face particular challenges in accessing food, due to a dependence on an unstructured labor sector, and these challenges are exacerbated during times of economic insecurity. (Piaseu 2003, 2) Following the 1997 economic crisis, “the number of poor at risk for food insecurity and poor health increased from 11% to 15% country wide.”(Piaseu 2003, 4) In a 2003 study of 199 households surveyed in slum areas of Klong Toey, Nuch, Chinatown and Dusit, results indicated that food insecurity was prevalent, with 55.8% reporting some degree of food insecurity, and 13.6% and 3% reported FI with moderate hunger and FI with severe hunger, respectively.” (Piaseu 2003, 46) In this urban context, food access for low-income people has changed, given an increase in the importance of informal vending of food, and the change in the character of wholesale markets.

B. Importance of Informal Street Vending of Food

Our research found that Thailand’s overall economic modernization and increased urbanization has led to an increased reliance on the informal street vending of food. In Bangkok in general, one study reported that, “90% of the population goes out a majority of the time for meals outside the home.” (Yasmeen 1997, 10) This increase in purchase of prepared food parallels Thailand’s economic shift. In 1962, “only 30% of the food budget was spent on prepared food” in the Greater Bangkok Metropolitan area, but by 1997, “50.4% of monthly food expenditures [were] spent on prepared meals.” (Yasmeen 1997, 10)

For low-income people, the informal street vending of food is a major source of food access. As revealed in Piaseu’s survey of household food providers in Bangkok slums, the majority of households (67.3%) cooked once a day, buying 1-2 meals as ready-to-eat food, rather than cooking. (Piaseu 2003, 40) These families explained that they purchased food sold by informal street vendors because it is: (1) more economical; (2) readily available with a great number of food stalls or vendors close to their homes; and (3) convenient because they did not have time to cook, especially for breakfast and lunch. (Piaseu 2003, 40)

In times of economic insecurity, informal vending of street food also provides economic opportunity for low and middle-income people, particularly women. In fact, in slums, “street

2 “Food security is defined by the U.S. Action Plan on Food Security as ‘When all people at all times have physical and economic access to sufficient food to meet their dietary needs for a productive and healthy life.’ Key elements of food security include: (1) physical and economic access to food by individuals and households; (2) adequate availability of food; and (3) full utilization of food; a balanced adequate diet; safe water; sanitation; education; and health care.’(Piaseu 2003, 16)
foods are speedily increasing in urban settings, especially in... economic recession[s] when people become vendors in addition to other jobs such as working in the home.” (Piaseu 2003, 41) Demographically, “most food vendors in Thailand are women; the Thai government reports that 82 percent of enterprises that employ fewer than four employees are owned and operated by women.” (Tinker 2003, 343) This form of employment creates the dual benefit for women micro-entrepreneurs of supplementary income as well as regular access to food for the family.

C. Change in Wholesale Food Markets

Low-income Bangkok residents’ access to food is also impacted by the change in the role of wholesale food markets. The rise of agribusiness and the transformation of the agricultural industry toward an export-oriented focus have consolidated rural corporations and formalized markets. (Goss and Burch 2001) This is illustrated by the decrease in traditional markets, or talaads, moving from 220 talaads in 1980 to 155 in 2003 (Kataoka, 2003).

In sum, the food access to low-income communities in Bangkok has shifted as a result of the structural transformation of national economic transformation. In the sections that follow, we will examine two areas of government intervention in both (1) informal street vending of food and (2) wholesale markets.

II. Intervention 1: Informal Street Vendors of Food

Informal Street Vending of Food in the Context of Bangkok

With 45.6% of Bangkok’s economy drawn from informal activity, (Kusakabe 2006, 22) it is natural that informal street vending of food has been an integral part of the city since its inception in 1782. Largely dominated by ethnic Chinese, informal street vending of food has traditionally been perceived as a means of reaching higher income levels. (Nirathron 2006, 13) As one of the worst hit economies during the 1997 Asian financial crisis, the central and municipal governments of Thailand and Bangkok respectively encouraged ethnic Thais to take on informal street vending of food as well. (Kusakabe 2006, 10) Grants in the amount of 4,000 Bhat (roughly US$ 100 dollars) were issued as seed money, occupational groups were established with World Bank funds, and skills training programs were promoted in an effort to promote informal street vending of food as a means to combat poverty.

