

Fachhochschule Köln Cologne University of Applied Sciences



UNIVERSIDAD AUTÓNOMA DE SAN LUIS POTOSÍ

FACULTADES DE CIENCIAS QUÍMICAS, INGENIERÍA Y MEDICINA

PROGRAMAS MULTIDISCIPLINARIOS DE POSGRADO EN CIENCIAS AMBIENTALES

And

COLOGNE UNIVERSITY OF APPLIED SCIENCES

INSTITUTE FOR TECHNOLOGY AND RESOURCES MANAGEMENT IN THE TROPICS AND SUBTROPICS

COFFEE TRADE BETWEEN MEXICO AND GERMANY Status quo, challenges and opportunities in alternative coffee production, consumption and trade

THESIS TO OBTAIN THE DEGREE OF

MAESTRÍA EN CIENCIAS AMBIENTALES DEGREE AWARDED BY UNIVERSIDAD AUTÓNOMA DE SAN LUIS POTOSÍ

AND

MASTER OF SCIENCE

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FOCUS AREA "ENVIRONMENTAL AND RESOURCES MANAGEMENT"

DEGREE AWARDED BY COLOGNE UNIVERSITY OF APPLIED SCIENCES

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Abstract

Coffee markets have imposed dynamics where supply and demand become first law of nature in economy and world trade. At the same time the supply market has to focus on changing issues of the demand market, consumer markets are more and more focusing on the socio-economic and environmental issues on producer markets. In the last couple of years different alternative business initiatives arose in the attempt to curtail the negative social and environmental effects of coffee production and trade in a globalized world, and to empower local development of producer communities. Alternative coffee such as organic and Fairtrade certified coffee pledge to make a positive contribution to a socio-economic and environmental development of producers and their land, and to create closer ties between producers and consumers.

However, as these alternative markets have grown from a small social and environmental movement to a substantial niche market, the relationships between producers and consumers have become less personal and the alternative markets more demanding. By determining the situation in which the organic and Fairtrade movement finds itself right now in the producer market in Mexico, and the consuming market in Germany, the challenges and opportunities that such alternative production, consumption and trade systems entail, can be seen.

In this, it seems that (organic and) Fairtrade has failed to carry out its promise and the study findings raise doubts about the organic and Fairtrade model, since producers face too many challenges that have to be overcome, in order to participate and benefit from these alternative markets. It even seems that other alternate certification labels like that of the Small Producer Symbol and other Alternative Trade Organizations play the role of increasing small-scale producers incomes, thus improving producers' livelihoods and sustainable agricultural systems as well as building links between producers and consumers.

Key words: conventional coffee, alternative coffee, organic, Fairtrade, production,

consumption, trade

Resumen

Los mercados de café, han impuesto la dinámica de la oferta y la demanda a ser la primera ley de la naturaleza en la economía y el comercio mundial. Al mismo tiempo que el mercado de la oferta, tiene que centrarse en los hábitos y tendencias de los mercados de demanda, los mercados de consumo están cada vez más enfocados en los aspectos socioeconómicos y ambientales de los mercados de producción. En el último par de años diferentes iniciativas de comercio alternativas surgieron en un intento de reducir los efectos negativos, sociales y ambientales de la producción de café y el comercio en un mundo globalizado, y para potenciar el desarrollo local de las comunidades de productores. El café alternativo tal como lo es el café certificado orgánico y un comercio justo, son una promesa de hacer una contribución positiva, a un desarrollo socio-económico y ambiental de los productores, sus tierras y la creación de vínculos más estrechos entre productores y consumidores.

Sin embargo, ya que estos mercados alternativos han crecido de un pequeño movimiento social y medioambiental, a un nicho de mercado importante, las relaciones entre productores y consumidores se han vuelto menos personales y los mercados alternativos más exigentes. Mediante la determinación de la situación, en la que el movimiento orgánico y de comercio justo se encuentra actualmente en el mercado de producción en México y en el mercado de consumo en Alemania, los retos y oportunidades que estos sistemas alternativas de producción, consumo y comercio conllevan, se pueden ver.

En este sentido, parece que el comercio justo (y orgánico) ha dejado de cumplir con su promesa. Los resultados del estudio plantean dudas sobre el modelo orgánico y de comercio justo, ya que los productores se enfrentan a demasiados retos, que se tienen que superar, para participar y beneficiarse de estos mercados alternativos. Incluso, parece que las etiquetas de certificación de otras alternativas, como es el del Símbolo de Pequeños Productores y otras organizaciones de comercio alternativo desempeñan el papel de aumentar los ingresos de los pequeños productores, mejorando así los medios de vida de productores y los sistemas agrícolas sostenibles, así como la construcción de vínculos entre productores y consumidores.

Palabras claves: café convencional, café alternativo, orgánico, comercio justo, producción, consumo, comercio

Zusammenfassung

Kaffeemärkte sind der Dynamik des natürlichen Gesetzes von Angebot und Nachfrage in der Wirtschaft und im Welthandel unterworfen. Während der Liefermarkt die Veränderungen des Marktes auf der Nachfrageseite wahrnehmen muss, achten Konsumentenmärkte mehr und mehr auf die sozio-ökonomischen und ökologischen Bedingungen auf der Angebotsseite. In den letzten Jahren sind verschiedene alternative Handelsinitiativen entstanden mit dem Versuch, die negativen sozialen und ökologischen Auswirkungen in der Kaffeeproduktion und im globalen Kaffeehandel einzudämmen, und die lokale Entwicklung von Produzentengemeinschaften voranzutreiben. Alternative Kaffeeangebote, wie zum Beispiel Kaffee aus kontrolliert biologischem Anbau und Fairtrade-zertifizierter Kaffee versprechen, sowohl einen positiven Beitrag zu einer sozioökonomischen und ökologischen Entwicklung der Produzenten und ihrer Landfläche zu machen, als auch eine engere Beziehung zwischen Produzenten und Konsumenten zu schaffen.

Da diese alternativen Handelsmärkte jedoch von einer kleinen sozialen und ökologischen Bewegung, zu einem wesentlichen Nischenmarkt gewachsen sind, haben sich die Beziehungen zwischen Produzenten und Konsumenten weniger persönlich und die Anforderungen der alternativen Märkte immer anspruchsvoller entwickelt. Indem die Situation bestimmt wird, in der sich die Bio-und Fairtrade-Bewegung im Produzenten-Markt in Mexiko und im Konsumenten-Markt in Deutschland aktuell befindet, können die Herausforderungen und Chancen, die sich aus solchen alternativen Produktions-, Konsum- und Handelssystemen ergeben, betrachtet werden.

Hierbei scheint es, dass (Bio und) Fairtrade es versäumt hat, ihr Versprechen einzulösen. Die Ergebnisse der Studie werfen Zweifel an dem Bio-und Fairtrade-Modell auf, da die Produzenten zu vielen Herausforderungen entgegnen, die überwunden werden müssen, um an diesen alternativen Handelsmärkten teilzunehmen und davon zu profitieren. Es scheint sogar, dass andere alternative Zertifizierungs-Siegel, wie das des Kleinen Produzenten Symbols und andere Alternative Handelsorganisationen die Rolle übernehmen, die Einkommensverhältnisse der Kleinbauern zu verbessern und so die Existenz-grundlage der Produzenten, nachhaltige landwirtschaftliche Anbausysteme, sowie die Zusammenführung von Produzenten und Konsumenten sicherzustellen.

