



The role of private actors in the Quito Metropolitan District food system

with a focus on larger processing and retail

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Abstract

The food system in the Quito Metropolitan District (DMQ) can be characterised as a mixture of a Food System 1.0 and 2.0.

Ecuador's internal food market has consistently grown over recent years. Food consumption statistics show that fresh and processed food household expenses have grown annually by 3% over recent years and totalled nearly 6.9 US million dollars in 2013. At the same time the country has increased its exports and the food processing industry now accounts for 45% of all manufactures and nearly one third of exports.

In Quito, food processing is increasingly dominated by a small number of national enterprises. Whilst these businesses are still traditional and are still sourcing from some regional SMEs and producers, they are involved in a process of modernisation (for example by centralising logistics) and concentration (a limited number of businesses share the majority of market share and turnover). This is particularly true in the meat, bread and grain-based and dairy sector, all sectors that have the highest growth in consumer demand. For each of these sectors, no more than 5 large companies account for over 80% of the sales. Alongside these larger enterprises a much larger number of small to medium sized enterprises tries to maintain and develop their place in a (changing) market.

The meat sector

The largest meat processor PRONACA runs production plants in all the regions of the country, including the DMQ area and the surrounding Pichincha Province. According to PRONACA'S sustainability report from 2015, 80% of their total procurement budget of 866 million US dollars per year is sourced from national suppliers. Local suppliers near to operation centres account for 45% of the procurement and the business therefore contributes to 'the development of these territories'. Whilst the socio-economic characteristics (e.g. large or small enterprises or producers) are not known, suppliers near to the PRONACA operation centres in the DMQ/Pichincha area could be classed as Quito city region suppliers.

Smaller enterprises in the DMQ area, such as MACAFRI, are selling directly to consumers via social networks and a retail store in the north of the city. According to its director, smaller firms such as MACAFRI are closer to their suppliers (which are intermediaries or small-scale producers) and they are more interested in investing in their continuous improvement by offering incentives for regular supply and good quality products.

The bread and grain-based sector

Four major companies account for the majority of sales in this sector. The remainder of the market is shared between more than 70 small companies. This sector is different due to the fact that primary materials are rarely available in the country and Ecuador imports almost 98% of its wheat. Therefore there are no local producers in this sector. However, the companies usually work with local middle-men in charge of distributing their products to local stores. Public procurement (schools) accounts for 10% of the sales at one of the main businesses which illustrates that even this sector has potential employment and consumption related impacts on the city region food system.

The dairy sector

In this sector there are also four companies that account for more than 50% of the sales. These companies collect milk from producers all over the country which are mostly small

and medium cattle breeders. Almost 22% of the milk is produced in the Pichincha province where Quito is located. These producers deliver their product to middle-men or, in a few cases, directly to some of the processing companies. For example, El Ordeño a medium-sized milk processing company (responsible for 5% of all sales) collects milk directly from medium and large farmers and (cooperative) collection centres. In contrast to other companies they have not lowered payments to suppliers in the past year (due to the economic crisis and lowering of household budgets and respective consumer demand). According to the managers this was only possible by excluding middle-men from the chain. They think that by building more direct relationships they are better positioned to contribute to building a fairer and more sustainable (and to a certain extent local) food system.

The retail sector

Similar to the food processing system, in the food retail sector modern supermarket supply chains continue to co-exist alongside traditional players like public markets where complex subsistence economies continue to thrive. However, it is important to point out that food expenditure is highly segmented by class and ethnicity patterns. Supermarkets represent only 8.7% of the total food purchases of Ecuadorian families, although for the countries' two largest cities such as Quito and Guayaquil this percentage can increase up to 17%. Popular traditional markets and local stores, as well as the informal sector represent the other main sources of food procurement for a large part of the population. This dominance is related to the existence of a mass of semi-independent (low-income) workforce, strong commercial links between rural and urban populations (in which ethnicity is a key factor) and demand for low priced food in the cities.

Again, four large supermarket chains dominate the food retail sector in the country. The biggest supermarket, Corporación La Favorita (CLF), operates using a single distribution centre near Quito, where they take in stock and distribute to their stores around the country on a daily basis. The company requires its suppliers to meet strict specification such as presentation, frequency, fixed delivery schedules, volumes). In the Ecuadorian food system which still has such the large number of small farmers and food enterprises, only a small group of powerful companies has the capacity to meet the CLF's requirements. This supports further concentration across the supply chain.

In contrast, another company (Mega Santa Maria (MSM)) still sources from several small and medium enterprises. This practice was supported by the *Good Commercial Practices Manual for Supermarkets*. Issued in 2014 (*Manual de Buenas Prácticas Comerciales para los Supermercados*), the policy calls for inclusion of small-scale producers in the distribution channel. However, MSM's CEO acknowledges that small suppliers often cannot afford to distribute the products directly to the supermarket and they need to sell their products to a commercial company (intermediary) that can undertake the logistics. Due to operational and efficiency concerns MSM has started more recently to look for bigger suppliers that can in turn source from several small and medium sized producers. The question remains to what extent MSM's motivation to reduce costs and to ensure product quality (and standardisations) leaves room for such a diverse (and less centred) food retail system.

Social ex- or inclusion?

The processes of modernisation and concentration can lead to the exclusion of small to medium enterprises, producers and low-income consumers. Innovations in the food processing, retail and government sector are aiming at increasing wider food access for the large number of small-scale producers, SMEs and low-income consumers.

The previously mentioned *Manual for Good Commercial Practices* obliges supermarkets to source 11% of their total procurement from smallholders and artisan producers. The regulation does not consider factors such as provenance. Instead, the goal is to promote competitive markets and set formal restrictions to limit oligopolistic consolidations (such as the ones reported above). MSM, like other supermarket chains, argues that smallholders cannot supply the required quantities on time, they don't meet the required food hygiene standards, the quality of their products is not consistent and they lack access to a cold chain. The new regulation could support the existence of the middle-men as it is easier for farmers to sell their produce to them instead of incurring the required transport and logistical costs when dealing with supermarkets directly. And although middle-men play an important role in the city region food system and can offer important job opportunities, the extent to which these systems favour inclusion of small-scale and local farmers is still to be analysed.

SMEs and short supply chains

Small to medium enterprises (SME) are often family owned and are more likely to work with small-scale producers and local traders. In fact, these enterprises have (traditionally) closer connections to their suppliers, whether they are producers or intermediaries. Many of them also have the ability to respond fast to changing contexts and to innovate by, for example, looking for direct ways to sell their products to consumers.

Most SMEs entrepreneurs are proud of their products and they care for issues such as improving their practices to improve product quality and providing information to consumers. In addition, SME processors/distributors in Quito also offer more opportunities for localised sourcing as they are less likely to operate a centralised logistics system. Strengthening their procurement systems with inclusive practices that involve local producers, promoting diversification through the creation of organic and/or healthier products coming from nearby producers and facilitating their access to consumers are some of the possibilities to strengthen the engagement of SMEs in a more sustainable city region food system.

At the same time such strategies should be accompanied by supporting the numerous smallholders who produce nutritious, healthy food and who can offer their products (fresh or processed) directly to consumers or to the SME sector. Quito has seen a rise in short food supply chains over recent years. Consumers can now access locally grown organic food in several markets, mostly at open-air fairs. The majority of producers who participate in these spaces are low-income farmers with restricted access to land and who rely on family labour. In contrast, consumers belong mostly to middle and high income classes.

If smallholders cooperate better they can raise their negotiation position and demand more transparent and inclusive relationships from all players in their supply chains. Specific programmes under the *Local Guarantee Schemes* and direct support mechanisms for small producers and their organisations (such as storage centres or food hubs, irrigation channels, ICT services, commercial and logistics training, knowledge exchange) will be key to ensure a fairer and more equitable distribution of benefits to all players in the food chain.

Creating a platform for dialogue including state institutions, supermarkets, processing companies, small and medium enterprises, producer organisations and consumers, may enable all parties to find more common ground. Finally, updated information on the food system is required (where does the food come from; who processes, sells and eats different types of food), as well as transparent communication on food policies and consumers awareness and education are required.

1. Introduction

This study sets out to better understand the role of the private sector in the city region food system of the Quito Metropolitan District (DMQ by its Spanish initials), with a specific focus on larger processing and retail enterprises. The study is part of joint effort of the RUAF Foundation and the Food Business Knowledge Platform, together with local partners, to contribute to a better understanding of how different types of private sector players can shape/enable the existence of a city region food system (as opposed to a more national or international food supply system); and what business and policy environment is needed to better engage the private sector in building such city region food systems. Similar studies have been undertaken for Rotterdam, The Netherlands and Bristol, UK. An overall analysis report highlights findings of these three case studies, 19 smaller cases and literature review¹.

A food system is understood to include all stages of food production, manufacturing, distribution, consumption and waste (Sustainable Cities Institute, 2012). This study focusses specifically on food distribution as this is considered one of the areas of rapid change in the DMQ. The emergence of supermarkets and new smallholders' markets in the last decade shows that the traditional food market is changing. The current context of urbanisation, population growth and public policies are redefining the involvement of private players, big or small. Interviews and secondary data are used in this study to better understand the interests and motivations of the players that are involved in food distribution.

'The city region is defined as a territoriality that emerges from the interaction between urban and rural areas (FAO and RUAF, 2015). The relevance of looking at the dynamics of urban and rural linkages in a given territory lies in the definition of development strategies (Steinberg, 2014) that can be better adapted to the context of a place that is intimately tied to a set of cultural practices and social relations. Urban households are dependent upon rural places for their consumption needs and rural households are in turn hardly only rural, the labour force is moving constantly between rural and urban areas (Berdegué & Proctor, 2014).

The term city region is new and still not clearly defined for policy makers and the population. The use of the terms 'territory' and 'integrated land use management' are new in Ecuador. The present study focuses on the Quito Metropolitan District – Region. Considering that a city's influence goes beyond its boundaries, new definitions can help to better explain and understand the flow of products and services and the dynamics of concentration, tension and synergy that can occur between the city and its hinterland. This is even more the case in a capital city that concentrates on different types of resources (human, technological, administrative, political, financial capital).

The analysis of the private sector's role in the food system indicates that the food system is wide-ranging and diverse. Private businesses have different challenges and standards to respond which vary significantly depending on them being profit driven only (Fuchs, Kalfagianni, & Havinga, 2011) or if they also have social, environmental and political motivations that aim for wider societal benefits. Private businesses can play a key role and use their resources (capital, information, network, negotiation power and influence) to generate profit **and** sustainability instead of practicing business as usual. It is not the same to start a family farm that sells surpluses to neighbours, to run an enterprise that works for a decent return and is recognised in the community for the good quality of the fresh or

¹ All case study reports and the overall analysis report can be accessed at <http://www.ruaf.org/projects/role-private-sector-city-region-food-systems>

processed food or to work for a corporation that aims to increase the dividends and sell all sorts of products (including alimentary and non-alimentary).

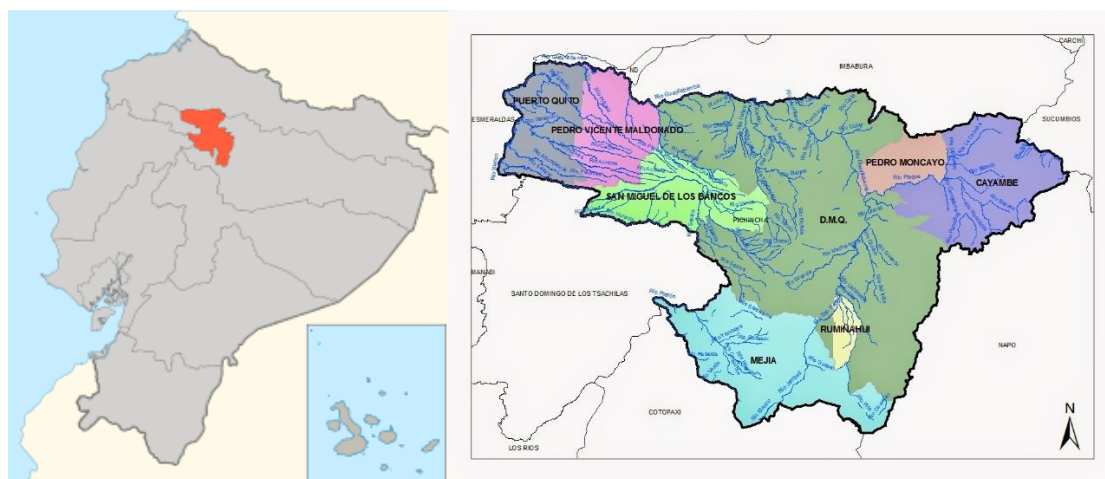
This study specifically highlights the presence of urban and rural players that are part of the food distribution chain in the city region. Private players in the city rely on rural enterprises, including players from the popular and solidarity economy² (associations, cooperatives) that provide food. In 2011 a new law (*Popular and solidarity economy*, 2011) was introduced to distinguish a sector of the population that works to support their community before prioritising capital growth (MIES, 2012).