Since the late 1990s, informal street vending of food has come to fulfill two different purposes for different classes along the Thai social spectrum: (a) as a vehicle towards upward mobility of the poor with some capital (and not the poorest of the poor) and (b) as a social safety net to fall back on for the newly unemployed urban middle class. (Tinker 2003, 13) And given the fact that the practice requires relatively low entry costs and is based in a commodity and skill familiar to many women (who dominate the trade), informal street vending of food proliferated in Bangkok. As of 2000, the Labor Force Survey of Thailand indicated that 390,600 workers fell within the category of “hawkers, peddlers and newboys,” roughly a 20% increase from 1997 when such workers totaled 310,500. (Thailand National Statistics Office, 1997 and 2000) And even as the Thai economy has stabilized and Bangkok’s economy booms, informal street vending of food has continued to remain a vibrant practice and continues to grow.

Dr Narumol Nirathron emphasizes that in Bangkok, informal street vending of food is perceived as a normal business enterprise, and not just an occupation of the last resort; 85% of vendors
express satisfaction with their work. (Nirathron, 2006) Not only is it the ease of entry, but it’s the ability to generate quick cash which largely explains why vendors continued with the practice and why there are always new entrants from various social classes. Informal street vending of food allows an exercise of one’s entrepreneurial skills, attracting even employed middle class residents with a promise of greater independence. The practice provides families with a second income, allowing women to implement a skill familiar to them. Furthermore, the ability to feed one’s family with unsold food makes investment relatively low risk. (Nirathron 2006, 37)

Bangkok residents themselves have also welcomed such growth in informal street vending of food. The rapid growth of Bangkok throughout the 1990s and 2000s have increased demand for food; and given Thailand’s food culture which traditionally sources its food from the street, demand grew for informal street vending of food, a trend noted in many other rapidly urbanizing Asian countries. A February 2003 survey carried out by the Bangkok municipality indicated that 49.1% of all vendors in Bangkok sold food of whom, 52% sold cooked or prepared food. (Nirathron 2006, 19) In 1990, nearly half of household food expenditure in Greater Bangkok was on prepared food. And the magnitude of importance of street vendors of cooked food is demonstrated in the fact that 23% of available housing in Bangkok consists of rooms without kitchens and 17.6% of Bangkok households surveyed said they never cooked. (Tinker 2003, 19) In a more recent household economic survey produced in 1998, households claimed that 17% of dietary consumption was prepared food taken home and 33% of food was eaten away from home. (Household Economic Survey, National Statistics Office, 1998) For the vast majority of Bangkok residents, street food is eaten at least once a day (namely for dinner), with 70% of buyers citing convenience and time-saving as advantages to buying street food. (Nirathron, 2006) Thus, informal street vendors of food are a major facet of the Bangkok food chain.

Informal street vendors of food can be classified as either mobile or fixed. “Mobile vendors” are defined as those who move from one location to another and carry the advantage of being able to locate themselves in proximity to consumers. Mobile vendors also include semi-static vendors who set up for a day, and remove necessary equipment and products at the end of the day. “Fixed vendors” are permanently located. And, while lacking the advantage of greater accessibility to consumers, fixed vendors enjoy greater stability and are able to have higher volumes of sale. According to Nirathron, mobile vendors are overwhelmingly rural-to-urban migrants (88%), 35% of whom came to Bangkok during the 1997 Asian financial crisis. Fixed vendors, however, are overwhelmingly from Bangkok with 70% of fixed vendors noting their previous occupation as mobile vendors. The majority of fixed vendors operate as family enterprises with both husband and wife working together. Thus, fixed vending can be noted as an economic activity of great importance as a number of households depend on fixed vending as a family’s sole source of income.