Schlüsselbegriffe: konventioneller Kaffee, alternativer Kaffee, Bio, Fairtrade, Produktion, Konsum und Handel

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List of Abbreviations

	T		
AAA	AA = coffee quality and the third A stands for sustainability		
(Nespresso)			
AMEC	Asociación Mexicana de Exportadores de Café A.C		
AMECAFE	Asociación Mexicana de la Cadena Productiva del Café A.C.		
AMSA	Agroindustrias Unidas de Mexico		
ANACAFE	Asociación Nacional de la Industria del Café A.C.		
BRIC	Brazil, Russia, India and China		
CAFE	Coffee and Farmer Equity		
CEPCO	Coordinadora Estatal de Productores de Café de Oaxaca		
CERTIMEX	Certificadora Mexicana de Productos y Procesos Ecológicos		
CLAC	Coordinadora Latinamericana y del Caribe de Pequenos		
	Productores del Comercio Justo		
CMC	Consejo Mexicano de Café A.C.		
CMPC	Confederacion Mexicana de Productores de Café, A. C.		
CNOC	Coordinadora Nacional de Organizaciones Cafetaleras		
COOPCAFE	Coordinadora de pequeños Productores de Café de Chiapas		
CRS	Catholic Relief Services		
CUCOS	Cafetaleros Unidos de la Costa		
DC's	Developing countries		
DKV	Deutscher Kaffeeverband		
ECF	European Coffee Federation		
EU	European Union		
FAO	Food and Agriculture Organization of the United Nations		
FAS	Foreign Agricultural Service		
FIBL	Forschungsinstitut für biologischen Landbau		
FLO	Fairtrade Labelling Organization		
FT	Fair Trade		
FUNDEPPO	Fundación de Pequeños Productores Organizados, A.C		
Gbe	Green Bean Equivalent		
GEPA	Gesellschaft zur Förderung der Partnerschaft mit der Dritten Welt		
	mbH		
GVC	Global Value Chain		
ICA	International Coffee Agreement		
ICO	International Coffee Organization		
IFAD	International Fund for Agricultural Development		
IFOAM	International Federation of Organic Agriculture Movements		
INMECAFE	Instituto Mexicano de Café		
ITC	International Trade Center		
LIFFE	London International Financial Futures and Option Exchange		
LOHAS	Lifestyle of Health and Sustainability		
MXN	Mexican Peso		
NYBOT	New York Board of Trade		
PNC	Patron Nacional Cafetalero		
RA	Rainforest Alliance		
SAGARPA	Secretaría de Agricultura Ganadería Desarollo Rural Pesca v		
	Alimentación		

SCAA	Specialty Coffee Association of America
SCAE	Specialty Coffee Association of Europe
SICN	Sistema Informático de la Cafeticultura Nacional
SPS	Small Producer Symbol
SWOT	Strength, Weaknesses, Opportunities and Threats
TCC	Tropical Commodity Coalition
TNC	Transnacional Company
UCIRI	Union de Comunidades Indígenas de la Región del Istmo
US	United States
USDA	United Stated Department of Agriculture
VAT	Value Added Tax
WFTO	World Fair Trade Organization

1 Introduction

1.1 Background and problem statement

Mexico was till 1989 one of the main coffee producing countries in the world, however, a number of factors have led to an overall stagnation in production in the last twenty years including volatile prices, low yields and higher production costs, a non-existent post-harvest infrastructure, a lack of access to basic services and migration are just some of the factors that make it increasing difficult for coffee growers to make a living out of coffee and to benefit from opportunities of an ever-changing demand sector.

As an alternative way of survival, more and more Mexican coffee producers have sought out for new opportunities in alternative niche markets that allowed them to commercialize their coffee at a reasonable price and thus to keep coffee production and commercialization as a mean of subsistence. Among these alternative coffees, often also referred to as "sustainable coffees" are organic and Fairtrade certified coffee, among others¹, which allow coffee producers to get access to new consumer markets and claim to improve not only the quality of their product but also the economic, social and environmental impacts on producer communities (Pérez Akaki, 2010). These alternative coffees have proliferated in the last twenty years in Mexico and increased the share of producers adhering to alternative – organic and/or Fairtrade – certification standards as a consequence of the transformation the coffee sector has gone trough.

Although these alternative coffees promise a higher return to coffee growing families than conventional coffee, organic and Fairtade coffee producers still face many constraints when it comes to production, certification, post-harvest processing, and commercialization of their coffee. They often lack the necessary human, social and financial capital required to obtain and/or maintain certification. Traceability and certification, however, are increasingly demanded by consumers and a lack of certification often represents an impediment for Mexican coffee producers to benefit from such consumer markets, among many that address the environmental, social and wholesomeness issues about which consumers, for instance in Germany, are cared about. While the conventional coffee market is not thriving in these mature coffee markets and green coffee continues with very low prices, certified coffee such as organic and Fairtrade are emerging from just a niche market and receive a premium (price). In effect, the price for organic and Fairtrade certified coffee in Germany is much higher than for conventional coffee. This is justified since a higher purchase price is paid to producers of alternative coffees. To find out, whether the price difference really benefits the producers in ways that they improve their well-being and their livelihood, this study elaborates on the status quo, opportunities and challenges of conventional versus alternative (organic/Fairtrade) coffee that is produced in Mexico and consumed in Germany.

¹ Others are Rainforest Alliance (RA), Utz Certified and Common Code for the Coffee Community (4C), etc. but these certification schemes are not issue of this study.

1.2 Justification

Mexico has been chosen as a producer country, since the model of alternative coffee production is currently perceived as a viable alternative for Mexican coffee producers to compete on the international coffee market and to benefit from an increasing niche market. The high number of coffee farmers that convert to organic coffee and participate in the Fairtrade scheme suggest that Mexican coffee farmers have a competitive advantage due to environmental and socio-cultural factors such as the diversity of its natural environment, the predominance of diverse shaded coffee farms, their traditional knowledge and low-input farming methods in coffee production, and the strenuous efforts of producers and their organizations. At this juncture, Mexico has become one of the world's largest supplier of both, organic and Fairtrade coffee.

Germany has been chosen since it is after the United States the second largest coffee consumer country in the world. Coffee is with a per capita consumption of 140 kg, the German's most preferred hot drink, even before water. However, low coffee prices for conventional coffee and a lack of mainstream consumer awareness and information about where their coffee comes from, imperils the livelihoods of millions of small-scale coffee producers in Latin America and other coffee-producing countries. Nonetheless, consumers concerns about health, social justice and environmental issues have driven a growing market for organically produced and fairly traded products. With regard to coffee, although alternative coffee consumption in Germany is still quite low, it is a market with great potential, which is growing faster than the conventional coffee market.

Hence, as changing consumption patterns and trends are at the core of decision-making whether to switch to and maintain alternative coffee systems, it is important to evaluate the current situation, opportunities and challenges in alternative production, consumption and trade. Since Germany represents one of the most relevant import countries for Mexican alternative coffee, it is essential to study the overall market context and more precisely the alternative (organic and Fairtrade) coffee segment in these two countries in order to identify key trends, potentials and limitations in alternative production in Mexico, consumption in Germany and trade between the two countries.

1.3 Objectives & research questions

The *general objective* of this study is to analyze the current markets for conventional coffee versus alternative coffees that are produced in Mexico and consumed in Germany and to identify opportunities and challenges in alternative coffee production, consumption and trade.

The *specific objectives* are:

• To analyze the current situation, challenges and opportunities of conventional versus alternative (organic and Fairtrade) coffee production, consumption and trade in Mexico

- To analyze the overall market context and more precisely the sustainability segment of the coffee market – organic and Fairtrade – as well as future trends and constraints in the consumer market in Germany
- To analyze the status quo, opportunities and challenges of alternative coffee production in Mexico, consumption in Germany and trade between the two countries

The expected results and information gathered from this study are to provide answers to a number of questions, among others including the following ones:

- With regard to *coffee production*:
 - What are the strategies followed by various producers to respond to the international coffee crisis?
 - Which are the transformations the Mexican coffee sector has been going through after the liberation of the world coffee markets?
 - What are experiences of converting from traditional (conventional) to alternative coffee production systems in Mexico?
 - Which are the tendencies towards converting to alternative coffee production systems in Mexico?
 - Which are the main benefits and constrains of alternative production and what is needed to alleviate these constraints?
 - Which are the economic, social and environmental impacts of alternative coffee production?
 - What are the internal strength and weaknesses of the coffee sector in Mexico? What are the external opportunities and threats?
 - How do Mexican coffee producers cope at present with alternative coffee demand and what are future prospects and priorities?
- With regard to consumption and trade:
 - What is the status quo of conventional and alternative coffee consumption internationally, in Germany and in Mexico?
 - Which coffee is most demanded and what are future prospects and trends in coffee consumption in Germany?
 - What are the challenges and opportunities as well as future prospects of coffee consumption in Germany and trade between these two countries?
 - What are the internal strength and weaknesses in consumption and trade?
 What are the external opportunities and threats in consumption patterns and trade?
 - What is the role of alternative (organic and Fairtrade) coffee trade between Mexico and Germany?