This report presents the characteristics of the private sector in the DMQ city region food distribution system and clarifies the power relationships, trends and patterns that characterise the private sector. It looks at the dynamics between modern and traditional markets and provides a brief account of state interventions in the food distribution sector and the responses from the retail sector. The report also discusses short supply chains in Quito and the diverse types of small-scale producers and consumers. The report ends with conclusions and recommendations.

² Popular and solidarity economy is defined as the set of individual or collective economic practices in which a worker can play several roles, such as producer, distributor or consumer, giving priority to human well-being before profit and capital surplus (MIES, 2012).

Quito Metropolitan District (DMQ) belongs to the Pichincha Province which has 2.8 million inhabitants. 89% of those live in the Metropolitan District (2.5 million). Therefore, the concentration of all the resources (human, natural, physical) is considerable and the dependency on the surrounding areas is high. Figure 1 illustrates the location of DMQ in the Pichincha Province.

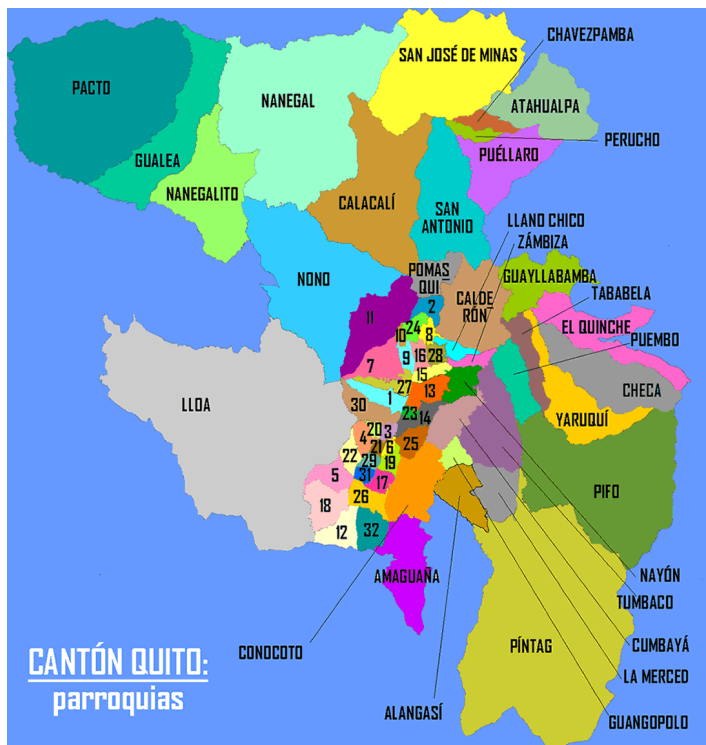
Figure 1: Location of the Quito Metropolitan District (DMQ) in the country (left) and Pichincha province (right)



Source: Wikipedia and Government of the Pichincha Province

Today DMQ covers 44.6% of the province of Pichincha. The DMQ is divided into 8 Zonal Administrations (*Administraciones Zonales*) which cover an area of over 423,055 hectares. Each Zonal Administration is managed by an administrator who is responsible to the Mayor of the DMQ. The 8 Zonal Administrations are made up of 65 parishes (*parroquias*): 32 urban parishes that form the city of Quito and 33 rural and sub-urban parishes. See Figure 2.

Figure 2: Quito Metropolitan District Rural and Urban Parishes*



*The Urban Parishes appear as numbered in the middle section of the graph
Source: National Institute of Statistics and Surveys

The economically active population in the DMQ includes 1.3 million people (INEC, 2015) who are active in several sectors such as transport, commerce, construction, industry, information and communication technologies (ICTs). The commercial sector adds the most value and generates 2.3 million US dollars per annum. The sector is mainly concentrated in the south east of the territory (DMQ, 2015) in the rural and increasingly peri-urban parishes.

2.2 Private sector engagement in the food sector

Quito's food system could be characterised as a mix between a Food System 1.0 and 2.0. As the authors of 'Food in an urbanising world' (Jennings, S. et al., 2015) define it, 'the Food System 1.0 is characterised by an important informal sector, a limited number of wholesale or retail markets, relatively large local and national production, while relying on regional and global commodity markets when needed. The Food System 2.0 would be in turn a system that depends more and more on national and international trade. It has a formalised and more consolidated retail sector; farm produce is sold on contract to larger retailers or processors. Supermarkets are the most common form of food retail, smaller food shops account for a lower percentage of sales and may be more expansive. Highly processed and packed foods are demanded by customers; a lot of food is wasted at the consumer stage.'

It is essential to note that these definitions don't cover all complexities and relevant issues without proper conceptualisation³. For instance, the access to land, capital and services, the redistribution of returns, the potential conflict between competitiveness and a popular and solidarity economy, gender issues, post-colonial practices and other cultural patterns that are specific to a particular territory all determine the characteristics of a (food) system and inequalities in terms of access to services at all levels (public, private, household (SENPLADES, 2013).

In the Quito Metropolitan District, different players and institutions that are typical of both food system 1.0 and 2.0, are involved in the city's food supply. In DMQ a wide range of food businesses co-exist. From smallholders who are trying to sell their produce directly to consumers to big supermarkets that are attracting more interest from the public and increase their sales and profits each year. Both formal and informal sectors are widely present and have distinct strategies to produce, process and distribute food and reach the consumer.

The data shows that food processing accounts for 17.5% of the total income generated in the city region. In the retail sector supermarkets have an 11% share of the income in the city region (OfiAgro, 2015). The contribution of SME is not specified. However, analysis based on the data from the last economic census in 2010 shows that from every 100 dollars generated by enterprises, 39 dollars came from medium and small businesses (Araque, 2012).

In Quito, as in many other Latin American cities, most modern supermarket chains co-exist along with traditional public markets where complex economies of subsistence continue to thrive. Despite the increased involvement of modern players over the last 10-15 years, the informal sector is still a fundamental source of food for a big part of the population. This is due to a range of factors such as a large lower-income workforce; strong commercial links between rural and urban populations (in which ethnicity is a key factor) and demand for low price food in the cities.

Traditional public markets are still a very important source of food for many people and a fundamental source of income for producers and merchants, many of whom survive because of this activity. Food chain modernisation processes are continuing and they have to be assessed with respect to the large number of players from the traditional sector⁴. It has to be noted that the implementation of novel approaches to improve food access specifically focus on the inclusion of the large number of people already working under precarious conditions (generally in the traditional public market). Some of the programs that are implemented by the municipality, for example the AGRUPAR (Participatory Urban Agriculture) programme, are inspired by this aspiration. This programme supports 14 open bio-fairs all over the city in which low-income and small-scale urban and peri-urban producers, mainly women, sell their produce. However, despite these efforts many challenges concerning the inclusion of the low-income population, as producers or consumers, remain (Dubbeling and Rodriguez, 2016).

Programmes such as AGRUPAR and other short supply chain initiatives (see Chapter 4) clearly aim at a Food System 3.0 and represents an opportunity to better observe the relationships between players across the agri-food chain and the definition of favourable

³ The division suggests some sort of evolutionary process in the food system (from 1.0 to 2.0), which is however not evident in every territory. It is important to take into account further and critical aspects regarding the relations, institutions and social practices encountered in different contexts and the power relations among the actors involved.

⁴ It is important to note that many supermarket companies connect in an indirect way to the workforce and the intermediary chains of traditional markets to source their products (Arrazola & Yumbra, 2015).

alliances needed to strengthen them. Again as defined by Jennings S. et al. (2015), a Food System 3.0 is characterised by a more re-localised city region food system that recognises social, economic and environmental benefits, where a higher proportion of food is sourced locally, through shorter supply chains (having less intermediaries), in which relations between consumers and producers are stronger and more transparent, and where food systems are considered in a territorial context. Such Food System 3.0 offers opportunities for small-scale producers (for example in urban and peri-urban agriculture), alternative short supply chain enterprises, new IT platforms linking producers directly to consumers and involvement of new private sector players such as health or social housing companies who share a vision for a healthier and more localised food system. Whilst a Food System 3.0 recognises a potential central role of the private sector, it also understands that public goods will not be delivered by market forces alone and that greater transparency and public participation in the food systems are required (Jennings S. et al., 2015).

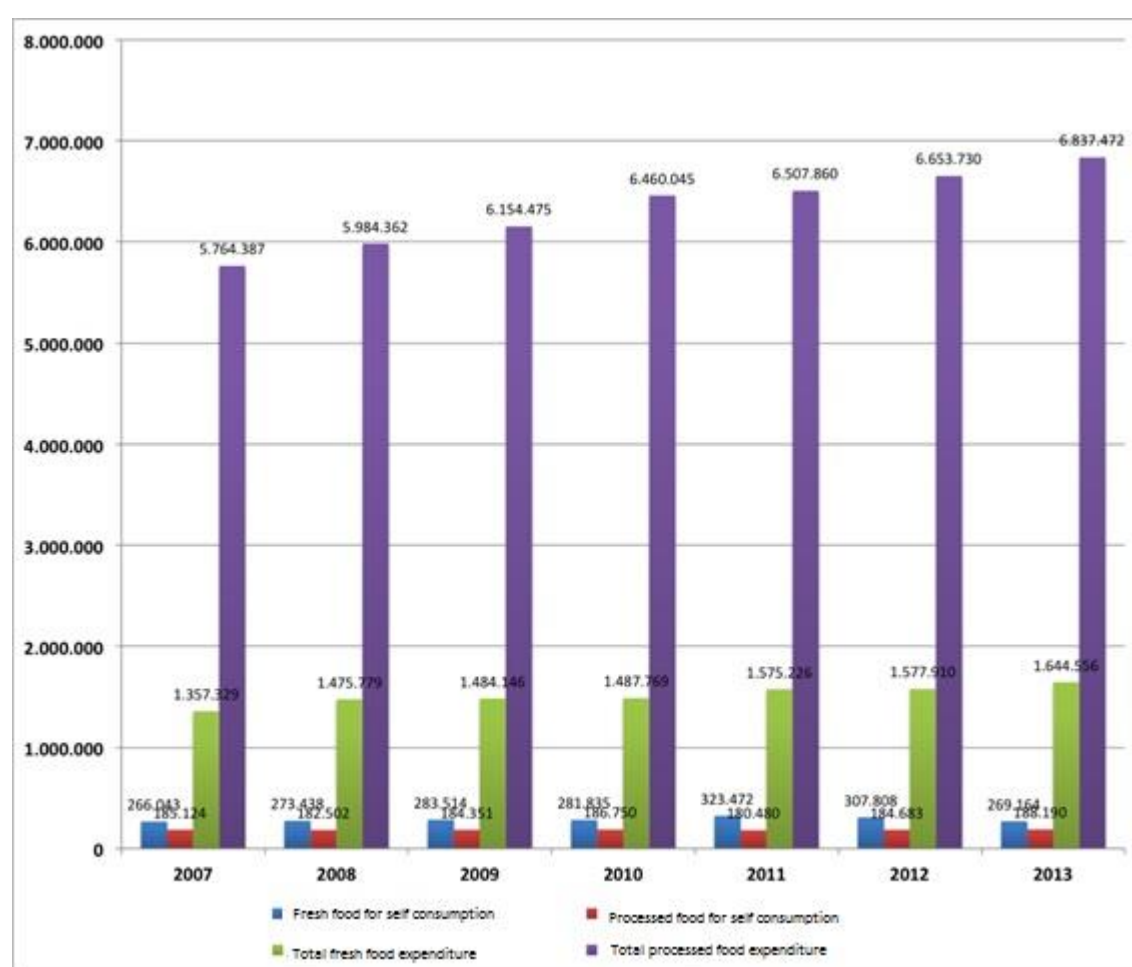
3. The dynamics between modern and traditional markets

3.1 Overview of food markets in Ecuador

Ecuador has experienced ongoing growth of its internal food market during recent years. The data provided highlights a number of trends in food consumption. Trends include an increase in consumption of processed food, the dominance of traditional channels in food distribution, the increasing importance of supermarkets and show different expenditure patterns for different parts of the population.