However, despite the critical role informal street vending of food plays in the Bangkok food chain and as a source of income for many Bangkok residents, the proliferation of informal street vending of food has produced a number of challenges for Bangkok particularly with regards to hygiene and space congestion.
The Challenge of Hygiene

Problems: While informal street vendors of food tend to place a premium on maintaining a certain quality of food to develop a regular clientele, it is difficult for street vendors to ensure a high quality when lacking certain facilities on the street. Furthermore, a recurring problem throughout Bangkok’s history and development has been the refuse on streets generated by informal street vendors of food.

Solutions: To address such issues of hygiene, a number of successful and unsuccessful efforts have been made on the part of various governments of the Bangkok municipality:

1) Prohibiting the selling of street food at certain times: Prohibiting the selling of street food on certain days (i.e. Wednesday) was unsuccessful and eventually overturned given the importance of street vendors as an integral source of food for many Bangkok residents. Prohibiting certain hours (between 11pm and 5am) has proven more successful, but implementation is strictly enforced in only a few key districts where law enforcement personnel are available.

2) Establishing a sanitation-monitoring agency: The Sanitary Office was established in 1992 to monitor vendors and help ensure consumer safety. While an important first step, the Sanitary Office lacks the necessary funding and personnel to fully implement its mission.

3) Requiring street vendors to pay cleaning fees: In 2000, vendors were required to pay sanitation fees based upon the square meterage each vendor occupied. 150 Bhat (roughly US$ 4) is charged per square meter and collected every 15 days. While effective in helping cover some costs involved in cleaning up refuse produced from informal street vending of food, fixed vendors are generally the only vendors making payments as it is difficult to require payment from mobile vendors.

4) Introducing mobile dishwashers: While implemented in Bangkok’s Chinatown with some success, initial costs of dishwashers (and costs of maintenance) can be cost-prohibitive for some.

5) Requiring registration of street vendors of food: The Act of Maintaining Public Cleanliness and Public Order B.E. 2535 (1992) required that vendors be registered, and through registration vendors were given vendor identification. Such identification enables public authorities to monitor and hold vendors accountable for unsanitary actions. Registration also carries the advantage of providing social insurance, (Kusakabe 2006, 21) as registration papers can be used by vendors as a collateral “asset” in securing loans. License regimes, however, can be susceptible to corruption.

6) Establishing rules surrounding street vending of food: Largely contingent on the registration of street vendors, the Regulation of Bangkok Metropolis on Selling in Public Spaces B.E. 2545 (2002) requires vendors to follow specific guidelines surrounding dress code, personal hygiene and care for cooking utensils. While ambitious in its reach, it has been loosely enforced.

The Challenge of Space Congestion

Problems: Given that profitability of informal street vending of food is largely contingent on location and proximity to customers, this has led to considerable congestion of well-trafficked thoroughfares. What T.G. McGee defines as “focus agglomeration,” (McGee, 1977) fixed vendors place a premium on establishing themselves around food market entrances, transportation hubs, and major pedestrian thoroughfares. While already heavily congested, the problem is only further exacerbated as mobile vendors congregate in crowded places to access the greatest number of consumers.
Solutions: To address such issues of space congestion, a number of successful and unsuccessful efforts have been made on the part of various governments of the Bangkok municipality:

1) **Enforcing prohibitive regulations:** Throughout the 1980s and 1990s, the Bangkok municipality introduced measures prohibiting street vending near bus stops and pavements narrower than two meters. Such measures have proven successful in limiting fixed and mobile vendors from obstructing already congested spaces. In 1992, the Bangkok municipality attempted to implement an even more ambitious Public Health Act B.E. 2535 which prohibited all street vending along footpaths, public roads, and public pathways. Only with permission from authorized authorities would vendors be allowed to sell within certain days, times, and spaces determined by authorities. Such a far-reaching measure, however, made the practice very susceptible to corruption and kept informal street vendors of food in a sense of great uncertainty as regulations constantly changed.