2 Conceptual Framework

2.1 General characteristics of coffee

Coffee is a tropical tree crop commodity. There are two basic coffee varieties that are Arabica coffee and Robusta coffee. The main characteristics of both coffee types are illustrated in the following table:

Variety characteristics	Coffee arabica (Arabica)	Coffee canephora (Robusta)
Share of world production	ca. 70 %	ca. 30 %
Site requirements	High sites; fluctuations in	Low sites; steady high
	annual rainfall and	temperatures and rainfall
	temperature	
Optimum temperature	15-24° C	24-30° C
(yearly average)		
Optimum rainfall	1500-2000 mm	2000 – 3000 mm
Time from flowering to ripe	9 months	10-11 months
cherry		
Yield (kg beans/ha)	1500-3000	2300-4000
Optimum altitudes	1000-2000 m	0-700m
Main growing areas	Latin America, Central and	Western and Central Africa,
	East Africa, India and to	South-East Asia and to
	some extent Indonesia	some extent Brazil
Caffeine content	0.8-1.4 %	1.7-4.0 %
Diseases/pests	Susceptible to the berry	Resistant against the berry
	borer, coffee rust and others	borer, coffee rust and others

 Table 1: Main characteristics of Arabica and Robusta coffee

Source: (ICO, n.d.)

Most coffee is offered in the market as roasted beans, ground or soluble (instant) coffee.

Arabica coffee is used for roasted ground coffee which is mostly sold as blend of different origins and qualities. It is grown in high sites with fluctuations in annual rainfall and temperature. Highland coffees need a longer time of ripeness, are more susceptible to diseases and yields are generally lower than Robusta coffee which is why they are more expensive. Arabica coffee is also milder than Robusta coffee, more flavorful and has a higher quality. Wet-processing and washed Arabicas are the mildest and most flavorful. They are used to produce the best blends and single origin coffee suited for filter coffee. Dry-processed Arabicas are bitter and rather suited for Espresso coffees. (ICO, n.d.)

Robusta coffee in comparison to Arabica coffee, is generally cheaper, less flavorful, has a lower quality, and is used for soluble coffee and blended with Arabica coffee to produce ground roast coffees, e.g. like Espresso blends. It thrives also in lower altitudes with higher temperatures and rainfall. Robusta coffee is less susceptible to diseases and coffee yields

are higher which is why the price for Robusta coffee is lower than that of Arabica coffee. (ICO, n.d.)

For organic coffee, mostly organic Arabica coffee is cultivated. Robusta coffee is not yet available as organic certified coffee (FIBL, Naturland, 2002, p. 52).

The four main types of coffee available in the international market are: Colombian Mild Arabicas, other Mild Arabicas, Brazilian and other natural Arabicas, and Robusta. The distribution of green coffee imports by types of coffee are grouped according to different producing countries applied by the International Coffee Organization (ICO) (Table 16 in Appendix I).

The *measures* used in this study are:

1 metric ton (ton) = 2,205 pounds = 16,7 bags

1 bag of coffee = 60 kg = 132,3 lbs

1 kg of roasted coffee = 1,19 kg green coffee

1 kg of instant coffee = 2,6 kg green coffee

For comparison, kg and metric tons are used.

Gbe is the sum total of the volume of green, green decaffeinated, roasted and soluble coffee recalculated to green coffee with the above conversion factors.

Most of coffee prices are indicated in US-Dollar per pound, only at the retail level in Germany, the coffee price is quoted as Euro per kg.

Figures are presented according to the convention of continental Europe as followed:

- Thousand are separated by a dot (.)
- The decimal sign is the comma (,)

2.2 Coffee market concepts

2.2.1 Conventional coffee

From a commercial perspective, conventional coffee is usually characterized by monoculture coffee systems and, thus by the use of chemical inputs for maximizing productivity and/or for pests and diseases control in coffee growing regions in order to achieve higher productivity, better quality and consequently better profitability for producers. Traditional coffee systems (commercial polyculture) are considered in this study as natural coffee due to the fact that these coffees are not certified, but they are traded as conventional coffee (Bacon, 2008).

There have been no price controls in the global coffee trade since the dissolution of the International Coffee Agreement² in 1989 and the suspension of quotas on coffee export. Ever since, the international coffee market is free and governed by supply and demand (ICO, 2011).

ICO Indicator prices (US cents/lb)		
	25/05/2012	change
ICO Composite	154.50	-0.1%
Colombian Milds	199.17	-0.8%
Other Milds	178.04	0.0%
Brazilian Naturals	166.61	-0.5%
Robustas	111.76	+0.6%

There are four different price indicators for each

of the different types of coffee as well as a ICO composite price which is calculated by a weighted³ average of the four indicator prices (ITC, 2011a, p. 10). For instance, the table above shows the current (date 25.05.2012) ICO indicator price and the prices for the four groups of coffee. These price indicators represent the actual market price for "all coffee" – the ICO Composite Indicator Price – which is an overall average indication of the current "international price of coffee" and the actual market price for each single type of coffee which are all subject to daily change (ICO, 2012). Through these indicators it is possible to track price developments and past price behavior of these different groups of coffee as the ICO calculates and represents the coffee price on a daily basis (ITC, 2011a, p. 10).

The day-to-day physical coffee price is, however, dependent on the quality and availability of a particular type of coffee and is determined by supply (the amount of coffee available) and demand (the amount of coffee demanded), speculative actions, and future perspectives. For the latter, also futures prices are estimated on the basis of future availability and demand estimates for coffee which can be reviewed on the stock exchange markets in New York for Arabica coffee and in London for Robusta coffee (ITC, 2011a, p. 10).

As can be seen in Figure 1, actors in the *conventional coffee supply chain* are producers, local intermediaries (coyotes), regional intermediaries, processors, exporters, distributors, toasters, retailers, consumers. In this connection, the producers are small local farmers or large plantation landowners who supply their harvested coffee cherry via intermediaries to processing mills often owned by private farmers, governments or cooperatives. Some coffee processors export directly, others are linked to multinational corporations in importing countries. Importers purchase the coffee beans from export agencies or through brokers and sell them to roasters. Large multinational corporations such as Nestle, Sara Lee, Procter and Gamble, Phillip Morris, Cargill as well as the coffee house chains Starbucks and Gloria Jeans are usually the roasters and the distributors of the imported coffee. They also pack and market the coffee as well as control the re-distribution to supermarkets and other selling points in the 58 consumer countries (CRS Fair Trade, 2010). Hence, the coffee market consists of an oligopolistic market where the control of coffee commercialization is in the hands of a couple of MNCs.

³ Weighting is according to the relative share of the four separate price groups: Colombian milds: 12% Other milds: 23% Brazilian naturals: 31% Robustas: 34%

² The International Coffee Agreement was a mechanism and buffer-stock system to control coffee prices



Figure 1: The conventional coffee supply chain

Source: (FAO, 2008, p. 8)

2.2.2 Alternative coffee: Organic and Fairtrade

Alternative coffee is related to a set of initiatives that appeared as alternative types of coffee production and trade systems such as Fair Trade (FLO), organic (IFOAM), Rainforest Alliance (RA), Utz Certified (UTZ) and the Common Code for the Coffee Community (4C Association) and some private initiatives by big corporations. These alternative certification systems offer coffee growers new opportunities to produce and commercialize coffee in an ecologically sound, economically viable and socially responsible manner (Pérez, 2010). This study focuses, however, exclusively on organic and Fairtrade certified coffee and to a lesser extends to other alternative coffees that are just briefly mentioned. In the following, a short background about the evolvement of alternative (fair) trade coffee is given, and the concept, including basic definitions, principles and standards, price and supply chain, of organic and Fairtrade coffee is briefly described and serves as brief and basic information for the study:

2.2.2.1 Background on alternative (fair) trade coffee

The fair-trade movement is an alternative approach to international commercial trade that is based on greater equity, social justice, quality of products and care for nature. Its movement grew out of alternative trading organizations (ATOs) based in Europe, and later in Northern America, and producer organizations in the South between the 60s and 80s. Both groups were often supported by church groups and nongovernmental organizations as an attempt to counteract the unfair trade rules of the capitalistic economic structure and to establish direct relationships between producers in the South and costumers in the North. Firstly, only handicraft products were imported directly from producer cooperatives in developing countries and sold in special "world shops". Since the beginning of the 80s, also other food products – the first of which was coffee – were marketed by ATOs. But since these still had very little impact on improving the welfare of producer communities, new strategies were sought to expand the market of fairly traded products in order to reach

a broad group of consumers in mainstream supermarkets. In 1988, the first fair-trade seal, Max Havelaar (later Fairtrade certification) was created by the ATO Solidaridad (Solidarity) in the Netherlands and the coffee cooperative UCIRI⁴ in Mexico in the endeavor to improve the production and trade conditions for producers and to return a higher price to cooperatives (UCIRI, 2002). Hence, cause-conscious consumers in the North could choose to pay a higher price for the Fairtrade certified coffee knowing that producers would be rewarded fairly for their coffee. The Fairtrade certification mark was soon expanded to other products in the movement of building a market presence for fairly traded products in Europe, this was later extended to other northern countries like the US, Canada and Japan. In the meantime, the Fairtrade market increased considerably and now works in 24 countries under the umbrella of Fairtrade Labelling Organizations International (FLO) that harmonize worldwide standards and certification (Fairtrade International, n.d.; Talbot, 2010, p. 2).