Looking at food consumption, Ecuadorian families spent increasing amounts both on fresh and processed foods (sold in both modern and traditional markets), as Figure 3 shows. It is important to note the increase in the expenditure on processed foods which now stands at nearly 6.9 billion US dollars per year.

Figure 3: Food consumption evolution in Ecuador by fresh and processed food (thousand dollars)



Source: Hollenstein, 2015

It is essential to keep in mind that household spending is very specific to different consumer segments that are differentiated by place, ethnicity and social class. Table 1 shows household expenditures using 10-group economic income segmentation.

Table 1: Food consumption by economic income segments in 2012 (USD)

Population Segment (from lowest to highest income)	Total Expenditure (USD/month)	Food Expenditure (USD/month)	Food Expenditure/ total (%)
1	250,7	109,5	42.3
2	333,8	137,2	40.5
3	393,0	151,5	38.1
4	439,6	153,4	34.6
5	496,2	158,2	31.6
6	545,2	158,3	28.7
7	620,8	162,3	25.8
8	705,2	158,3	22.0
9	879,8	159,3	17.8
10	1.439,8	165,8	11.3
Total	610,5	151,4	24.4

Source: Hollenstein, 2015

People with higher incomes tend to consume more processed and more expensive products. Places of food procurement also depend on income level, as will be discussed later.

Ecuadorian families spend most of their budget on three types of products: meat, bread and dairy products. This is followed by vegetables (see Table 2).

Table 2: Types of food consumed in Ecuador, 2012

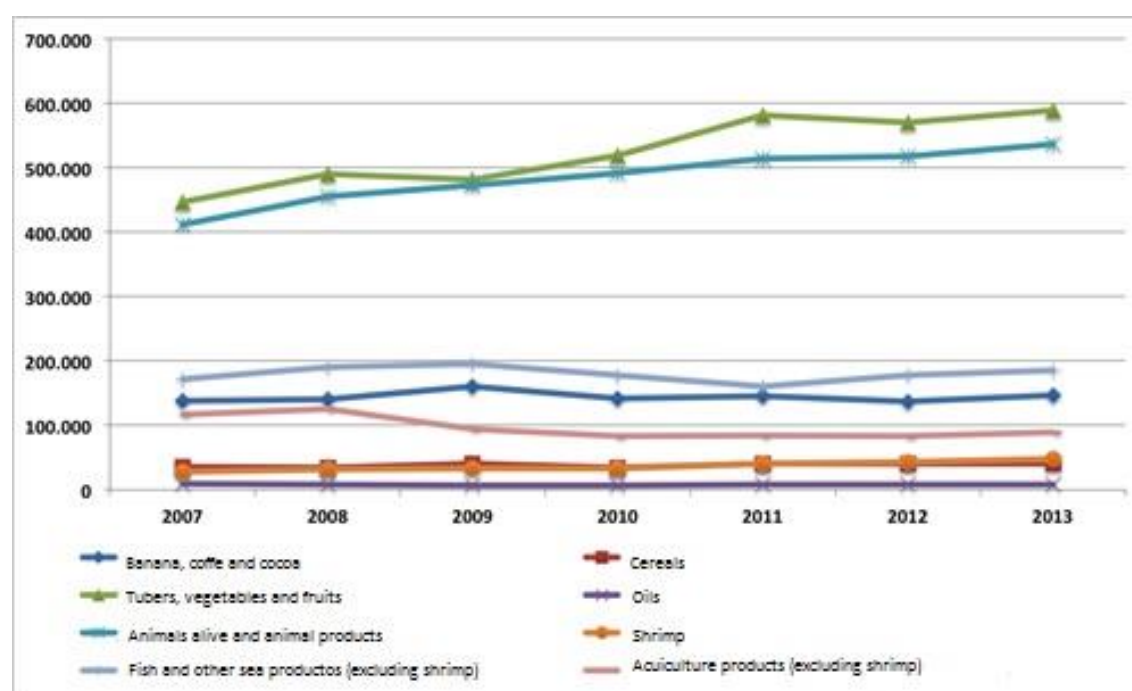
Food Type	Monthly Expenditure (USD)	% of expenditure by food type
Meat	114,566,977	19.6
Bread and cereals	109,894,753	18.8
Dairy products	81,731,008	14.0
Vegetables, legumes, tubercles	76,209,783	13.0
Mineral water and juices	54,652,391	9.4
Fruits	53,426,619	9.1
Fish	33,655,624	5.8

Food Type	Monthly Expenditure (USD)	% of expenditure by food type
Oils and fats	20,860,195	3.6
Sugar	20,817,139	3.6
Condiments	12,406,524	2.1
Coffee, tea, infusions	6,275,327	1.1
Country	584,496,341	100

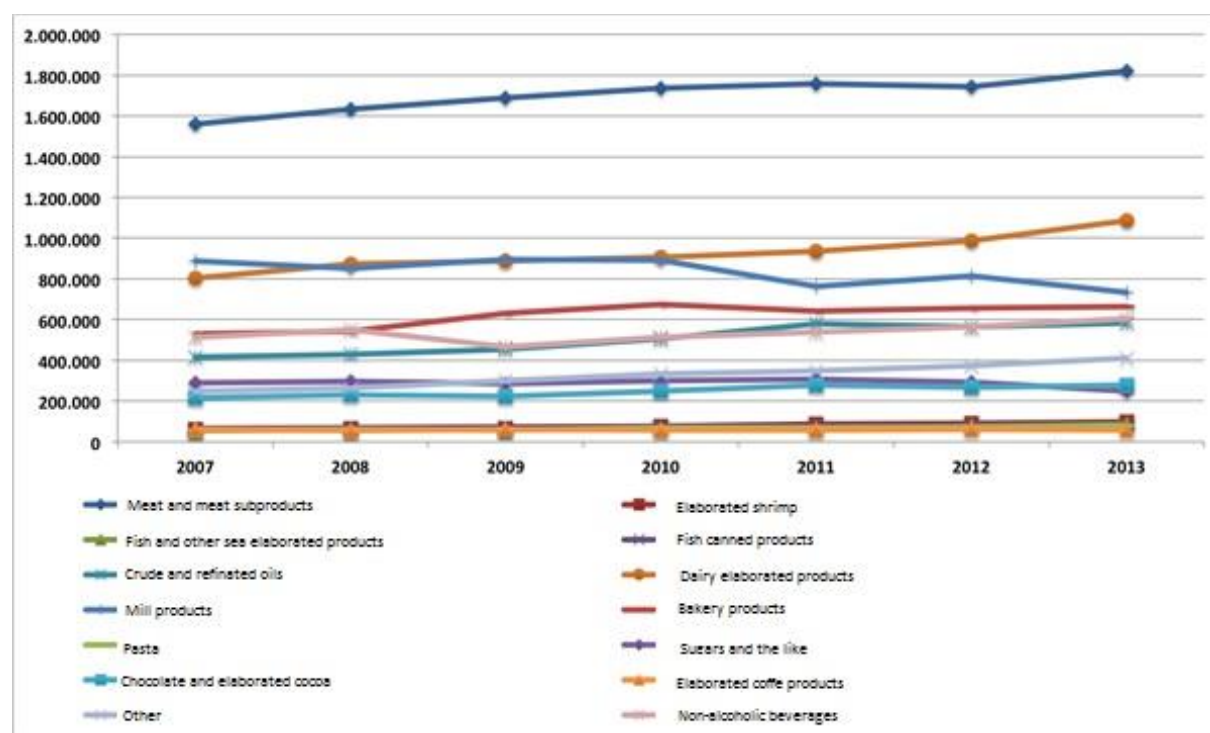
Source: Hollenstein, 2015

The way expenditure for these product groups has developed is consistent with the expansion of the food market as already outlined. Figure 4 and 5 show the development of expenditure for different types of fresh and processed food over recent years and they illustrate the growing consumption of meat, bread, cereals and dairy products. For example meat consumption has experienced a similar growth as in other countries, with the progressive consolidation of the meat processing industry and the positioning of meat as a high status product.

Figure 4: Fresh food consumption evolution disclosed by type (thousand dollars)



Source: Hollenstein, 2015

Figure 5: Processed food consumption evolution disclosed by type (thousand dollars)

Source: Hollenstein, 2015

The majority of food procurement is still channelled through traditional markets and stores. However, these traditional channels are being increasingly challenged by the consolidation of modern outlets like supermarkets. This leads to a significant transformation of the food chain. The available data provides different estimates of the importance of supermarkets. Hollenstein, based on an official household consumption survey, states that roughly 9% of the total of food expenditure is linked to supermarkets (Hollenstein, 2015) (see Table 3).

Table 3: Food spending by urban/rural area

Shopping place	Area	Expenditure	%	Frequency	%
Supermarkets	Urban	46,145,227	10.7	6,478,925	6.0
	Rural	4,903,567	3.2	765,169	2.5
	Total	51,048,794	8.7	7,244,094	5.2
Local stores, distribution centres	Urban	207,732,202	48.0	63,622,107	58.5
	Rural	70,120,991	46.3	15,270,930	48.8
	Total	277,853,193	47.5	78,893,037	56.4
Popular markets and open fairs	Urbana	116,438,789	26.9	24,414,112	22.5
	Rural	56,699,458	37.4	11,275,871	36.1
	Total	173,138,247	29.6	35,689,983	25.5

Shopping place	Area	Expenditure	%	Frequency	%
Street vendors, bakeries, butcheries	Urban	62,627,840	14.5	14,168,625	13.0
	Rural	19,828,267	13.1	3,956,994	12.7
	Total	82,456,107	14.1	18,125,618	13.0
Total	Urban	432,944,058	100.0	108,683,770	100.0
	Rural	151,552,283	100.0	31,268,963	100.0
	Total	584,496,341	100.0	139,952,733	100.0

Source: Hollenstein, 2015

Food procurement is not only determined by spatial location but also by class and ethnicity. Supermarkets tend to be places for white and mestizo people who spent around one fifth of their budget on buying food. People from other ethnic groups go more frequently to places like public markets and traditional stores (Hollenstein, 2015). In a similar way, supermarkets are the preferred source of food for the highest income segment of the population, whereas the lowest segments rarely buy there.

Table 4: Consumer's food sources by income segments

Shopping place	1	2	3	4	5	6	7	8	9	10	Country
Supermarkets	1	2	3	4	4	5	7	10	16	31	9
Local stores, distribution centres	55	56	55	53	52	50	48	43	39	29	48
Popular markets and open fairs	32	31	30	31	30	31	30	32	28	24	30
Street vendors, bakeries, butcheries	12	12	12	13	14	14	15	15	17	16	14
Total	100	100	100	100	100	100	100	100	100	100	100

Source: Hollenstein, 2015

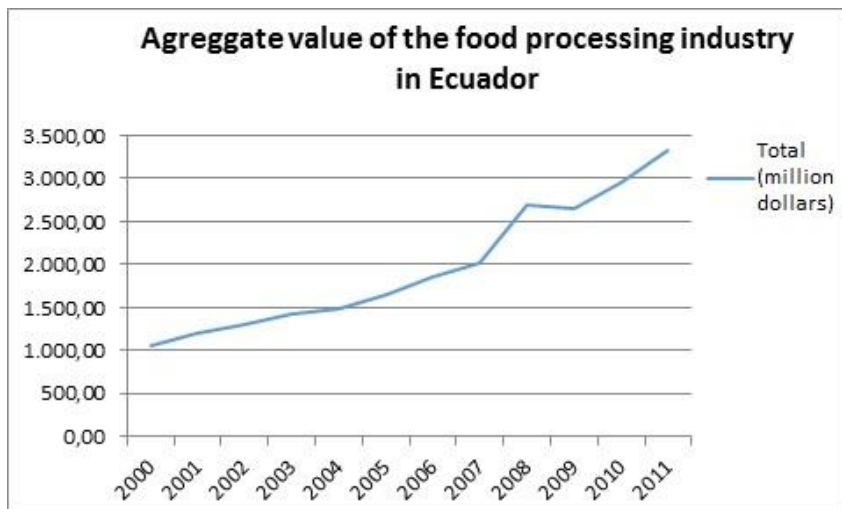
3.2 Modern channels

Modern food channels involve: 1) food processing and 2) the retail sector. Both are characterised by considerable growth in the last decade and by high concentration, with no more than five companies dominating each sector.