2) **Designating areas for street vendors:** The Act of Maintaining Public Cleanliness and Public Order B.E. 2535 was established in 1992, authorizing the Bangkok Metropolitan Administration, in conjunction with the Bangkok Traffic Police Division, to assign designated areas for street vendors. Designated areas were city-owned property, and helped contain congestion.

3) **Designating specific street vending spaces:** Throughout the 1990s, businesses and households were prohibited from renting sidewalk space and required that vendors register and rent space from the municipality. Designation of vending spaces also provided a collateral ‘asset’ which could be used by vendors to secure loans.

**Policy Suggestions for Bazurto**

While Bangkok and Cartagena hold many differences with regards to geography and culture, a number of lessons learned from Bangkok can be applied to Cartagena as the two cities share challenges faced by a number of cities in the developing world with problems surrounding hygiene and space congestion of its markets.

1) **Licensing and Registration:** Licensing and registration enables authorities to identify vendors thereby holding vendors accountable to their actions (with regards to hygiene and/or space congestion). Licensing and registration also enables the municipality to tax vendors and/or charge fees for cleaning and/or occupation of space. Incentives exist for vendors as well. A license empowers vendors, providing security from harassment (whether from authorities or gangs), providing vendors a sense of stability and entitlement, and providing vendors with a collateral ‘asset’ with which to access credit. It is suggested that the process for obtaining a permit not be overly tedious, time-consuming or complicated. As demonstrated from the case of Bangkok, a requirement of obtaining seven permits from seven independent agencies made the licensing process too difficult and expensive for vendors.

2) **Clearly-defined and Consistently-enforced Laws:** Make policies on street vending clear and enforcement of laws consistent, enabling vendors to better adapt. Policies should be made consistent with each other, and not overturned with every change in government. Though Bangkok street vendors do not pay taxes, the inability of vendors to understand the law and their rights make street vendors bear higher expenses from corruption and extortion. (Kusakabe 2006, 30) Many times, the inconsistent and sometimes contradictory enforcement of laws add to street vendor insecurity and serve as a greater hindrance.
3) **Securing rights to space:** While many times considered a legal tenure issue, securing rights to space should be approached as an urban planning issue. Defining and planning spaces is critical for street vendors, a process which vendors themselves should be a part of. Informal street vendors of food should not be classified as ‘occupying’ public spaces or ‘disturbing’ order in public spaces. (Kusakabe 2006, 32) Informal street vendors of food attract consumers, and their proximity to formal markets make them an asset to formal businesses as well. When strategically placed, informal street vendors of food can also be major drivers of economic redevelopment when secured a plot of under-utilized public space such as sidewalks with low traffic movement, un-utilized land pockets and parking lots. (Kusakabe, 2006: 33)

### III. Intervention 2: Wholesale Market

**Problem**

Despite the introduction and spread of large-scale supermarkets in Thailand since the 1980s, wholesale markets remain as a vital mean to supply food to the people in Bangkok and throughout country. In Thailand, wholesale markets have been traditionally located within “talaads,” which are collectives of vendors including fresh and non-fresh products with both small-scale retaining and wholesale functions coexisting, often lacking a clear boundary between them.

In 1995, 90% of fresh food products and 60% of processed food in Bangkok were sold in markets (Kataoka 2003, 51). One of the major reasons why markets remain as the dominant supplier of food in Bangkok is not only because of the low and fair price of food products, but also due to people’s preference and trust towards the quality and variety of food offered in wholesale markets. Although the number of supermarkets in Bangkok is increasing, only the top 10 to 30% of the population are able to afford fresh food products sold in supermarkets, which roughly coincides with the population with car ownership. (Kataoka 2003, 49) Therefore, studies have also shown that most of the low-income populations rely to purchase their food from informal street vendors that are often times surrounding the talaads. (Kataoka 2003, 49)

Furthermore, the fact that housing values of areas close to markets tend to be high also indicate the people’s preference and value of talaads (Kataoka 2003, 51). In addition, the dynamic nature of wholesale markets that are usually not limited to vending activities within the boundaries of the formal markets, but spread beyond into the surrounding informal street vending, attract and provide essential services to a variety of populations.