2.2.2.2 Fair Trade and Fairtrade coffee system

When talking about fair trade, it is important to distinguish between broad social movements of a *Fair Trade* (FT) which aim to restructure the international trading scheme and the more specific initiatives like that of *Fairtrade International*⁶ (Max Havelaar and Transfair). According to the four main Fair Trade Networks FINE⁶, "*Fair Trade* is a trading partnership, based on dialogue, transparency and respect, which seeks greater equity in international trade. It contributes to sustainable development by offering better trading conditions to, and securing the rights of, marginalized producers and workers – especially in the South. Fair Trade organizations, backed by consumers, are engaged actively in supporting producers, awareness raising and in campaigning for changes in the rules and practice of conventional international trade" (FINE 2001).

The term *Fairtrade*, in turn, "refers to all or any part of the activities of FLO e.V., FLO-CERT, Fairtrade producer networks, Fairtrade labeling initiatives and Fairtrade marketing organizations. Fairtrade is used to denote the product certification systems operated by Fairtrade International (FLO). Fairtrade certification is based on the standards for and audits of specific products as determined by the Fairtrade Labelling Organizations International (FLO)" (WFTO, 2011).

Both terms are used in this study since alternative trade comprises both schemes. However, the focus is put on the more specific *Fairtrade* certification scheme laid down by the international certification body FLO whose principles and certification process are depicted shortly in the following (Fairtrade, 2011):

The Fairtrade coffee standards are based on the following principles:

⁴ Unión de Comunidades Indígenas de la Región del Istmo in Oaxaca

⁵ Fairtrade International is a global organization working to secure a better deal for farmers and workers. See also: http://www.fairtrade.net/

⁶ Fair Trade Labelling Organizations International (FLO), the former International Fair Trade Association (now World Fair Trade Organization or WFTO), the former Network of European Worldshops (NEWS) and the European Fair Trade Association (EFTA)

- Direct trade, (in the best case) without intermediaries
- Fair price that cover average cost of a sustainable production⁷
- Long-term trading partnerships and purchase agreement
- Pre-financing opportunities for producers if necessary
- Purchasing from democratically organized cooperatives
- Fairtrade environmental criteria which are seen as a primary stage of organic production (Fairtrade International)

Besides these common principles to which all the actors in the coffee chain have to adhere in order to be certified, there are specific principles that apply either to: small producer organizations, hired labor, contract production and/or trade. Additionally, there are productspecific principles to which producers of a certain Fairtrade product have to comply with (Fairtrade International, n.d.).

The compliance with the Fairtrade standards in the entire supply chain is regularly controlled by inspections and several audits through inspectors from the certifying agency FLO-Cert, an independent certifying company, which however works under the umbrella of FLO. Producers that want to participate in the Fairtrade scheme have to be members of a small-scale producer organization (cooperative). Since producer organizations might be very large with a high number of affiliated producers, there are also group certifications possible where the audit is done in the producer organization itself and on randomly selected producer farms. This can take from 4 days up to several weeks. After the audit, an evaluation report is sent to FLO CERT, where an independent certification committee decides on the compliance with all the standards and on the Fairtrade certification of the producer organization. These audits are repeated on an annual basis.

The certification costs for convenional Fairtrade coffee are largely borne by the organizations themselves who, in turn, reflect these costs in the price paid to producers for their products. A small producer oganization fee system was implemented in 2004, which includes a fee for application and initial certification of currently 525,00 EUR, as well as annual certification fees ranging between 1.430,00 and 3.470,00 EUR, depending on the number of members of the organization. Other fees apply for registring more Fairtrade products, processing installations and subcontrated entities. The cost for organic coffee certification have to be borne by producers themselves, but with the support of their afiliated producer organization and/or FLO, the certification body (FLO-Cert GmbH, 2011).

⁷ Fairtrade International issued the "Guidelines for estimating costs of sustainable production", where it examines the main types of production costs at every stage of the production and export process. Available at: http://www.fairtrade.net/uploads/media/Guidance_COSP_EN_09-06-2010_Final.pdf

Today there are "19 labelling initiatives" covering 24 countries that take part in the Fairtrade scheme. With regards to the price standards paid for Fairtrade certified coffee, the coffee is purchased directly from cooperatives of small farmers that are guaranteed a minimum pre-established fixed contract price. In Mexico and Central America, this minimum price for conventional, natural Arabica coffee is curently US\$1.35⁸ per pound (lb) (US\$1.40/lb for conventional, washed Arabica coffee) and an additional price differential of US\$0.30 per pound is paid for certified organic coffee (Table 17 in Appendix I). In addition, buyers pay a Fairtrade (social) premium of about US\$0.20/lb (at least 0.05 of which have to go to productivity and quality improvements), which is aimed to improve the livelihoods of the local community by investing parts of it (decided democratically by community members) in education, healthcare, community projects, infrastructure and the environment, among others. If the New York market prices for conventional coffee are low, these Fairtrade minimum prices are guaranteed from one year to the other. In the opposite case of a higher New York market price than that of US\$1.35 (natural)/1.40 (washed)/lb, Fairtrade buyers must pay the market price plus the social premium of US\$0.20/lb. Aditionally, buyers are expected to offer producers advanced pre-financing opportunities, when necessary, in order to ensure that producers have access to capital in case they need to have more planning security (Fairtrade International, n.d.).

The Fairtrade supply chain is distinguished from that of a conventional coffee chain, in ways that a more direct relationship between buyers and producers is created. Farmers have to be part of a democratically run cooperative where producers have an equal voice in decision-making. They sell their coffee to the cooperative that process the coffee in their own processing mills or pay to have their coffee processed in private or government-owned processing mills. Then, the coffee is sold directly to the coffee company in importing countries, verified by a third-party verification agency of its compliance with the terms of Fair Trade certification. The coffee company fulfils multiple functions in the supply chain, as it acts as the importer, roaster and seller at the same time and maintains direct relationships with both, the producer cooperative and the Fair Trade retail and/or catering market where the coffee is sold. Due to this multiple performance of one coffee company, it is possible that Fair Trade cooperatives overseas receive a higher share of the final consumer price (CRS Fair Trade, 2010).

In short, although socio-economic criteria marked the Fairtrade movement initially, aiming to improve producer (groups) living and working conditions locally, in the discourse of a sustainable development, environmental issues and organic production play a more and more important role. In the case of non-organic Fairtrade or conventional Fairtrade coffee production, the use of agrochemicals are still permitted, however, the application has to be minimized and safe. The waste, soil fertility and water resources have to be managed properly and the use of genetically modified organisms is not allowed. Thus, the Fairtrade environmental criteria are seen as a primary stage of organic production which is increasingly promoted among Fairtrade products, but is not a requisite to obtain the

⁸ Fairtrade Price was increased from US\$1,25/lb in 2008 to US\$1.35 on 01. April 2011; The organic premium was increased by 10 cents/lb on 01. April 2011 as a result of rising market prices for conventional coffee

Fairtrade mark. Nevertheless, nowadays a large share of Fairtrade products are also organically certified (Fairtrade International, 2011)



Figure 2: Fairtrade supply chain

Source: own elaboration according to CRS Fair Trade, 2010

2.2.2.3 Organic coffee system

Organic coffee is certified to be produced with methods that preserve the health of soils, ecosystems and people with the use of techniques and materials that are compatible with the environment. Hence, organic agricultural (coffee) cultivation relies on the establishment of an environmental management system, "ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of chemical inputs with adverse effects" (IFOAM, 2011). The responsible body for this certification form is the International Federation of Organic Agricultural Movements (IFOAM) based in Germany.