Food processors

The Ecuadorian food processing industry represents 45% of the total manufactures and nearly one third of exports (Arrazola & Yumbra, 2015). The sector has experienced consistent growth over the last decade (see Figure 6).

Figure 6: Evolution of the Aggregate Value of the processed food industry



Source: Arrazola & Yumbla, 2015

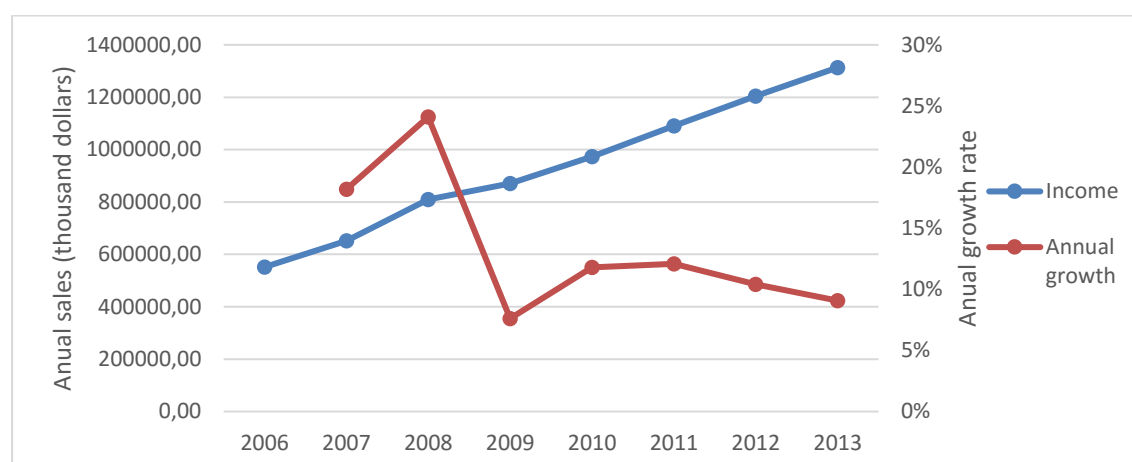
Below, the food processing sector will be further characterised using three sectors: 1) meat, 2) bread and grain-based products and 3) dairy products. As indicated earlier these types of food are the most consumed by Ecuadorian households which is why any analysis of the role of the private sector in the food system must take them into account. Secondly, given their dominance of the food system, opportunities for the development of a Food System 3.0 are important to discuss. When describing ways that these players relate to their suppliers, it becomes clear that small to medium sized, family enterprises (as compared to large food processors) are more likely to work with the majority of the large number of producers and merchants that are still working in the traditional system. In addition, many of these businesses, for example in the dairy sector – are concentrated in the surrounding areas of the Metropolitan District of Quito which represents in itself an opportunity for more local sourcing.

Each of these three sectors has grown steadily over recent years, although this growth has clearly benefited some groups more than others. In each sector, no more than 5 large companies share over 80% of sales, whilst a much larger number of small family-run companies are trying to find their place in the market.

The meat sector

Figure 7 shows how annual sales and annual growth have developed in this sub-market. Although these rates varied in successive years, the growth of this sector has been more than 7% since 2007. The number of enterprises in this sub-market has also increased, from 54 to 79 in 2013 (SUPERCIA, 2015).

Figure 7: Evolution of the meat processing sector



Source: SUPERCAS, 2015

Only two companies share nearly 80% of all sales in this sector. Figure 8 shows the development of sales of main enterprises and the concentration in the sub-sector. PRONACA, the main meat company in the country is significantly larger than its closest competitors.

Figure 8: Evolution of the income of leading companies in the meat processing sector



Source: SUPERCAS, 2015

PRONACA operates in all the regions of the country, including the Pichincha province and DMQ area (see Figure 9).

According to PRONACA'S sustainability report from 2015⁵, their procurement budget reaches 866 million US dollars per year and is sourced mainly from national suppliers. Suppliers near to operation centres account for 45% of the procurement⁶ and the business therefore contributes to 'the development of these territories' (PRONACA, 2015)⁷. Whilst the socio-economic characteristics (e.g. large or small enterprises and producers) of these 'local suppliers' are not known, suppliers near to the PRONACA operation centres in the DMQ/Pichincha area could be classed as Quito city region suppliers.

Figure 9: PRONACA Distribution Centres in Ecuador 2015



Source: PRONACA

The larger circles represent the main distribution centres while the small dots show other distributions centres that are spread all over the country to serve the internal market. These distribution channels principally serve national markets and cater for local urban markets. That makes PRONACA's presence in the DMQ City Region and in Guayaquil City (the two largest cities in the country) very significant.

With an average of 70% of the total sales during 2006 to 2013, PRONACA is the largest meat processor in the country. The business sells added-value products such as pre-packed chicken pieces to a range of customers. Restaurants and hotels account for 37% of the sales, the traditional channel (i.e. local stores) 24%, supermarkets 19%, open markets 11% and other channels 8% (PRONACA, 2015). In the last decade the company has expanded the product range to include frozen fish, pet food and beverages. Unfortunately, the company did not respond to the interview invitation which does not allow us to present their views. According to the PRONACA report (PRONACA, 2015) and conversations with the

⁵ Source: PRONACA website

⁶ Source: PRONACA sustainability report, 2015

⁷ It is however worth to note that the report is mainly focused on highlighting the company's success and social responsibility, without providing any further data allowing the reader to assess their conclusions.

managers of the National Association of Food and Beverages (ANFAB)⁸, PRONACA's main focus is technological innovation⁹. However, according to ANFAB, a strong business focus on profit and technological innovation may neglect aspects such as nutrition and health issues (ANFAB, interview 2016).

The second largest company is INT FOOD SERVICES CORP with approximately 12% of the sales. Some of the other businesses (see Figure 8), which include Juris, El Ranchito and Alimentos la Europea, are known for trading cold cuts. Others, such as ECARNI S.A, sell their products under the well-known brand Don Diego. These companies' products cover pork, beef and chicken. The beef and pork is mainly sourced from small-scale producers. Whilst the location of suppliers is not available, it is known that the company located in the DMQ sources from producers outside the city region.

Italimentos S.A, fifth in size, has a small factory, a store in Cuenca and an online platform to sell products directly. Another small enterprise that does not appear in the graph but that is also selling directly to consumers via social networks and a store located in the DMQ city region is MACAFRI. Edison Romo, the owner of this firm and chair of The Small Enterprises Chamber of Pichincha (CAPEIPI), says that he has invested in improving the quality of the products and making them available for a large part of the population (Macafri, interview 2016). He owns a store in *El comité del pueblo*, a neighbourhood located in the north of the city and known for what used to be an area mainly populated by informal settlers and informal merchants. The executive director of Macafri remarks that once the brand is known, customers pass by the store and buy meat for their families directly. He notes that people come from different corners of the city. However, he regrets that lower income families – who live nearby – prefer cheaper products over quality fresh produce guaranteed meat. For him, consumer education is vital and people need to be aware of the sanitary measures taken when handling delicate products such as fresh meat. Edison Romo has had experience with selling to hotels and supermarkets and he knows the requirements of each client. The director of MACAFRI explains smaller firms such as this one are closer to the suppliers (intermediaries or small-scale producers) and are more interested in investing in their continuous improvement by offering incentives for regular supply and good quality products (Macafri, interview 2016).

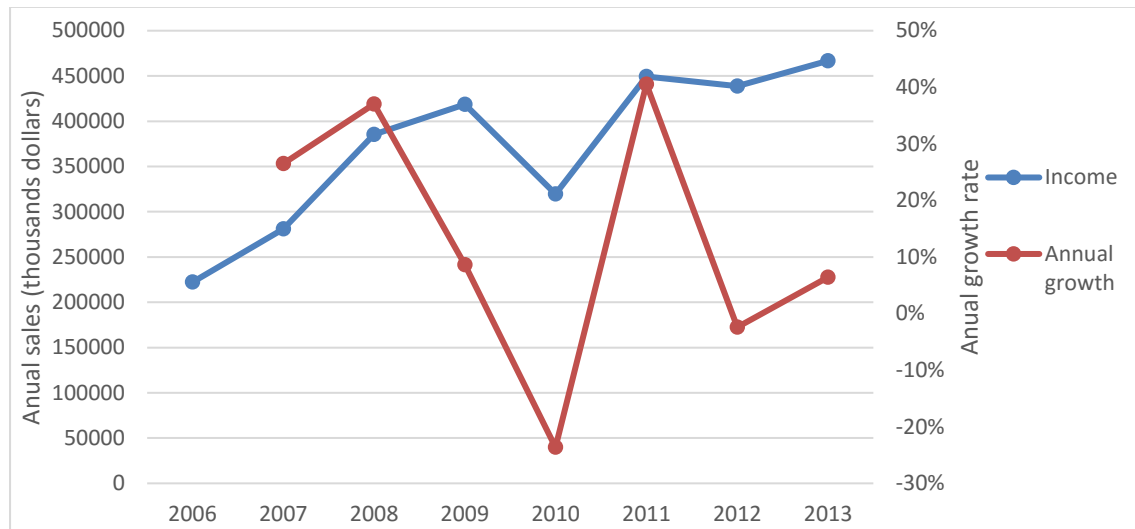
The bakery and grain-based sector

Figure 10 shows the development of sales in the bakery and grain-based sector, with total sales growing since 2003.

⁸ PRONACA itself did not respond to the author's request for an interview to obtain further information.

⁹ According to Agencia Ecologista however, other factors – such as controversial environmental and social practices – should be also taken into account to the company's growth and expansion (Agencia Ecologista, 2013).

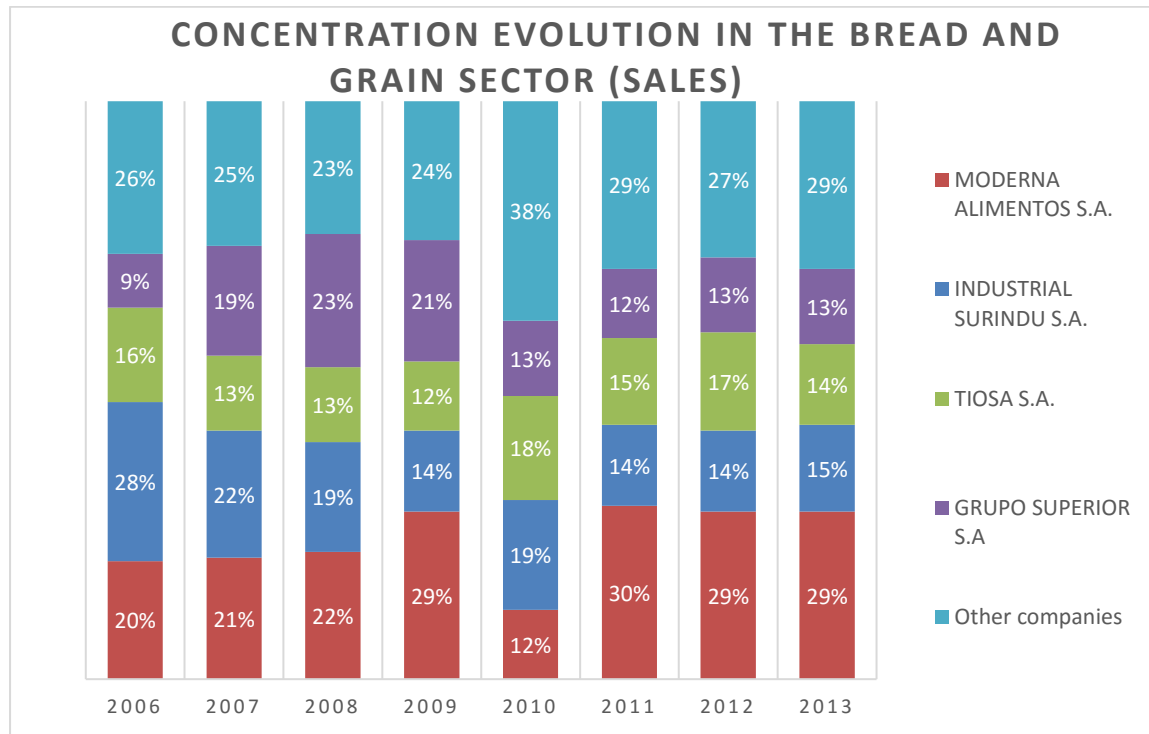
Figure 10: Development of the bakery and grain-based processing sector in Ecuador



Source: SUPERCAS, 2015

Four major companies dominate this sub-market. The remaining third of the market share is split between more than 70 small companies (see Figure 11).