Nevertheless, the number of traditional fresh food markets is decreasing in Thailand. In 2003, there were 155 fresh food markets, which was a significant decrease from 220 markets in 1980 (Kataoka 2003, 51). Lack of modern infrastructure and stringent management mechanisms to control the qualities of food products sold in talaads has raised significant heath and food safety issues. In addition, the drastic urbanization and increased land value in Bangkok City has made it difficult for the talaads to expand their operation to feed the expanding population. Heavy traffic and space congestion issues are also limiting food access and distribution, especially to the urban poor. Moreover, national policies to establish and expand export-oriented agribusiness have created a need for wholesale markets to be more large-scale and formalized through the improvements in their efficiency and management.
Solution
Both national and international interventions and initiatives have taken place to address the issues of food access and safety in Bangkok.

1. Establishment of Talaad Thai
Until the early 1990s, there were three major wholesale markets in Bangkok located in the “Pakkhlong Talaad” district. These markets were, Angkan Talaad Pakkhlong, Yood Phiman, and Song Serim karn Kaset Thai. (Kataoka 2003, 56) Agricultural products harvested in the countryside would be transported to one of the three wholesale markets, where the standard price in Bangkok for the fresh-food product was decided. (Kataoka 2003, 56) However, due to limitation of space, capacity constraints and traffic congestion issues, as well as Thai Government’s policy towards globalizing the agricultural economy, there was an urgent need to create a new large-scale wholesale market.

In 1995 Talaad Thai opened as the largest and most complete agricultural wholesale market in Thailand. (Angkanawattana 2007, 9) Located outside the city-center, 15 km from Bankok’s major international airport, Talaad Thai was an attempt to increase the efficiency of transaction between farmers and consumer through the implementation of a modern, large-scale, systematically managed wholesale market in order to facilitate large-scale agricultural exports.

In most countries in Southeast Asia, the provision of wholesale market facilities for agricultural products is seen as the sole responsibility of city or local governments. However, in the 1990s, Thailand established large private wholesale markets in Bangkok and Chiang Mai to create conditions that can promote private investment in market facilities. (FAO 2001, 45) By making land available and granting planning permission for private sector market development with possibilities of joint ownership, the Bangkok Municipal Government provided the initial impetus to private sector investment in the market facilities.

In setting up the Talaad Thai market, the Bangkok Municipal Government provided private investment incentives by eliminating corporation tax for the first eight years. (Esguerra et. al. 2006, 114) In this way, modern infrastructure and management services of Talaad Thai were provided by a third-party private entity called the Thai Agro Exchange Co. Ltd (TAECO). TAECO, a government monitored company, operates the halls, parking, heating and electricity, security and transportation infrastructure within the market.

With a large land area that spreads across 500 rai (200 acres), Talaad Thai is divided into 20 different markets with more than 5,000 permanent vendors that rent small vending spaces that are less than 10m² (Esguerra et. al. 2006, 113). Vendors with five years or more operating history with a certain minimum volume of sales can apply for permanent spot in the halls. The market has a well laid out infrastructure, with a vehicle flow of 30,000 a day, 24-hour security, a waste water system, three food centers, stores, parking and many automatic teller machines – as all the transactions are in cash (Esguerra et. al. 2006, 113).
Overview of Talaad Thai Market

<table>
<thead>
<tr>
<th>Establishment:</th>
<th>November 12, 1995</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner:</td>
<td>Thai Agro Exchange Co., Ltd. (TAECO)</td>
</tr>
<tr>
<td>Operating Hours:</td>
<td>24 hrs, 7 days a week</td>
</tr>
<tr>
<td>Area:</td>
<td>200 acres (80.92 ha/500 rai)</td>
</tr>
<tr>
<td>Registered Capital:</td>
<td>2,000 Million Baht</td>
</tr>
<tr>
<td>Transaction Value:</td>
<td>400 – 600 Million Baht / day</td>
</tr>
<tr>
<td>Vehicle Flow:</td>
<td>30,000 / day</td>
</tr>
<tr>
<td>No. of markets:</td>
<td>20 markets</td>
</tr>
</tbody>
</table>