The principles for organic coffee cultivation are based on:

- Soil conservation practices (shade trees, terracing, contour planting, rotation and intercropping)
- Disease, pest and weed control by the use of organic fertilization and without synthetic chemicals or prohibited substances
- Composting methods and the use of organic matter to improve soil quality
- Low environmental pollution during post-harvest handling (FIBL, Naturland, 2002; Giovannucci & Koekoek, 2003)

The compliance with these basic principles and more specific organic standards (or laws) of importing countries are inspected and certified by an accredited third-party agency. The cost of certification varies according to production volume, size and sophistication of the producer organization and is generally up to 10 % of total sales. To convert a conventional coffee cultivation system to an organic one, a transition period of 2-3 years is required to guarantee that the farmland has been decontaminated and free from prohibited synthetic chemicals. Within this period, it is necessary to keep detailed written records on production and sales and to undergo periodic on-site inspections by an independent third-party certification agency. The certification (in form of fees) and the inspection (travel and daily

fees) have a cost that has to be borne by the producers individually or collectively by participatory certification (FIBL, Naturland, 2002). The explicit requirements for organic certification vary from country to country and involve a set of standards, especially directed to producers but also to the whole coffee value chain. In particular, when organic products are exported to consumer markets like the EU, Japan or the USA producers have to comply with defined legal standards, which mostly meet or exceed the basic *IFOAM Norms for Organic Production and Processing* in order to obtain the organic label and to sell on these markets (Giovannucci & Koekoek, 2003).

There is no guaranteed price premium and the price paid by coffee buyers for organic coffee varies, but is usually between US\$0,10/lb and US\$0,40/lb above the current market price for conventional coffee. Hence, the price for organic coffee is, like the conventional coffee, market-based and depends on demand and supply patterns, quality characteristics as well as on the consistency, sales and marketing competence of producer organizations (Giovannucci & Koekoek, 2003; Calo & Wise, 2005). However, recent research in Mexico and Central America indicate that although producers of organic certified coffee receive a higher price premium than any other certification scheme, it is still not sufficient to cover the cost of organic coffee cultivation management (Méndez, 2010).

There are surely many more aspects which could be considered when comparing organic and Fairtrade criteria. However, in general, the main differences in their *characteristics, values and benefits* for producers of organic and Fairtrade coffee are represented in the following table:

Characteristics / Value / Benefits	Organic coffee	Fairtrade coffee
General characteristics: Objective	Promotes an ecological sustainable production	Promotes an ethical trade and a sustainable development of small producer (organizations)
Responsible body for inspection, certification and label	IFOAM, where multiple, privately- owned certifying bodies are represented	FLO, where multiple, privately-owned certifying bodies are represented
Type of participation	Individually	Collectively (exclusively members of small producer organizations)
Economic benefits: Minimum Price Premium variable Premium guaranteed	- ✓ -	✓ - ✓

Table 2: Main characteristics, values and benefits of organic and Fairtrade coffee

Reduced price risk	-	\checkmark	
Reduced financial risk	-	\checkmark	
Higher share of value added	√/-	\checkmark	
Direct access to market	√/-	\checkmark	
Social benefits:			
No discrimination	-	\checkmark	
No child labor	-	\checkmark	
No forced labor	-	\checkmark	
Free association	-	\checkmark	
Fair salaries to workers	-	\checkmark	
Safe and healthy working conditions	-	\checkmark	
Reduced health risk due to non-use of	\checkmark	✓/-	
agrochemicals			
Environmental benefits:			
Conservation of biodiversity	~	\checkmark	
Waste management	\checkmark	\checkmark	
Protection of water bodies	\checkmark	\checkmark	
Increased soil protection and resilience	✓	\checkmark	
Non-use of agrochemicals and	~	\checkmark	
genetically modified organism (GMO)	\checkmark	√/-	
\checkmark /- = depending on the effectiveness, marketing and negotiating capacities of producer (groups) and on how it is commercialized via the conventional supply chain or directly without intermediaries			
Source: (Fairtrade International, 2011; FIBL, N	Naturland, 2002; Pérez, 20	10)	

2.3 Background on global production, consumption and trade patterns

According to the conceptual framework of political ecology (Blakie & Brookfield, 1987), there are several factors influencing production, consumption and trade. These are on a global level the world economy as such with its actors and conditions (terms of trade, demand structures, commodity stock exchange, development aid, etc.) and on the national level the state, its actors and the political-economic system (insitutions, organizations, multinational corporations, political decision makers) as well as the structure of society (culture, religion, etnicity, gender, etc.) There is a close interaction between these superordinate factors, having an impact on local-level production systems, thus affecting individuals, communities and the environment (Soyez, 2001).

In the case of agriculture and the commodity coffee, for example, cultivation practices and production systems are influenced by such socio-economic and politicial factors on a macro-level, but also by the economic environment (markets, policies, goods and services), cultural environment (habits, beliefs, gender), natural environmental conditions (temperature, topography, nutrients and water available, seasonality) and institutional environment (cooperatives, legislations, research and extension institutions) on a micro-level. As shown in the model of political ecology adapted to coffee cultivation in the Figure 3 below, there is a close interaction between these different factors which have an impact on land-use systems and an overall sustainable development at a local level.

However, the neoliberal globalization and with it the increasing interconnection of economic activity throughout the world, accentuates uneven developments between these macro- and micro-level factors. For instance, the unequal distribution of power between northern and southern countries have constructed a coffee commodity chain that is dominated by large multinational corporations (MNCs) from northern countries and thus creates wealth in the north and poverty for southern producers. This is why, Fridell (2007) argues that the alternative - such as organic and fair trade - production and trade commercialization systems resulted out of the dependency and underdevelopment theory which represents the dominance of wealthy northern countries over poorer countries through various policies and initiatives. This is demonstrated by the capitalistic international trade and commerce system whose rules are set by wealthy northern nations, thus making poorer nations depended from northern markets and having an impact on the underdevelopment status of these countries. Proponents of fair trade, hence, argue that exchanges between developed nations and lesser developed countries occur along uneven terms. This is why alternative production, consumption and trade systems focus on building more equitable trading relationships and a "fairer trade" between consumer countries in the North and producers in the developing world in the South (Fridell, 2007).



Figure 3: World economic order

Source: Own elaboration adapted from Soyez, 2001

2.4 Literature review

Several studies have analyzed global trade by using structural analyses, such as the development and world-systems theory, and by focusing on neoliberal globalization effects on production and consumption. More recently, however, new academic tools such as a global commodity value chain analysis - also known as Global Value Chain (GVC) analysis – have been used to explain the dynamics of global trade thus focusing not just on production and consumption but rather on the value-adding economic processes in the commodity chain as a whole (Hopkins & Wallerstein, 1994). According to Gereffi (1994, p. 97) the systematic study of the commodity chains seeks to explain how production, trade and consumption in a globalized world is organized by examining the input-output structure (main activities and input-output products and services in each segment of a global value chain), the geographic scope (spatial distribution of activities and actors) and the role the actors play in market governance in developed and developing countries (authority and power-relationships). Moreover, it provides a mean to understand the changed global-local dynamics in the commodity chain studied and the human relationships behind them (Gereffi & Korzeniewicz, Commodity Chains and Global Capitalism, 1994).

The coffee supply chain, in particular, has been subject to innovation and shifting production, trade and consumption patterns with regard to the uprising of alternative (fair-trade, certified organic) coffee production and trade systems as an attempt to restructure the conventional coffee commodity chain "from below".