Figure 11: Concentration of sales in the bakery and grain-based processing sector in Ecuador



Source: SUPERCAS, 2015

The bakery and grain-based sector is different from other sectors due to the fact that almost none of the raw material is available in the country. Ecuador imports almost 98% of its wheat (Andes Info, 2015) which means there are no local producers.

Grain arrives at the country's main port and is directly transported to mills. The complexity of the food chain lies in the distribution system that these enterprises deal with.

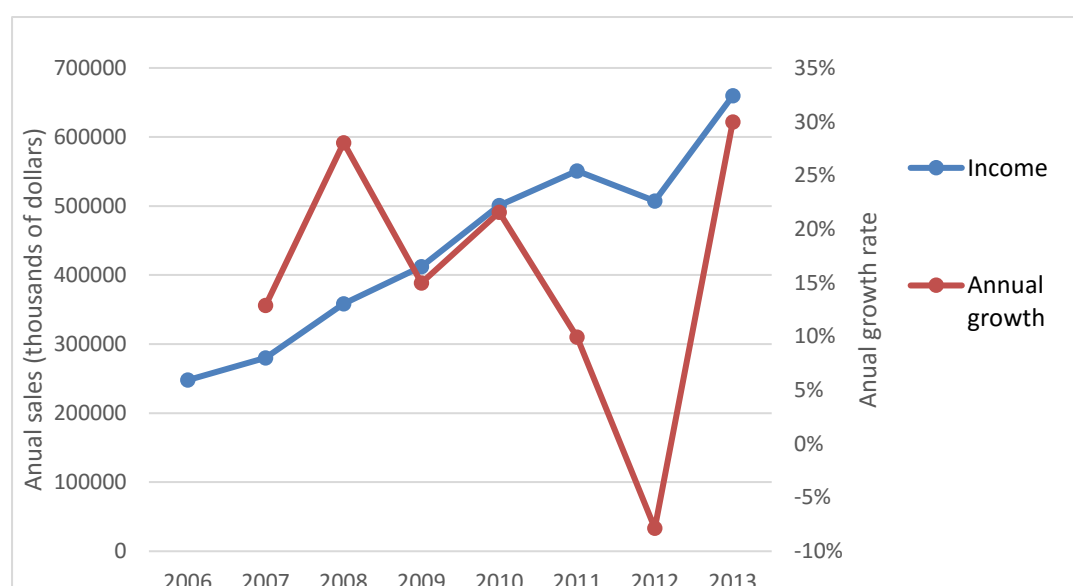
The companies usually work with local middle-men who distribute their products to local stores.

The Government is also a big client. Public procurement (via the National School Feeding Programme) accounts for 10% of Grupo Superior's sales. This illustrates that the national (and local) governments can play a pivotal role in the dynamics of the industry (through local procurement) and that even in this sector there are potential employment and consumption related impacts on the city region food system.

The dairy sector

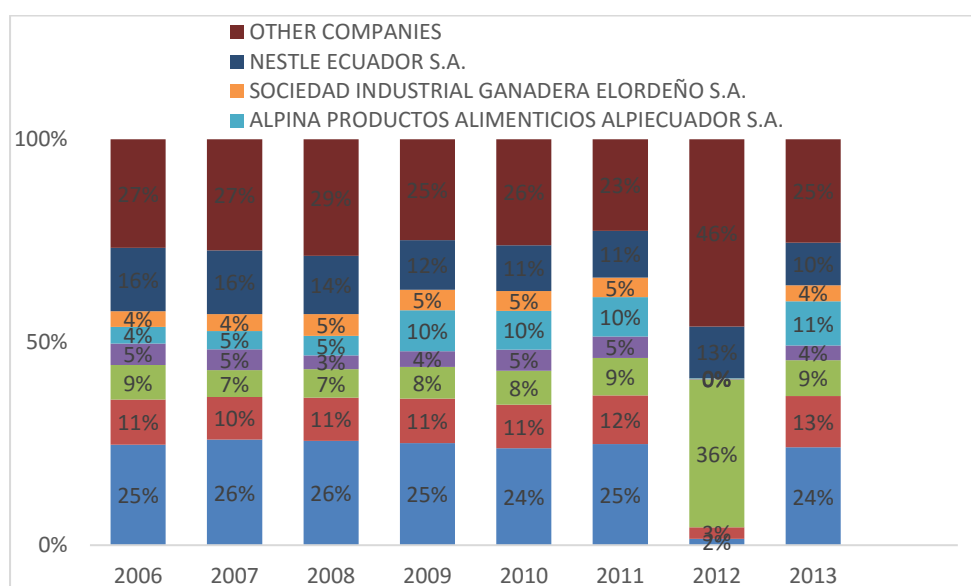
Figure 12 illustrates the development of this sector since 2006.

Figure 12: Evolution of the dairy products sector



Source: SUPERCAS, 2015

Once again, this sub-sector has grown over the last years and is also characterised by a process of concentration.

Figure 13: Concentration of the dairy sector

Source: SUPERCAS, 2015

The number of companies in this sector has shrunk from 119 in 2006 to 72 in 2013. Four companies currently account for more than 50% of the national market share. These companies collect milk from producers all over the country. It is estimated that around 11% of the population earns their livelihoods in this sector and they are mostly small and medium sized cattle breeders. These producers deliver their product to middle-men or sometimes directly to some of the processing companies. Almost 22% of the milk is produced in the Pichincha province where Quito is located (Grupo de Trabajo de Comercialización, 2016). One third of the milk production (5.8 million litres a day) is used in cheese manufacturing (Centro de la Industria Láctea, 2015).

The dairy sector is strategically important for the rural areas of the country. Approximately 75% of cattle herders (about 306,000) are small farmers that combine dairy production with other crops. These farms normally rely on family labour to manage their businesses and therefore an estimated 1.5 million people are involved in dairy production. Producers deliver their milk daily to the collection centres and they are paid every fifteen days. Milk constitutes a regular income and keeps families from leaving their land (El Ordeño, interview 2016).

There are several steps involved between the collecting centres and the processing factory. Middle-men, who are frequently linked to producers by vicious credit cycles, buy products and sell it to the biggest processors (El Ordeño, interview 2016). Creating opportunities for more direct links between producers and processors requires a number of changes, from an increased support and willingness from processors, improving existing collection centres to constructing new collection centres.

Recently, the sector underwent a profound crisis due to the overall economic crisis which also affected household expenditure. Evidence suggests that due to reduced consumer demand for dairy products, the industry reduced prices and forced the intermediaries to also reduce the prices that they paid to farmers. This crisis demonstrates the recurring dependence and vulnerability that small-scale farmers in Ecuador suffer. This is also the case for many other countries in the world (Grupo de Trabajo de Comercialización, 2016).

There are only two enterprises that are partially owned by farmers associations, one of which is El Ordeño. According to the manager of the business they are famous for promoting what they call an '*associative and inclusive entrepreneurial model*'. El Ordeño was created by the Asociación de Ganaderos de la Costa y el Oriente (AGSO), which is a national gremial association of a few large cattle breeders. The company was created in order to increase the proportion of national milk output being utilised in the dairy processing sector. Until very recently Ecuador was an importer of powdered milk and other derivatives (El Ordeño, interview 2016).

AGSO and El Ordeño have two types of suppliers. The first group are nominal members, which include ca. 3,000 independent producers who own their own milk tank. Collection centres constitute the second type of suppliers. El Ordeño collects milk from medium sized and large farms and collection centres located in rural areas. There are hundreds of families linked to these centres and the company has worked hard promote these links. Many of these collection centres are within a 50 km radius of the Quito city region. According to a representative of the company who was interviewed for this research, the strategy is to create stable relationships with these centres so that the company becomes 'an anchor platform' for the families involved. They also provide support for genetics improvement programmes and support credit petitions to banks (El Ordeño, interview 2016).

During milk crisis that has already been discussed, El Ordeño did not reduce the prices to their suppliers and instead increased the quality requirements. According to the managers the company has been able to keep prices competitive by discontinuing the traditional system of using intermediaries.

One key element that is important to understand in terms of the peculiarities of this company is its market focus. The organisation focuses on milk derivatives, powdered milk and other products account for 97% of their sales. Fresh milk only accounts for approximately 3% of the total sales. 97% of the milk supplies come from small suppliers (producers or collection centres). As the manager states 'the company has done a good job in its social emphasis but lacks a good commercial positioning' (El Ordeño, interview 2016).

The company recognises that it makes little sense to compete with other players such as Nestlé or San Antonio as these have the advantage of the economy of scale and can afford to reduce prices. Instead, their strategy is to focus on 'diversifying the product segments', i.e. developing more dairy derivatives. They also hope to grow their export market for powdered milk in the near future (El Ordeño, interview 2016).

It is interesting that these plans include a continuing reliance on a large network of associations consisting of small producers that tend to comply with the company's requirements. With the obvious precautions that need to be taken into account, this company seems to offer better perspectives and opportunities for their suppliers than the others. They also seem to be in a better position to contribute to building a fairer and more sustainable (and to a certain extent local) food system.

Modern retail

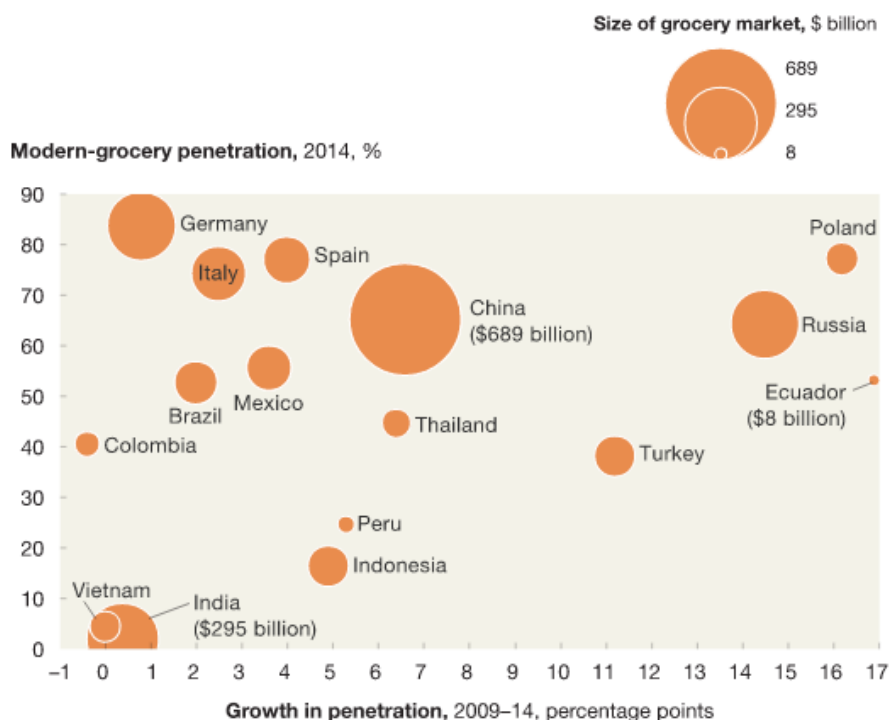
The main characteristics of the modern retail sector in Ecuador differ from the modern grocery retail sector in Europe or in the USA. When compared to supermarkets in the DMQ, the hypermarkets or supermarkets in Europe and the USA are generally in a different location and respond to different land use pressures. In the DMQ locations are dependent on being in places that are easy to reach by car for the middle and high income segment of the population. Additionally American companies planed on fast rising car-ownership rates and a large middle class that had good and stable salaries (Child, Kilroy, & Naylor, 2015). In contrast, when supermarkets first developed in Ecuador car-ownership was still very limited

and the unstable economic situation did not allow for good and sound projections at that time.