(Orange, mixed fruits, seasonal fruit, coconut, watermelon, farm crops, vegetable, vegetable ground, fresh food, rice, fresh water fish (night & day), hygienic meat, pets, plant, flower, assorted, sweets, perishable one stop service export center cold storage (POSSEC))

| Facilities: | 6 lane road (30m wide), parking lot, 24hrs security, waste water system, 3 food centers, cold storage, export center, 8 commercial banks/ATM, transportation service (bus/taxi, rental truck) |
| Customers:  | • Seller: collector, farmer/grower  
• Buyer: regional wholesale markets, retail market in BKK and nearby, supermarket, hotel/restaurant/school, bazaar, pick-up truck, consumer |
| Fees:       | • Entrance fee charged according to market and vehicle size  
(Vegetable yard: B100 for 4-wheel vehicle; B150 for 6-wheel vehicle, B200 for trucks; per 24 hrs.)  
• Traders: B35/day for 4m² |

(Source: Angkanawattana 2007, 9-14)

From 1996, Bureau of Planning and Policy of Bangkok embarked on Bangkok Healthy Cities Project (HCP), which was part of an international initiative led by the World Health Organization (WHO) to advocate an intersectoral approach to health development that focused on the environmental, social, and economic determinants of health, by putting health issues onto urban agendas. (Harpham, et. al 2001, 111)

Within this effort, improvements of markets were undertaken. Improvements included (Durongdej 2006, 466-467):
• Inspection of food sanitation in the super markets
• Development of private owned market
• Improved health and sanitation of markets through education ands awareness raising
• Empowerment of food handlers on food and nutrition through capacity building

As part of the HCP, Talaad Thai, since its establishment, has worked with national and international agencies to follow and implement the principles and guidelines set forth by the “healthy market” policy within the HCP, which required markets to ensure 1) environmental health, 2) food safety, and 3) consumer protection.
Outcome
Benefits
Talaad Thai has been regarded as a successful model of wholesale market development in order to improve the accessibility and quality of food distributed throughout the city and region by establishing a more efficient and organized wholesaling systems. Functioning as the dominant vegetable wholesale market in Thailand, food access in Bangkok, the region and throughout the country has increased considerably in terms of having the infrastructure available to manage increased total volume of food traded at the wholesale market. More than 15,000 tons of goods flow through the market daily generating transactions from 400 – 600 million baht per day. Goods are sold to a variety of consumers, including secondary wholesales, retailers and vendors, such as hotels, restaurants, and departments stores, etc. (Angkanawattana 2007, 14; Kanchana 2009, interview)

Alleviation of Congestion: Traffic and space congestions have been alleviated by the strategic location of Talaad Thai outside of city center and close to a large highway system. Parking lots that can accommodate up to 500 vehicles have been constructed to avoid traffic congestions. Furthermore, designated space has been created for temporary vendors and farmers without permanent vending spaces to rent a space by paying a daily rental fee. This has also prevented space congestion issues that have been prevalent in traditional talaads where informal street vending of food have concentrated around the most economic areas of the market, thus preventing easy and equal access throughout the entire market.
Hygiene and Food Safety: Food safety and quality have also improved through the provision of capacity training and education by the TAECO management company. Furthermore, the government has initiated an effort for Q-certified, food quality certification scheme.

Hygiene issues have been improved through the implementation of modern infrastructure that gives market vendors and their customers’ access to potable water, toilet facilities. TAECO also provides training on personal hygiene, food handling and waste disposal.

Another aspect that contributes to the improvement of hygienic condition of the market is that, at Talaad Thai, TAECO collects fees from vendors to properly manage the considerable organic and packaging waste that is generated through the wholesale operations. Some of the waste can be recycled and composted. Other liquid and solid wastes are transferred to off-site waste disposal sites (FAO 2001, 20; Kanchana 2009, Interview).