Fridell (2007), Jaffee (2007), Lutchford (2008), Martinez-Torres (2006), Bacon et al. (2008) have examined these changes in the coffee commodity, the motivations of small-scale producers to adhere to alternative certification standards, the experiences that organic and/or Fairtrade certified coffee producers have made by certificating their coffee and the impact herein. As a result, many coffee growers in Mexico adopt Fairtrade and/or organic certification because of the higher price that they might get for their coffee and hence the higher net revenues that can be generated in comparison with conventional coffee sales. However, the benefits and the "real" contribution such certification schemes make to the improvement of the (net) income and hence the livelihood of producer communities is controversially discussed and reviewed in the following:

As a result of the review of impact studies made by IFAD (2003)⁹, Méndez (2010)¹⁰, Jaffee D., (2008)¹¹ *during the coffee crisis*, it can be said that alternative coffee systems generate many more benefits that go much beyond the just economic merits from higher prices paid to producers. For example, the promotion of *organic Fairtrade coffee* does not only benefit local coffee producers and rural communities in ways that they bring: more stability and

⁹ IFAD (2003) evaluated the "The Adoption of Organic Agriculture Among Small Farmers in Latin America

¹⁰ Mendez et al., (2010) evaluated in his study the "Effects of Fair Trade and organic certifications on smallscale coffee farmer households in Central America and Mexico" by surveying 469 households and 18 cooperatives of Cenral America and Mexico

¹¹ Jaffee (2008) examines the specific ways Fair Trade has affected small (Fair Trade versus conventional) producer households in Oaxaca, Mexico in the period of 2001-2005

planning security to the region, and hence reduced vulnerability to volatile market prices; improved access to financing and the market; improved rural labor opportunities, improved food security, better organizational and community relationships, but also pays off in terms of environmental benefits as an systemic management of natural resources is favored which protects ecosystem services. However, when analyzing the socio-economic and environmental impact of organic or Fairtrade certification separately, another picture is shown and many benefits as well as limitations are identified:

Calo & Wise (2005)¹², analyze the net revenue for conventional, organic and Fairtrade producers, with the result that only the *organic Fairtrade model seems to have a positive net revenue* (to a limited extend), and that solely organic production does not cover basic costs when the market prices are low. In that case, coffee growers could not even reach break-even (Calo & Wise, 2005). Hence, with regard to solely organic coffee production and sales, the lack of a guaranteed organic premium and the additional cost arising from organic production represent a barrier for producers to adopt and maintain organic certification. Particularly if market prices are low, the organic premium fails to reward the farmers for their transition and maintenance costs associated with organic certification (Calo & Wise, 2005).

More recently, Gitter, Lewis, & Weber (2011) studied the net cash revenues across Fair Trade/organic and conventional coffee producers in southern Mexico¹³ and the extent to which differences in yields and prices contribute to income generation. They found out that among the 9 regions studied, organic/Fairtrade producers received on average about 23,4 % more per kilo than conventional producers got. This might be due to the certification premium received by the organization and/or to the *increased coffee quality* obtained through producing organically. However, this increase varied among regions and depended principally on the positioning and competitiveness of the region in the organic/Fairtrade market and quality characteristics of the coffee produced (Gitter, Lewis, & Weber, 2010, p. 139).

When speaking about organic coffee production, however, it should not be neglected that the conversion to and maintenance of organic production and certification entails much higher production costs than if conventionally produced, mainly because of *the additional labor requirements needed*. Although, the price premiums for organic and organic Fairtrade coffee is expected to cover these costs and compensate for the efforts, this is not always the case, since the market-based price premiums paid for certified coffee is insufficient and/or not always all certified coffee can be sold under the certified premium. The latter also is contingent upon the organizations' (cooperatives') capacity and its associated costs which "farmgate" price producers get under the certified terms, their links to buyers and the size of the demand market in consumer countries (Bacon, 2008).

¹² Calo & Wise (2005) was "Revaluing peasant coffee production: Organic and Fair Trade Markets in Mexico" on the basis of the statewide Oaxacan Coffee Producers' Network CEPCO

¹³ The survey was realized during the 2004-2005 coffee period in the southern Mexican state of Oaxaca and Chiapas with various coffee growers in 9 regions, some of which were members of a cooperative engaged in Fairtrade/organic markets and some were outside the organic/Fairtrade movement and considered as conventional producers.

Not just the labor cost represents a barrier for producers to entry the organic (Fairtrade) coffee market, but there is also a scarcity of laborers in coffee producing areas. As seen in Table 19 (in Appendix I), labor requirements show a seasonal overlap in the production of organic coffee and the traditional milpa (corn and beans) (Bray, Sanchez, & Murphy, 2002). Particularly, in the first half of the year, this overlap could represent an obstacle since there might not be enough day laborers available during harvesting time which therefore raises the price for additional labor and/or day laborer from conventional coffee farms are recruited, which in turn leads to the fact, that the additional earned premium of certified coffee is flowing back to conventional coffee farms (Jaffee D., 2007).

Notwithstanding, most of the regions studied by Gitter, Lewis, & Weber (2010) had a higher return and a larger part of the farmers income that came from other labor activities outside the farm that a family member was generating and sending back to sustain coffee growing. These remittances contributed in the cases studied to a higher share of the overall farmer's income than is generated from coffee sales (in both cases conventional and organic/Fairtrade coffee production and sales). Quite conceivable therefore is that most part of the income generated is rather invested in sending a family member to school or as a migrant to the United States rather than in the coffee farm as such. As a consequence almost each of the coffee families studied, had at least one family member studying and/or working in other parts of Mexico or in the United State sending their family in rural areas financial resources on a regular basis (Gitter, Lewis, & Weber, 2010, p. 141).

With regard to productivity, it depends on the tecnification level before (conventional or traditional management, sun- or shade-grown, etc.) and on the formation and training of farmers in organic management practices if yields are below or above those of conventional coffee farmer. As corrobated by IFAD (2003) Jaffee (2008), Gitter, Lewis, & Weber (2010), while in some case studies, productivity levels decrease when converting to organic production, coffee yields in other cases tend to be higher by organic methods. For instance, in the case study of a small coffee farmer association in Chiapas, affiliated organic coffee farmers experienced a rapid increase in yields due to their traditionally and already "organically" managed coffee production with no chemical inputs and their reliance on labor, they could rapidly reach an equilibrium after conversion (IFAD, 2003, p. 44). In contrast, conventional coffee producers that intensively used fertilizers and pesticides before suffered a decrease in yields when converting to organic production methods (Gitter, Lewis, & Weber, 2010).

Concluding, there are common and different perspectives and aspects tackled in these studies, however, all of these works have a general sense in that there seems to be an increased bias between the pre-conditions demanded by standard-setting organizations from consumer countries in the North and the little reward coffee growers, for example in Mexico, get for their efforts of producing organically and participating in the Fairtrade system.

The alternative coffee market confronts two central paradoxes: a still existing power imbalance between northern and southern actors and the tension between the size and the value of this alternative trade system. Regarding the first, there is still a pyramid decision-making structure in the alternative commodity chain where decisions continue to

be taken "from above" by northern certifying organizations which set (or change) the standards for products and the producer (organizations) in southern countries that have to comply with them. This represents challenges and opportunities for producers to access and benefit from an increasing alternative (fair trade, organic) market. Concerning the latter, with the rapid expansion of alternative coffees, there is an ongoing tension between increasing market share and conforming to the original values of the alternative system, for instance in the case of a "fair trade", the fair-trade commodity chain is more and more influenced by the growing role of large corporate players (Talbot, 2010, McCook, 2008).

3 Methodology

3.1 Data collection

The methods of data collection are based on secondary data and semi-structured interviews. To assess the characteristics, quantities and tendencies of production, consumption and trade and to ensure most accurate information on estimates for alternative coffees, a triangulation of information sources is used, based on primary data collection from qualitative interviews, and secondary data collection.

• Secondary data

Secondary data is based on literature, government data, published statistics and already existing academic/research studies and reports complemented by case-studies at the micro-level. Due to a lack of response from coffee actors in Germany (see section 3.3), data collection in Germany is exclusively based on literature, statistics, government data, market research studies about consumer demand and trends as well as recent journal articles about the German coffee market and consumer behavior.

• Primary data

Primary data collection is based on survey information from qualitative interviews with important actors in the coffee sector in Mexico. This technique is used to collect qualitative data in order to contextualize the experiences of producers and to take into consideration the different views and perspectives of different actors and to deepen the subject matter by the respondent. For that purpose, a semi-structured interview guide has been prepared for different actors (producers, certifiers, inspectors, etc.) according to the following indicators: *production, certification, organization, commercialization, governmental policies, impacts and perspectives*.