The retail system in Ecuador is also shaped by the fact that, according to a report of the National Statistics and Survey Institute, Ecuadorians have reduced their time spend on food preparation by one hour between 2011 and 2012 (INEC, 2012). According to the chair of the National Association of Processed Foods and Beverages (ANFAB) the food retail sector represents an opportunity to provide food for the increasing urban population. This organisation, which includes 75 enterprises that produce snacks, beverages, dairy products, processed food, frozen food and others, sells 40% of its total produce through supermarkets (ANFAB, interview 2016). ANFAB's director states that supermarkets present a convenient channel for a number of these companies due to the reduction in transaction costs. It is easier to sell a large portion of products to one place than to sell smaller volumes to a number of retail outlets (ANFAB, interview 2016).

Figure 14 shows the penetration of supermarkets in several countries. Ecuador is located in the centre right with a grocery market of 8 billion US dollars (Child et al., 2015).

Figure 14: Modern trade penetration and growth vary widely by market

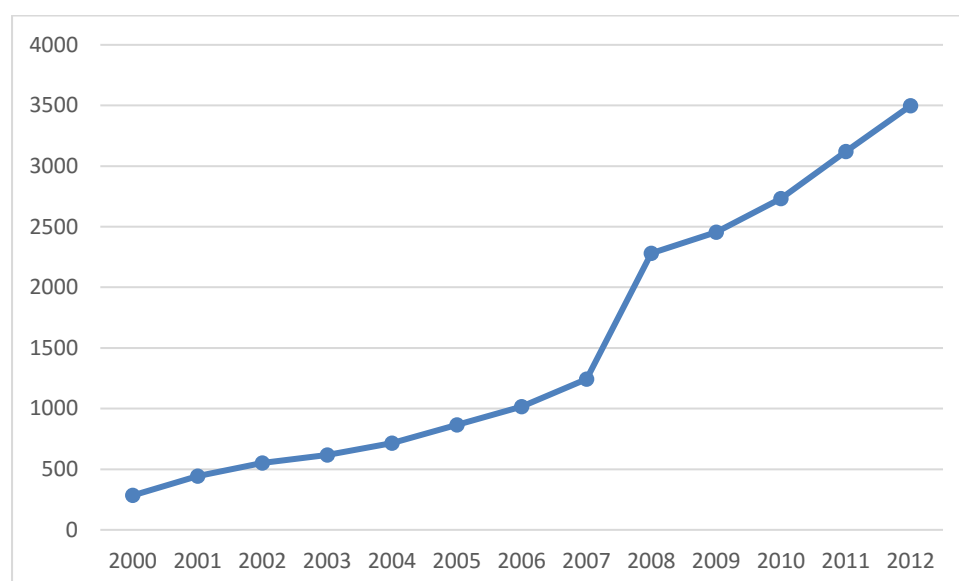


Source: Euromonitor International, MacKinsey analysis

As previously discussed, whilst supermarkets are not the main source for food shopping, their importance is growing particularly in the bigger cities. More recently this is also the case in medium and small urban centres in other provinces of the country (Hollenstein, 2015). The number of supermarket stores has grown from ca 50 in 1998 to more than 350 in 2014 (RIMISP-RURAL DIALOGUE GROUP).

Figure 15 shows the development of sales in this sector. Napoleón Gallardo highlights that modern retail outlets make it easier for people who consider both quality and price for their food purchases (Mega Santa Maria, interview 2016).

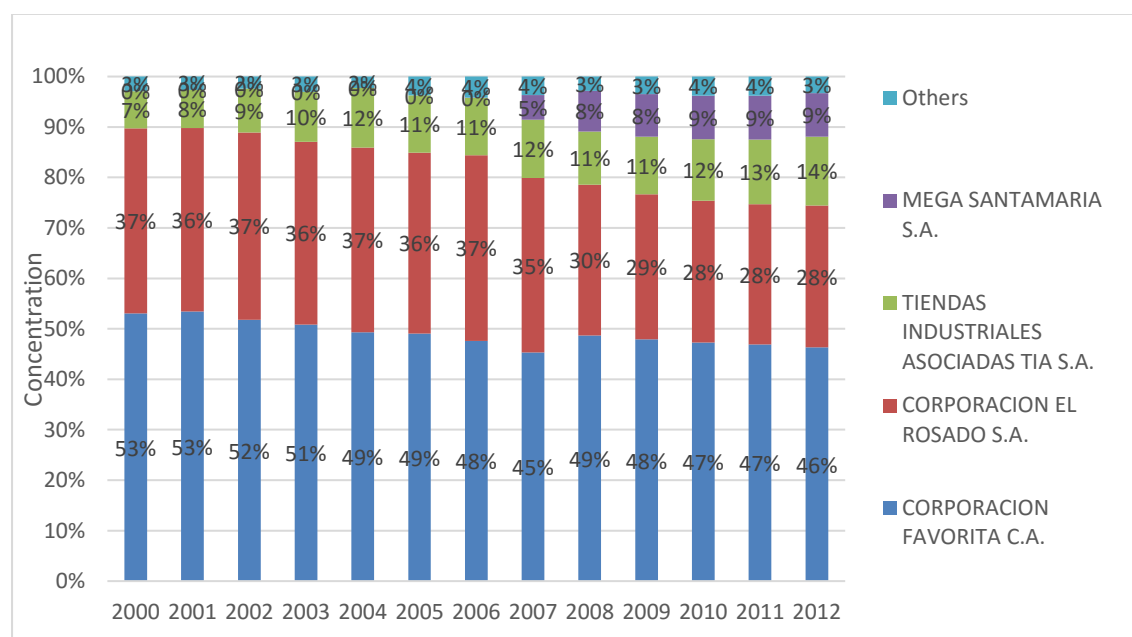
Figure 15: Development of Supermarket sales in Ecuador (in million dollars)



Source: Arrazola & Yumbla, 2015

As with other sub-sectors the supermarket sector is heavily concentrated. Four businesses dominate the market with the two most important accounting for the largest market share (75%).

Figure 16: Concentration of Supermarket sales in Ecuador



Source: Arrazola & Yumbla, 2015

As previously discussed, supermarkets tend to be a marketplace for the medium to high class mestizo people. Having said that, they are also frequented by diverse groups of people, including those who used to buy in traditional markets (Arrazola & Yumbla, 2015). Supermarkets focus on specific types of consumers using specific formats that are differentiated by the variety, presentation and prices of the products they offer.

Mega Santa Maria (MSM), a supermarket that holds the fourth place in the previous graph started out as a large grocery store that sold products in bulk. CEO Napoleon Gallardo emphasises that the added value of this supermarket is the offer to buy large units of a product or bulk-buy and receive a discount. He states that if a group of families organise themselves and buy more than 6 units for example, they can benefit from the same discount that the owner of a restaurant would get (Mega Santa Maria, interview 2016).

In the DMQ, supermarkets have diversified their product range in recent years by incorporating products with added value in terms of packaging, presentation, nutritional aspects etc. The bigger chains offer low-price as well as premium products and services depending on demand.

The supermarkets are clearly able to choose locations strategically and respond to consumer needs and preferences. MSM supermarkets for example are located near traditional public markets to offer products that could 'complement' the basic household shopping. This strategy is successful and several MSM's are now located near markets and squares in the DMQ. Other supermarkets choose locations in highly populated areas and others prefer to settle near main entertainment areas and retail parks.

The lead supermarket Corporación La Favorita (CLF) has become the benchmark in regards to efficiency and operational management. Other companies are trying to follow CLF's practices when they are planning their growth (Mega Santa Maria, interview 2016). For example, Mega Santa Maria (MSM) has so far mainly focused on expansion in the Pichincha province. MSM is now planning to expand all over the country which will require far-reaching transformations in their logistical set up and relationships with other players in the food system. Looking at these two companies may help to understand possibilities to engage them (or not) in constructing a more re-localised, inclusive and sustainable food system (a Food System 3.0.)

CLF uses a single distribution centre near Quito where they can take in stock and distribute to their stores daily around the country. The centre has implemented the latest technological system with Radio Frequency Identification (RFID) which allows for the control of products and rotating stock. CLF (which owns several supermarket brands that aim at different sectors of the population) do not store products to increase efficiency (Arrazola & Yumbla, 2015).

One key factor for improving efficiency at these facilities (in strict economic terms) is to reduce the transaction costs as much as possible. To support this aim the company requires its suppliers to meet certain requirements in relation to the frequency and volume of their deliveries (there are other aspects such as presentation, shape, etc. that are not considered here). For the company it is also best to work with a low number of suppliers¹⁰ for each product as this will support the efficiency of its operations and it reduces prices per unit (Arrazola & Yumbla, 2015).

The suppliers have to meet fixed delivery schedules and pay for transport costs. For the suppliers it is a privilege to work with a company like CLF and it can help them to secure further sales from other retailers. The prospect of becoming a CLF provider is an aim for many producers and food processors.

¹⁰ These providers tend to be specialised intermediaries that provide products across the whole country. They include both modern as well as more traditional food system actors – this is one of the key points in which the food system 1, 2 and 3 categories shows some weakness and where the existence of mixed systems may be much more common.

CLF's strategy clearly allows some players to participate and excludes others. In a food system like the Ecuadorian, which, as illustrated is still also characterised by a large numbers of small farmers and food enterprises, only a small group of powerful companies (will) have the capacity to CLF's requirements. This issue further adds to processes of concentration taking place in other parts of the supply chain (Arrazola & Yumbra, 2015).

MSM manages several distribution centres and this is seen as an opportunity and a risk at the same time. On the one hand, having 27 distribution centres keeps products fresh due to short transport distances from storage to store. On the other hand it increases operation costs. Currently rotation of produce is high and the company plans to follow CLF's examples and work with one main distribution centre and with standard quality criteria.

MSM currently sources from several small and medium sized enterprises. Small suppliers have specific needs such as better payment terms. Good payment terms were reinforced with the *Good Commercial Practices Manual for Supermarkets* which was issued in 2014 (*Manual de Buenas Prácticas Comerciales para los Supermercados*) and aims to include small-scale producers in the distribution channel. Nonetheless, MSM claims that for them, prompt payment for smaller suppliers was a normal practice already, especially with fruit and vegetable distributors. However, MSM's CEO acknowledges that small suppliers often cannot afford to deliver their products directly to the supermarket and they need to sell their products to a commercial company (intermediary) that takes on the logistics. He also mentioned that not all of MSM's small suppliers have an entrepreneurial vision and there are still some intermediaries who take advantage of that (Mega Santa Maria, interview 2016).

At the same time, MSM has started more recently to look for bigger suppliers that can source from several small and medium producers. Even though the number of suppliers has reduced over time, there are new suppliers that have diversified their production through adding value and presenting their product differently. In the case of fruit and vegetables, producers changed the packaging, combined products, delivered services, etc. Every week MSM receives around 100 to 150 offers of new products. MSM is interested in such differentiation and that is not necessarily price-related. The supermarket's staff look for added value in terms of nutrition, health and communication (Mega Santa Maria, interview 2016).

According to their own data, fresh product sales in MSM supermarkets have reduced over recent years. One reason for this may be the emergence of small distributors that set up their business using a single truck and work in residential areas. Most of them are not producers, they are intermediaries that sell fresh vegetables and fruit at an affordable price. They have caught the interest from some of MSM's customers because: 1) the consumer looks for a fresh product, 2) the price is affordable and 3) they can buy in smaller units. Nevertheless, due to the opening of new stores MSM has not reduced its overall purchase volume from its suppliers (Mega Santa Maria, interview 2016).

MSM thinks that new stores can offer opportunities for agro-ecological products such as Wayruru Orgánico or Megasano because it presents an opportunity to test consumption trends. Napoleon Gallardo from MSM notes that once there is demand for a particular product they proceed to list the product and sell it in their supermarket.

In summary, MSM's CEO summarises the basis of their success: 1) a diversified product range, 2) bigger transactions that generate more margin, and 3) high product rotation. The question remains to what extent MSM's strong tendencies towards reducing costs and ensuring product quality (and standardisations) still will allow room for a more diverse (and less centred) food supply system.