Fair Pricing: TAECO operates a website that provides comprehensive and real-time information regarding trends and pricing of the commodities traded at the wholesale market. Therefore, there is a more transparent process for pricing, and farmers and vendors can easily access price information to make informed decisions on whether they want to sell their products to maximize their profits. As a result, although transaction between traders and farmers are negotiated on a one-to-one individual basis and informal bargaining processes still do exist within markets, prices of specific goods remain relatively stable and overall have a relatively low and fair pricing. (Esguerra et. al. 2006, 115)

Challenges
The establishment of Talaad Thai market has played a significant role in improving the accessibility of food to people in Bangkok and throughout the country by drastically improving the total volume and variety of food that can be bought and sold within the single wholesale market. Furthermore, with government efforts to improve the quality of food products traded at Talaad Thai with the aim of making the agricultural goods compatible for global trade, the overall food quality of food has also improved leading to a local distribution of safer and better goods.

However, the centralization and formalization of wholesaling of food may have some challenges in terms of food distribution and altering the capacity of food access particularly to the low-income population. In addition, although the government-supported private ownership of the management of Talaad Thai has attracted private investment and has enabled the economic development and sustainability of the market, government authorities have significant responsibilities to implement certain regulations on food quality and environmental standards. Therefore, further efforts and collaboration between the private sector and the government sector must be enhanced in order to establish the legal framework to assure improved food access, quality, and health concerns of large-scale wholesale markets.

Impacts on informal vending: The establishment of a large-scale centralized wholesale market has altered the traditional model of talaads that are located within city centers, and often surrounded by informal street vendors that play a significant role in providing fresh and prepared food to the urban residents. Due to the location of Talaad Thai, the wholesale market is most convenient for those that own a car. Therefore, it may be difficult for low-income urban population to access Talaad Thai directly. Furthermore, centralization of agricultural wholesale
functions to Talaad Thai may have accelerated the decrease of talaads and thus the surrounding informal vendors located within city centers of Bangkok. As a result, centralization of wholesale markets may be limiting food access to the low-income population in the urban centers of Bangkok. Further research is necessary to estimate the direct relationship between the establishment of large-scale wholesale markets outside of the city center and food access to low-income populations in the city center.

Quality: TAECO is only a service provider of the Talaad Thai Market. Therefore, it has not introduced minimum standards of food quality and cannot impose penalties for poor quality goods sold in the wholesale market. Although, they provide services to visit farmers and vendors’ groups annually to give advice on quality, packaging and other issues, since they are not a government agency, TAECO lacks the legal authority to impose legal minimum standards. In order to eliminate low-quality and unsanitary food products to be sold in Talaad Thai market, further government intervention efforts are necessary. (Esguerra et. al. 200, 116)

Policy Suggestions for Bazurto
As seen in the case of Talaad Thai in Bangkok, the establishment of effective wholesale markets can drastically improve the food accessibility and quality in cities. Several lessons can be drawn from the development of the Talaad Thai in Bangkok for the improvement of Bazurto and the future relocation and establishment of the new wholesale market in Cartagena.

1) **Promote private participation and investment:** Management of the wholesale market by a government-supported private entity, TAECO, has been one of the major success factors for Talaad Thai. With the help of Thai Government’s effort to attract private investment by providing tax breaks and other incentives, TAECO was able to develop a large-scale market with modern facilities including access to clean water, toilets and cold storage.

2) **Reflect the opinions and needs of vendors within market operations:** At Talaad Thai, high rent is charged in order to maintain high standards of hygiene, orderliness, and security. At first, the vendors were not happy to relocate and pay the high fees, however due to the strong communication and persuasion by the managers of the market for vendors to relocate, ultimately many vendors relocated to the new wholesale market. (Kusakabe 2006,16) “Through renovation by the company, the market has good infrastructure, including restrooms and a car park, and this has contributed to the increase in customers and consequently, an increase in income for vendors. Hence, vendors are also willing to pay higher rent for this place. All these well-managed markets show successful negotiations between vendors and market managers in reaching an agreement on rent policies. The key to success, these case studies revealed, is how much managers listen to vendors and accommodate their needs.” (Kusakabe 2006,16)