The interviews were realized with coffee producers from two different coffee producing areas in Mexico: Pluma Hidalgo in the south-western state of Oaxaca, and Xilitla in the central state of San Luis Potosí, in the Huasteca region of Mexico. The information gathered locally serves as snapshots to give an overall picture of the current situation of conventional and alternative coffee producers in Mexico. In addition to producers, in both areas qualitative interviews have been undertaken with experts and representatives of conventional as well as alternative coffee organizations and cooperatives such as UCIRI, CEPCO, CUCOS, an anonym producer organization in Xilitla as well as inspectors from agencies like CERTIMEX (Mexican certifier) and IMO Control (Swiss). In total, about 18 interviews have been conducted in Mexico, of which 10 were coffee producers, 4 representatives of certifying agencies and other 4 coffee representatives from cooperatives or other organizations that promote and commercialize organic and/or fair trade coffee. Of the 10 producers, 2 producers were already organically certified, 4 in transition (the first or second year) to organic, 2 with natural¹⁴ (traditional) management

¹⁴ Natural means organically managed coffee plantation but without organic certification

and other 2 with conventional management. Almost all interviews were conducted face to face with the interviewees, just two of the interviews realized in Mexico were conducted via Skype internet call. In Germany, little but valuable information could be gathered by mail communication with one coffee consultant (previously managing director of a coffee roasting company) about key issues regarding organic Fairtrade certified coffee trade between Mexico and Germany. The complete list of interviewed persons can be found in appendix II.

3.2 Data analysis

As a tool to analyze and discuss the current situation, opportunities and challenges in coffee production in Mexico, consumption in Germany (and Mexico) and trade between Mexico and Germany, a SWOT–Analysis is chosen. SWOT stands for *Strength, Weaknesses, Opportunities and Threats* and is an analytical method to analyze internal strength and weaknesses, for example of a market (or an organization, a concept, a project, etc.) and its opportunities and threats in the external environment. It helps to identify and categorize significant *internal* potential and limitations and probable *external* opportunities and threats, for instance through economic, social (cultural), political, technological, environmental and competitive factors that influence the sector (or an organization, a concept, a project, etc.) (FOR-LEARN, n.d.). In this study, the SWOT-Analysis is made by identifying the Strength, Weaknesses, Opportunities and Threats of *each* of the following areas:

- Production, consumption and trade in Mexico
- Consumption in Germany
- Trade between Mexico and Germany

The analysis about coffee production in Mexico is principally based on the information gathered from qualitative interviews and (to a lesser extent) on literature review. The information gathered from the realized interviews has been classified and codified in an Excel sheet and evaluated according to the different indicators mentioned (production, certification, organization, commercialization, governmental policies, impacts and perspectives) and according to the overall strength, weaknesses, opportunities and threats.

The analysis about consumption in Germany is made exclusively on the basis of literature review and the information gathered from published academic and development agency studies, including journal articles, working papers and reports. Moreover, the previous study of the International, German and Mexican coffee sector helps to identify various factors of success or failure and to group them accordingly in the SWOT-Analysis. The latter SWOT-Analysis of coffee trade between Mexico and Germany is a result of pooling together the main points gathered from both market studies and the previous SWOT-Analysises.
In general terms, the SWOT-Analysis gives answers to following general questions according to the area studies (adapted from FOR-LEARN, n.d.):

Strength and Weaknesses

- What are positive and negative factors (advantages and disadvantages)?
- What is the potential and what are limitations?
- What relevant resources are available and what is lacking?
- What do other competitors see as strengths or as weaknesses?

Opportunities and Threats

- What are opportunities and what are obstacles?
- What are potentials and drawbacks?
- What are positive and negative changes (e.g. in government policy, technology, social patterns, consumption habits, etc.?
- What are present and future trends and threats?

All of these questions can be answered by using SWOT-Analysis for the areas mentioned. The results are illustrated according to the following Matrix and each point further discussed afterwards.

STATUS QUO / OPPORTUNITIES	STATUS QUO / CHALLENGES
Strength	Weaknesses
• •	• •
Opportunities	Threats
• •	• •

As a result, by analyzing and discussing the results of the SWOT-Analysis in each area, more precise conclusions about the status quo, opportunities and challenges in alternative coffee production, consumption and trade can be drawn.

3.3 Limitations

There are certain delimitations related to the study:

- General limitation
 - Although trade is one of the main points of the study, *supply-chain* problems and challenges are not much issue of the analysis since the study

will particularly focus on the production side in Mexico and the consumption side in Germany and the challenges and opportunities arising from both market studies.

- Limitations of primary data collection:
 - With regard to the interviews in Mexico, there is a risk of producers bias and subjective view of the coffee actor, which is reflected in the analysis and which might distort the reality
 - Geographical delimitations: Interviews have just been conducted in Oaxaca and Xilitla, but the information and results gathered are transferred to the overall market context in Mexico
 - With regard to the interviews, only personal interviews in the Mexican coffee sector could be realized since there was no response on interview requests in Germany (out of 13 mail requests, just one answer)
- Limitations of secondary data collection:
 - Information based on statistics and research studies about these types of coffee production, commercialization and consumption might not be all inclusive, complete or error free and gathered information on numbers might be inconsistent in the course of the study due to different information sources
 - Information might be slightly out of date since data on these coffees are not always thoroughly documented or up-to-date.
 - In the case of Germany, statistical analysis about trends in consumption represent a special challenge since Germany is the world's largest reexporter of coffee and statistics on coffee imports are substantially higher than consumption
 - Information on current numbers about alternative (organic/Fairtrade) coffee trade, specifically between Mexico and Germany are scarce and difficult to access
- Limitations with regard to the SWOT-Analysis ((FOR-LEARN, n.d.)
 - Length of the list of factors that are taken into account
 - Lack of prioritization of factors, there being no requirement for their classification and evaluation
 - No suggestions for solving disagreements
 - No obligation to verify statements or aspects based on the data or the analysis
 - Analysis only at a single level (not multi-level analysis);
 - Subjectivity in the generation of factors

As a result of these limitations, conclusions that will be drawn from the available data should be regarded as less definitive.

4 Study Area

4.1 The international coffee market

4.1.1 The international conventional coffee market

Several incidents in the last decades have transformed the coffee sector, both globally and nationally. Since the dissolution of the International Coffee Agreement (ICA) in 1989 and the suspension of quotas on coffee exports, the coffee sector entered a crisis, affecting millions of small coffee farmers around the world. The ICA, which entered into force in 1962 (and was extended and renegotiated several times since), was a mechanism established by coffee consumer and producing nations and administered by the International Coffee Organization (ICO). It had the aim to regulate the market and to control coffee prices by setting supply-levels and export quotas for coffee producing countries. The objective of this agreement was to reach a supply-demand balance in order to guarantee consumers an adequate supply of coffee at equitable prices and producers a secure market for crops at reasonable prices. However, since the breakdown of this agreement in 1989, the international coffee market is free and governed by supply and demand, and the price driven by speculation on commodity markets (Goodman, 2007, pp. 3-25).

The direct consequence of this market liberation has been a substantial increase in world production, which caused an oversupply on international markets. The glut of coffee has largely been created by the expansion of (mainly Robusta) coffee supply by traditional suppliers like Brazil and a flood of coffee from new entrants in coffee production, which like Vietnam in just few years has become the second world's largest exporter of coffee (Table 3) (Petchers & Harris, 2007, pp. 43-46; FAS-USDA, 2011). As a consequence, there was an oversupply of cheap Robusta coffee on the market (which in general has a lower quality than Arabica coffee) and coffee roasters increasingly used Robusta for their coffee blends. Hence, Arabica coffee produces were more and more forced to compete on the price against Robusta coffee. This had a direct impact on coffee producers in Latin America, which had increasing difficulties to cover production costs and to make a living out of coffee (Néstor, 2002). On the demand side, in turn, low quality standards made it difficult to promote coffee consumption, which is why conventional coffee consumption remained stable in the last two decades in major consuming countries.

As Figure 4 shows, the coffee market has been marked by a great volatility since the dissolution of the ICA, and the increase in worldwide coffee production was influenced by price hikes in 1994-95 and 1997 and factors such as national policies, new technologies and new entrants to coffee production on farm-level and country-level (Petchers & Harris, 2007, pp. 44-46).



Figure 4: Coffee price developments since 1990 (annual averages)¹⁵

Source: (ICO, 2010 cited in ITC Coffee Guide, n.d.)