3.3 State intervention in the retail sector

In 2014, the institution that analyses the market share of the private sector (SCPM) published (as mentioned previously) a manual for good commercial practices that obliges supermarkets to source from smallholders and craftsmen¹¹. The policy states that 11% of their total purchases has to come from this sector, a requirement that was lowered from the original 15% (Superintendencia de Control del Poder de Mercado, 2014). However, the impact of this regulation is not yet quantified. The supermarkets argue that smallholders cannot supply the required quantities on time (Mega Santa Maria, interview 2016). They also mention that they are not able to meet the food hygiene requirements, that the quality of their products is not consistent and they lack facilities such as cold storage and access to chilled distribution (García, C. 2015, March 26th, Rural Dialogue Group).

Rubén Salazar, who works for the La Favorita Corporation which is the biggest retailer in DMQ, states that there is not a clear definition of the term 'small producers' and has requested a list of this type of supplier. According to his analysis, if supermarkets are required to source from smallholders they would need to deal with over 8000 suppliers. Currently they only have 70 suppliers of this type. For him, the regulation is difficult to implement because he argues that it is difficult to find food suppliers that are officially registered within the social and solidarity sector (Salazar, R. 2015, March 26th, Rural Dialogue Group). However, this argument is not completely valid because the regulation also includes small and medium enterprises which implies that there is a wide range of suitable suppliers such as the meat processor MACAFRI that was mentioned earlier. More information needs to be made available across the food chain so that support organisations (e.g. The Quito Economic Agency CONQUITO, other municipal agencies and secretaries, the Pichincha local government and NGOs) can help small-scale suppliers to improve their practices to meet demand, while at the same time allowing supermarkets to make a more informed choice in their arrangements with small-scale producers and SMEs.

Daniel Olivo, from retailer Tia stores that have experienced significant growth in recent years, thinks that the new regulation will support the existence of middle-men because it is easier for farmers to sell their produce to them instead of incurring the transaction costs related to logistics that meet the supermarkets requirements (Olivo, D. 2015, March 26th, Rural Dialogue Group). And although middle-men play an important role in the city region food system and may offer important job opportunities, the extent to which these systems favour inclusion of small-scale and local farmers is still be analysed (and currently not documented or monitored).

However, it is important to note that the Good Practices manual was released with the intention to stop the ongoing concentration process in the food retail sector. The discussion about producers getting fair and impartial access to this market remains another issue. One interviewee acknowledged that a producer who supplied one of the supermarket intermediaries complained (via an anonymous letter) that he was not receiving a fair price and that the intermediary did not share the margin (Mega Santa Maria, interview 2016). In that particular case the supermarket manager investigated the case and found out that the producer was right and demanded from the intermediary to pay a fair price without delay. Such monitoring, however obvious it may seem, is not a regular practice and it is not known to what extent supermarkets, the state authorities or the chamber of SMEs survey the issue.

¹¹ The scope and competencies of the SCPM do not consider factors such as location. The goal is to promote competitive markets and set formal restrictions to oligopolistic consolidations (such as the ones reported in this document).

It should be noted that intermediary companies can also play a role in supporting small farmers to be included in the chain and to receive a fair price (Padilla, D. 2015, March 26th, Rural Dialogue Group). Further initiatives need to be encouraged to promote more transparent relationships and stronger producer organisations (legally recognised, with the ability to handle logistics and commercial operations).

Agro-ecological producers require an official certification to achieve a premium price. In recent years agro-ecological farmers have fought for the recognition of the Local Guarantee Systems (SPG in Spanish) that provides a different tool to recognise current food safety norms (Coordinadora Ecuatoriana de Agroecología, 2015) and reduces the burden of expensive foreign certificates. Interesting initial experiences from using SPG at the provincial level (Pichincha, Tungurahua, Azuay) could be replicated in other provinces but this has not been recognised by supermarkets yet. The State could increase such socio-economic legitimisation for producers' initiatives by officially recognising the SPG label which would require supermarkets to increase the price they pay to agro-ecological producers. However, such recognition could also create tensions within the state itself and within the agro-ecological social movements. Trying to gather state institutions, supermarkets and producers organisations to find common ground to solve this issue would be a good step forward in improving producers' conditions and rights.

In 2015, the Ministry of Agriculture, Livestock and Fishery proposed an inclusive business strategy to take advantage of the manual of good commercial practices. This plan includes four strategies: 1) provide up-to-date market intelligence (e.g. produce that is in demand or low in supply) to small producers who are able to supply supermarkets, 2) develop an inclusive business plan with local operators that design and implement the plan, 3) supervise the contracts to prevent mistakes and 4) promote an alliance to support co-responsibility and co-financing for the implementation of the plan (MAGAP, 2015). Nevertheless, the implementation and potential benefits of this programme have yet to be shown.

Another policy measure that was introduced was the 'nutritional traffic light' which was issued in 2014 to provide consumers with nutritional information of pre-packed food. According to labelling regulations, the industry has to report levels of fat, salt and sugar that processed food contains (Ecuador. Ministerio de Salud Pública, 2013). The traffic light shows the three ingredients using a colour (green, yellow and red) depending on the amount per category (green for low, yellow for medium and red for high) and in white writing the claim '*it does not contain fat, salt or sugar*' when the ingredients are not present. Christian Wahli, chair of ANFAB, states that not all consumers rely on this tool. However, he acknowledges that many of the enterprises that process food are trying to reach 'yellow' to increase customer demand (ANFAB, interview 2016).

A study from last year that included work with a focus groups showed that the traffic light system can be misleading. People might choose a different product when they see red on a label even if the product is not considered a threat to health. Other critics reflect on the limited efforts to educate and guide the population and discourage consumption of certain ingredients. Others suggest that the current traffic light does not complement the nutritional information on the label (De Souza, 2015). Indeed, most of the population has a limited understanding of nutrition and people often have difficulties distinguishing between the types of fat that are healthy or harmful for example. Additional information from market research company Kantar Worldpanel indicates that the impact of the traffic light was different in each sector. Consumers have reduced purchases of milk and yogurth because of the high fat content and of beverages because of high sugar content. The responsible Ministry is currently examining a proposal to improve the information that is communicated through the traffic light system. Citizens expect to be better informed to help them make a wise choice (Revista Lideres, 2016).

In addition to supply regulations and food information the DMQ government has also issued policies that deal with distribution schedules for heavy trucks in the city, standards for accessing markets, health and safety measures and food hygiene requirements. However, these standards are not combined in a single document which would make access easier for all players involved.

4. Short food supply chains Quito

In addition to the distribution and retail sectors that were previously described, several short supply chains of groups of producers, commercial organisations and consumers have been established in Quito. They are all involved in different initiatives that aim to provide and get access to food in more sustainable and fairer ways.

4.1 Diversity of types of short food supply chains

There are several types of outlets where consumers can buy food, which was grown locally using agro-ecological standards, directly from the farmer. These are shown in Table 5, based on the research performed by (Boada & Torres, 2015).

Table 5: Types and significance of outlets for agro-ecological products

Place of purchases	Percentage
Fair	54.8
Market	17.9
Product basket/box	15.5
Store	10.7
Public Purchase	1.2
Total	100

Source: Boada & Torres, 2015

Each type is characterised by significantly different kind of food distribution. Whereas markets and fairs take place, or baskets are delivered, once a week or every two weeks, consumers can buy every day in stores. Markets and fairs usually provide mainly fresh food. In contrast, shops tend to sell predominantly processed food. There are also other large differences for each type of retail outlet in regards to the organisation of the supply chain. Generally speaking, producers (the majority of whom are located in the surrounding areas of DMQ) are more directly connected with the organisations that govern the markets, fairs or provide hampers. This is not the case with the retail stores (Boada & Torres, 2015).

4.2 Characterisation of the producers

Modernisation and concentration processes in food retail tend to exclude a large number of (small-scale) farmers from the productive system¹². Therefore, it is not surprising that many of the government and NGO led short food chain initiatives are focussed on including low-

¹² These processes have been studied in Latin America and other regions. For a brief introduction see Bernstein (2010).

income farmers that live mainly from agriculture and who sell their products also in traditional public markets.

Table 6 shows the income level of the participating producers. The vast majority of them (85%) are situated in the lowest segment, earning less than the minimum wage.

Table 6: Income level of the producers

Variable	Percentage
From 1 to 365 USD	85.4
From 366 to 500 USD	4.2
From 100 to 2000 USD	4.2
More than 2001 USD	6.3
Total	100

Source: Boada & Torres, 2015

For most of the producers agriculture is their main source of income. In addition, they are usually farmers with very restricted access to land (Table 7). This is a crucial limitation for producers, as, for example, it limits producers' ability to meet required volumes or the requirement for regular supplies.

Table 7: Land size of the producers

Variable	Percentage
From 0 to1 ha	60.4
From 1 to 5 ha	14.6
From 11 to 20 ha	2.1
From 21 to 50 ha	0
More than 51 ha	4.2
Not registered	18.7

Source: Boada & Torres, 2015

In fact, the main reason for the majority of producers to get involved in short supply chains is that they can receive a better price than through traditional channels and it helps to improve their quality of life.

Table 8: Producers' motivations to participate in agro-ecological short chains

Variable	Very important	Important	Not that important
Improved household income	20	15	13
Offer natural and healthy products to buyers or consumers	19	24	5
Socialise with customers and producers	16	8	21

Source: Boada & Torres, 2015

These producers also rely on familiar labour to cultivate their fields. 75% of these producers grow for their own consumption. 77% of these producers are women.

4.3 Consumers and support organisations

Boada estimates that the estimated number of people purchasing from these outlets is not higher than 4,000 (roughly only 0.3% of the city's population). Furthermore, 60% of those shoppers are from the upper middle classes. Clearly, these short chain food procurement systems benefit only a very small segment of population.

Most of the consumers tend to be female (70%). It is also worth noticing that 55% of the consumers declare that supermarkets are their main outlet for food shopping. This demonstrates that short supply chains only account for a small part of the food these people consume.

Table 9 shows the percentage of the short food supply chain initiatives that are supported by specific support organisations. Only 30% of the chains had no external support and relied on the own initiative of involved producers. This does however raise questions on the sustainability of the initiatives (e.g. can they survive without external support) or may lead to the conclusion that development of short supply chains involving small-scale and low-income producers will need some kind of external support for reasons mentioned earlier in this report (lack of own resources, transport, lack of negotiation power etc.).

Table 9: Support organisations

Variable	Percentage
NGOs	12.5
National State	16.7
Local Governments	25
Private companies	2.1
Social movements	10.4
Own producer initiatives	31.3

Variable	Percentage
Total	97.9
System losses	2.1
Total	100

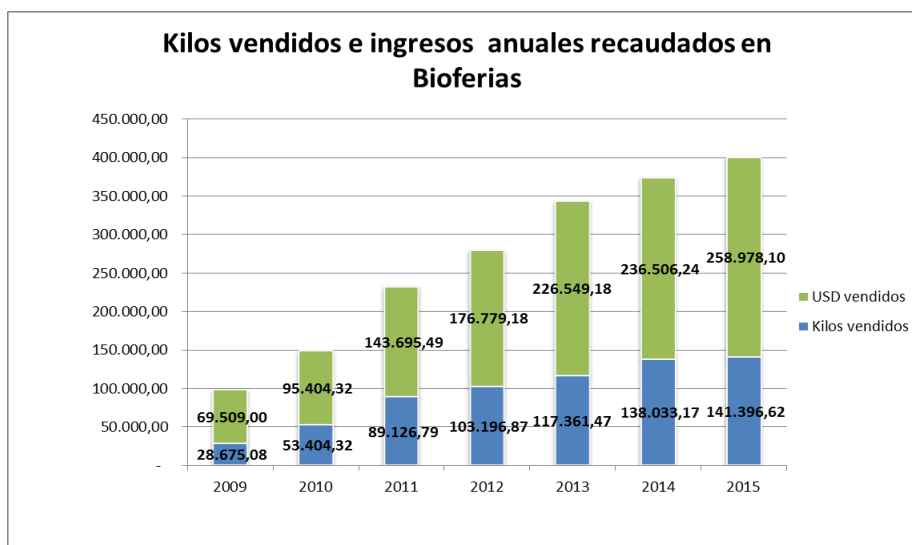
Source: Boada & Torres, 2015

The organisations that contribute the most to the development of these short supply chains are the State (at the central and local level) and NGOs. For instance, the National Government (Ministry of Culture and Heritage) developed a strategy to support the gastronomic heritage of the country and supported links between producers, chefs and consumers focussing on three areas: 1) cultural belonging, 2) food sovereignty and 3) endogenous development. Territorial attachment and the challenges regarding inequality in food distribution, loss of biodiversity and standardisation of eating habits are some of the aspects that were considered (Zarate, 2013).