3) **Ensure access:** Due to high land values and congestion issues, new large-scale wholesale markets are often created outside of the city center. Although there are significant benefits in regard to food access by locating wholesale markets outside the city center where vendors and customers can avoid heavy traffic congestions, at the same time it may limit access of the wholesale market by increasing the cost and time to reach the market. Often times, it is the most vulnerable populations such as low-income residents and women that may suffer the negative consequences of such change. A thorough examination of how the new location of the market will impact the diverse stakeholders
as well as the development of infrastructure and means to ensure the equal access of food is necessary. Furthermore, city governments have a responsibility to minimize the negative impacts of new wholesale market development to informal vendors. Although well-managed and organized markets provide significant benefits, informal vendors often play a significant role in providing food access to people as well as creating employment opportunities. Therefore, ensuring a space and services for informal vendors is necessary. If the government policy is to decide that informal vending should be reduced or formalized for the improvement of the overall food access of the city, provision of alternative strategies, such as provision of education and capacity building for alternative income generation methods must be developed.

4) Information dissemination: Although commodity prices within the market are not controlled and farmers negotiate a price on a one-to-one basis, Talaad Thai Market has a research group that collect prices and regularly update and display them on Talaad Thai Market internet site (www.talaadthai.com). In this way, market prices tend to be stable and transparent, giving farmers and consumers the agency to make informed decisions on vending and purchasing timing and volume.

Conclusion
It can certainly be noted from this study that the food distribution system of Bangkok is incredibly complex, and as the system continues to augment and evolve to changing times and dynamics in the Thai economy, the interconnectivity of various facets of this chain (in the form of talaads, informal street vendors of food and large-scale wholesale markets) continue to remain strong. Like the food chains found in nature, the Bangkok food chain is equally as complex, and removal / hindrance of one facet will greatly affect the other. Mutual coexistence is of highest importance when taking into account government interventions within the Bangkok food distribution system.

While introduction of large-scale wholesale food markets (i.e. Talaad Thai) has added an additional middleman within the greater Thai food supply chain, it should be noted that in many cases, quality has gone up, distribution has been optimized and demand has been better met as large-scale wholesale markets are beginning to source a great number of inner-city talaads. Such benefits are imparted onto consumers directly as well as indirectly, as a great many informal vendors of street food source their food from such talaads. Large-scale wholesale markets have also led to a growth in truck bazaars, which serve as a direct link between wholesale markets and consumers, serving as mobile markets, bringing fresh food to Bangkok resident doorsteps. Supermarkets have also benefited from such wholesale markets as supplies are delivered in a more timely fashion and large quantities of supplies can be secured.

Yet, as supermarkets become an increasingly greater presence within Bangkok, informal street vendors of food continue to remain a major source of daily nourishment for many Bangkok residents as many lack the time and facilities to prepare their meals themselves. And many informal street vendors continue to source their food from talaads as smaller-scale markets enable informal street vendors of food to (a) build personal relationships with market vendors (thereby enabling possibilities of credit and insured quality of raw food), (b) purchase small quantities, and (c) access a diversity of goods with regards to the good itself and price. And, while past government interventions have tried to reign in on informal street vendors of food and their proximity to talaads due to their competitive edge against talaad vendors and looming problems of congestion caused by the informal vendors themselves, the informal street vendors
of food have proven to be an asset for talaads as their very presence attracts consumers. Thus, we see the complex interdependence of all actors within the Bangkok food distribution system.

One overarching conclusion can be drawn from this interconnectivity. All major actors—talaads, informal street vendors of food, and large-scale wholesale markets—have equally as significant roles within the Bangkok food distribution system, and thus, government interventions must take this into account. Each actor deserves equal representation and role within the system and should be treated as such. And thus, by acknowledging the equal significance of each actor can better policies be made in the future, whether in Bangkok or in Cartagena.
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