The municipality uses its agency CONQUITO and particularly the AGRUPAR project (see Chapter 2) to support food sovereignty through measures such as technical assistance to urban and peri-urban farmers, small animal breeders and food processors support for sales at local fairs throughout the city. So far, the DMQ city region has 12 *bio fairs* ('bio' to distinguish the agro-ecological characteristics of the products) which are established in the north, centre and south of the city and in its valleys. The following table shows the origin of the producers. The fair in *La Carolina*, located in the north of the city includes several associations of small-scale producers who come from several areas within the DMQ. As this was one of the first bio-fairs to offer agro-ecological products direct to consumers it became a benchmark project. Alexandra Rodríguez (leader of the AGRUPAR project) explains that there is a plan to open two new sales outlets in the near future and to extend the fair in Bicentenario Park to Sunday.

In 2015 over 400 tonnes of food were produced in urban and peri-urban gardens and farms. 25% of that was sold at bio fairs. The Quito bio fairs sold more than 141 tonnes of ecological produce (valued at almost USD 260,000) in 2015.

Figure 17: Amount of produce sold and annual revenues from bio fairs for the years 2009-2015



Source: AGRUPAR

Nearly 170,000 consumers have attended these markets in recent years. By using new production techniques (greenhouses and drip irrigation) and crop rotations, local food production is no longer seasonal but maintained throughout the year.

Alongside state intervention and NGO's support, private players such as the Slow Food Coalition promote the transparency in the transactions between producers and caterers. Slow Food stands for three basic principles: 1) **GOOD FOOD** that tastes delicious, 2) **CLEAN** in terms of zero agrochemicals, short distance transport and consumption that reduces the impact on nature and favours agro-ecology and, 3) **FAIR** for the producer and the consumer. The caterers are key players in the food system because they can connect their customers with producers. The State (via the Ministry of Agriculture, Fishery and Livestock (MAGAP), and more precisely its Short Chain Commercial Network Department is currently engaged in conversations with the private sector, research organisations and NGOs to establish further steps in the promotion and acknowledgement of small-scale producers in restaurants and coffee shops. Esteban Tapia, chef and member of the Slow Food Movement comments that the restaurant is a great place to educate consumer and co-operation with research organisations could reinforce existing initiatives to improve the food system (Esteban Tapia, 2015 interview).

Several NGOs support producer organisations directly to sell their products in different ways, for example through fairs, local stores and hampers. However, since these initiatives require a certain level of organisation and logistics, the NGOs also focus on formal retail outlets as an alternative once producers become more commercial.

Consumer organisations only start to play an active role in maintaining these systems. In fact, Ecuador has a law to protect consumers but it does not make any specific references to the configuration of consumer groups in specific sectors such as food. The only references to food deal with the quality of the products and the nature of food labelling (Congreso Nacional del Ecuador, 2000). On the other hand there is a consumer tribunal, a body that is supposed to promote sustainable consumption (Tribuna ecuatoriana del Consumidor, 2011) but they are not as active as similar organisations in the neighbouring country Peru. The Peruvian Association of Consumers and Users, ASPEC in Spanish, has, for example, already issued a decree that deals with recommended healthy foods to be sold at local schools (Asociación Peruana de Consumidores y Usuarios, 2012).

Short supply chains could in future be further strengthened by linking them to the 'Responsible consumers initiative' in Ecuador. They have tried to mobilise 250,000 citizens in the country (5% of the population) to form a grass-roots counter-response to 'modern' food and to play a larger role in the transformation towards a sustainable and equitable city region food system in Ecuador. For many families this implies investing in local, ecologically produced food and provides new opportunities for localised production systems (Sherwood and Cane, 2015).

5. Conclusions and recommendations

Ecuador's internal market of processed foods has grown considerably during recent decades and follows the international trend. On the consumption side, Ecuadorians still get their food primarily from public popular markets and local stores. However, in urban areas and particularly in large cities such as Quito or Guayaquil, the importance and market share of supermarkets is growing. Supermarkets have developed several formats that target different types of customers and cover wide geographical areas.

The Ecuadorian food system, particularly in the Quito Metropolitan District, is also characterised by a 'concentration process' in the food processing and retail (supermarket) sector. A maximum of five companies share the majority of sales in each sector. This increases competitiveness and excludes small and medium producers and enterprises who have fewer resources available.

The pressure for larger companies to be efficient, to offer standardised products and reduce costs presents challenges and obstacles for small-scale farmers, small enterprises and pioneering entrepreneurs. It is still uncertain to what degree supermarkets will be willing to include small-scale producers even with current regulation that requires them to do so. To increase efficiency small-scale producers may need to work with medium sized intermediaries that can afford the transactions costs that are required to deal directly with supermarkets.

It is mainly the small and medium sized food processors and retailers that still have closer links with their suppliers, whether they are producers or intermediaries. Some are able to respond fast to changing contexts and to innovate looking for new ways to sell their products directly to consumers. Most of the SME entrepreneurs are proud of the products they offer and it is important to them to improve their practices aiming for better product quality, to provide consumer education and to connect to their suppliers in a more inclusive and sustainable way. SME processors and distributors in Quito also offer more opportunities for local sourcing as they are less influenced by issues concerning economy of scale and logistics.

Small and medium sized enterprises and companies that practice sustainability should be considered as key players in building a more equitable and sustainable city region food production and distribution system. This sector is dynamic and new strategies to reach the market are being developed. Some of the enterprises, such as MACAFRI and EL ORDENO, have experience of supplying major customers (e.g. large retailers and exclusive stores) as well as selling to consumers directly. That means that they already know the players, the standards and the regulations and this can help them reduce their transaction costs. Several initiatives could be considered to increase their involvement of SME's. Examples include increasing the number of local suppliers in their supply chains, promoting diversification through the sourcing of organic or healthier products from local producers and facilitating SME's direct access to consumers.

At the same time, there are interesting developments in the concept of short food chains. Whilst, some consumers from higher income segments of the population are becoming more health conscious, lower income consumers are becoming more excluded.

The SMEs that were interviewed for this research see online platforms and social media as opportunities to grow and connect directly with consumers. They offer an interesting possibility to support de-concentration of markets (which is an explicit policy objective of the State). They are willing to negotiate and create alliances that benefit producers and

consumers alike. The representative of the SME chamber (CAPEIPI) for the Pichincha Province highlights how important it is to look for good suppliers, to innovate, to raise standards and to create fair and transparent relationships across the supply chain.

The second key sector, alongside SME processors and retailers, are formed by a large number of smallholders who produce nutritious, healthy food and who sell direct to consumers or to the SME processing/retail sector. The issue of food access for large populations, who cannot afford to pay the price for agro-ecological products whilst paradoxically living very close to those producers, continues to require attention.

The key for small-scale producers to become more visible and relate more directly to processors/retailers is to set up associations or cooperatives (Gallardo, N. 2016 interview). Once smallholders organise themselves in groups they can increase their negotiation power and demand more transparent and inclusive relationships with other food system players. Specific programmes that aim to support the consolidation of producers organisations could be considered. These might include improving strategic access to resources (such as storage centres, irrigation channels, ICT services and others), commercial and logistics training and knowledge exchange to create sound, stable commercial relations with strategic partners (such as SME's).

Local government and public institutions could represent an opportunity to look for alternatives that 1) support dialogue between different players and 2) promote sustainability, transparency, consumer education and communication.

Quito signed the *Milan Urban Food Policy Pact Milano* on January 15th 2016. The Milan Pact explicitly recognises the need for sustainable urban food systems. The Pact mentions the importance of small-scale producers to provide food to the city and to contribute to more resilient and fairer food systems. On the other hand, it also signals the key role of the private sector to provide expertise, innovation and communication to support a better food system and to incorporate inclusive practices and human rights in urban public policies (MUFP, 2015).

DMQ does not have a clear urban or city region food policy. There are interesting proposals coming from citizens, small-scale producers, SME's and bigger enterprises that have to be heard and considered. Therefore the creation of a multi-stakeholder platform engaging all these actors could help with developing plans to implement the Milan Pact.

In order for this to happen specific policies need to be developed and tailored to these players. The financial sector could develop specific products for small-scale producers and SME's and the state could develop supportive and differentiated fiscal policies (selective tax exemptions, space for markets, a priority to source from local producers or smallholders in public purchasing programs, etc.).

The power of SME processor, retailers and smallholder farmers lies in their attachment to the territory, the delivery of good services to consumers, their pride in their products and the strategic market positioning of their products: agro-ecological, local provenance, healthy food and fair trade.

Another way to support these sectors is through supporting an entrepreneurial environment that encourages young people to develop a product or add value to an existing product. An interesting example is the cooperation of an enterprise with a University to launch 'the entrepreneur's corner' to support new ideas in the food and crafts sectors. Several products

were developed and are now sold in airports and retail stores in Ecuador, Peru and Colombia¹³.

The Alliance for Entrepreneurship and Innovation (AEI) helps entrepreneurs to connect with established enterprises that have several years of experience and that can provide focus for new developers. Agri-business incubators can help small entrepreneurs to start a new business and improve their enterprise skills (FAO, 2016).

The conceptual differentiation between rural and urban creates biased policies that are oriented towards either the 'hinterland' or 'the metropole' (Berdegue & Proctor, 2014) instead of holding the integral view that one is highly interdependent of the other (as expressed in a city region food system that recognises the interconnectedness). For example, aggregation of rural (from outside the DMQ) and urban production (see the AGRUPAR programme) is the key to offering consumers a diverse and sufficient supply of produce. Horticultural produce from AGRUPAR's urban gardens are complemented by rural production which allows for increased diversity of supply with products that require larger growing areas, such as pork, trout, honey, eggs, grains and beans.

Strengthening the city region food system can help to reach sustainability goals in terms of justice and solidarity and accomplish the Milan Food Policy Pact. The opportunities are summarised by Berdegue and Proctor in the five following points:

1. Localised production i.e. urban and peri-urban agriculture for food and income security at household level, to reduce market distortions and reduce dependency on imported supplies
2. New enterprise and marketing opportunities
3. Entry point for awareness raising on healthy foods and lifestyles
4. Resource recovery (urban waste) and climate change adaptation such as designating low lying areas and flood plains for agriculture to limit construction and reduce the impact of floods
5. Reduce emissions related to food transport and food waste thus lowering the urban footprint.

If the private sector experiences an enabling environment in which to create and propose rather than comply and compromise, there is a higher probability to achieve social, economic and environmental returns in the medium to long term.

In addition to urban-rural links, city region food systems also need to consider other dimensions of sustainability. According to the Sustainable Food Lab, a food system is considered sustainable when the soil fertility is maintained and improved, the water quality is protected, the farmers and the farm workers have liveable incomes, the food is affordable, health is respected and there is consideration for the energy flow and the earth's capacity to absorb greenhouse gas emissions (Sustainable Food Lab, 2015).

Dialogue between several players (producers, retailers, processors and consumers) is needed to make sure that everyone knows how to contribute to the improvement of the food system. If the right environment is created chances increase to set up alliances, tailor specific products and reduce the impact of externalities.

¹³ More information about the project is available from <http://www.revistalideres.ec/lideres/republicacacao-udla-emprendedores.html>

To support the transition towards a Food System 3.0 in which several players create a common framework for conscious food governance that fosters an improved balance between global and local food supply, based on an awareness of the multiple food system outcomes for health, economic development and environmental sustainability (Jenning S. et al., 2015), the complexities of power relations between the actors that intervene in or influence the food sector need to be better understood, as well as the beliefs and behaviour of people in the given territory, their motivations and interests. Updated information on the food system is required (where does the food come from, who processes, sells and consumes different types of food, as well as transparent communication on food policies and consumers awareness and education (Castells, 2010).

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