However, since the last upturn in 1997, the international prices for green coffee steadily went down and fell by half between 1999 to 2001 reaching the lowest level (at real prices) in the last half-century. Given that coffee demand in coffee consuming (mostly developed) countries for conventional coffee has been stagnant and domestic consumption in producing (developing) countries did not expand greatly, there was a constant glut in the market which kept price levels down for a couple of years, i.e. levels that were far below the coffee farmers' cost of production (FAO, 2003). As a direct consecuence, the coffee sector entered a crisis that forced many coffee producers out of production. This implied an impoverishment of rural areas and an increasing migration to cities (Petchers & Harris, 2007).

Albeit prices recorded a steady upward trend since 2004 reaching between 2010 and 2011 the highest level ever, the dynamics of the market have not shifted in ways that guanrantee long-term stability. Moreover, terminal markets¹⁶ play a decisive role in determining the price of commodities. The majority of green coffee beans, for example, is traded as a commodity on terminal markets such as the New York Board of Trade (NYBOT)) for Arabica coffee trade and Euronext-LIFFE in London for Robusta coffee. These markets provide reference and transaction prices for international commerce of coffee has been purchased in the producer country and for the exporter at which retail price the coffee will be sold in the consumer country. In this context, production and

¹⁵ The current composite indicator price is calculated by taking a weighted average of the indicator prices for the four separate groups, weighted according to their relative shares in international trade (Colombian Milds 12 %, Other Milds, 23 %, Brazilian Naturals 31 %, Robustas 34 %). See also: http://www.intracen.org/coffee-guide/world-coffee-trade/ICO-indicator-prices/

¹⁶ A terminal market is a trading place for commodities, which is most often located close to transportation hubs. Terminal markets facilitate information exchange and commercial transactions between wholesaler buyers, producers, shippers, brokers and truckers. See also: http://www.terminalmarkets.com/

demand markets are separated from each other as coffee is sold by exporter and purchased by roasters at a terminal market price. By selling to and buying from terminal markets, exporters and roasters can hedge themselves from volatile coffee prices in futures trading. There is, however, evidence that increased speculative activity increased the level of volatitiy on coffee markets, thus still exposing producers to fluctuating and volatile price movements (Gilbert, 2008, p. 14). Nonetheless, the final price paid to producer depends on various factors such as the level of demand from coffee consuming nations, the availability and number of coffee supplying countries, current and future harvest situation and quality of coffee, among others (CBI, 2011b).

Aditionally, the price level paid to producers is not only subject to changing production or market conditions and the speculation on terminal markets, but is also influenced by an increasing concentration of power in the coffee supply chain. Thus, the liberized coffee market is not only relying on the mechanism of supply and demand, but is also being more and more manipulated by a few multinational companies that dominate coffee comercialization and processing. Hence, the conventional coffee supply chain is characterized by an oligopolic competition of a few multinational companies (see next chapter) which control collection, transportation and processing infrastructure and thus determine the price and terms of trade offered to small-scale coffee farmers (ECF, 2010/2011).

As seen in Table 3, more than 60 % of the worldwide coffee production is concentrated in the four producing countries Brazil, Vietnam, Colombia and Indonesia, which dominate the actual coffee market. Other important producing countries among the top ten are India, Ethiopia, Mexico, Honduras, Guatemala and Peru, among others (FAS-USDA, 2011). While coffee in the first countries is mostly cultivated in monoculture plantations, coffee in the latter countries is rather grown by using traditional practices of coffee cultivation, mostly on privately owned smallholder plantations (Brown, Charveriat, & Eagleton, 2010).

Position	Country	Cycle (Dec 2011/2012)	Participation (%)	Peru Handuran
1	Brazil	49,200	36,77%	3%
2	Vietnam	20,600	15,40%	Other 15%
3	Colombia	8,500	6,35%	Guatemala Brazil
4	Indonesia	8,300	6,20%	3% 40%
5	India	5,200	3,89%	2%
6	Ethiopia	4,700	3,51%	Maxico
7	Mexico	4,300	3,21%	3%
8	Honduras	4,100	3,06%	India 13%
9	Guatemala	3,810	2,85%	3%
10	Peru	3,800	2,84%	Indonesia _
11	Other	21,291	15,91%	7% Colombia
	Total	133 801	100 00%	6%

 Table 3: Worldwide production and main producing countries

 (in thousand 60-kg bags)

About 70-80 % of the worldwide trade of green coffee beans is traded through Germany from where coffee commercialization is controlled by a few multinational companies which

Source: (FAS-USDA, 2011)

concentrate their purchases in the above mentioned coffee producing countries. These companies exercice price pressure on those actors at the bottom of the coffee supply chain. Allthough world market prices went up, coffee producers still struggle to make a living out of coffee. Since major parts of coffee processing is realized in developed countries which constist of a roasting industry, most coffee exports from developing countries are minimally processed green coffee beans.

With regard to coffee comercialization, coffee trade is highly consolidated, which means that there are three main coffee traders which dominate almost half of the world's coffee trade. These are the Neumann Gruppe¹⁷ from Germany, the British-Swiss Volcafe-ED&F¹⁸ Man and ECOM¹⁹ from Switzerland. Other trading companies are in part integrated as inhouse buying companies as subsidiaries from downstream companies such as large roasting companies (CBI, 2011c). However, most roasters derive their coffee from the large international traders that have been mentioned (TCC, 2012, p. 12).



Figure 5: Conventional trade channels from coffee producers to consumers

Source: adapted from (CBI, 2011c)

Figure 5 visualizes a conventional trade channel from coffee producers in developing countries (DC's) to consuming countries. As illustrated, brokers, agents and traders act as

¹⁷ Neumann Kaffee Gruppe (NKG) is the world's leading green coffee service group. See also www.nkg.net

¹⁸ ED&F Man is one of the leading providers of certain commodities like sugar, molasses, animal feed, tropical oils, biofuels, coffee and financial services. See also www.edfman.com/

¹⁹ ECOM Agroindustrial Corp. is an International commodity merchants involved in cotton, coffee, oilseeds and grains, cocoa and hogs. See also www.ecomtrading.com

intermediaries between coffee producers and coffee grower associations in the producingcountries and roasting companies in coffee consuming-countries, for instance, in Europe. Brokers/agents often act as representatives of exporters in DCs and play a more important role when coffee producers are not yet known by large importers. Importers usually deliver coffee roasting companies, although roasters themselves also increasingly import coffee from producing countries.

International coffee trading companies operate in the coffee-producing countries with local middleman in joint-ventures or have established their own local subsidiaries and deal directly with producers in order to reduce the interaction (costs) with intermediaries (Petchers & Harris, 2007, p. 49). Nevertheless, the headquarters of international coffee trading and roasting companies are often located close to the ports where coffee is shipped. Hamburg is not only for Germany the main trading point, but the world's largest market point for green coffee. Others in Europe are Antwerp (Belgium), Le Havre and Marseille (France), Genoa and Triest (Italy) (CBI, 2011c). An even greater concentration of power in the supply chain is to be found at the roasting level in consuming countries. Hence, the major part of the added value is gained by transnational roasting companies like Philip Morris/Kraft, Nestlé, Sara Lee, Procter& Gamble, Tchibo and their afiliated companies and brands. They account for almost 45 % of all annual coffee purchases (TCC, n.d.). With regard to soluble coffee, Néstle dominates with over 50 % the market. Other big roasters among the top roasting companies are Smucker's, Strauss, Lavazza, Starbucks, Aldi and Segafredo. They together import and process almost 85 % of green coffee for selling its end-products to retail markets in the US, Japan and Europe (TCC, 2012). In short, these companies gain most of the profit margins after exportation which means that "most value is added in consuming countries" (Petchers & Harris, 2007, p. 49). This is partly because customs right and taxes on raw (green) coffee imports to the US, Japan and EU are lower or free in opposition to those custom duties and taxes paid for "processed" products (FIMARC, 2011).

Company	Affiliated companies and brands	Share of worldwide green coffee volume
Philip Morris	Kraft Foods, Jacob Suchard, Maxwell House, Splendid, Grand Mere, Carte Noir, Lyons Birds Brim Gevalia Maxim	13 %
Nestlé	Taster's choice, Nescafé, Hills Brothers, Lite, Sarks, MGB	13 %
Sara Lee	Douwe Egberts, Merrild, La Maison du Café, Café do Ponte, Caboclo, Café Pilao, Seleto, Uniao, Marcilla, Soley	10 %
Procter & Gamble	Folgers, Millstone, Highpoint	4 %
Tchibo	Eduscho, Tchibo Privatkaffee	4 %
Total		44 %

Table 4: The five largest coffee roasting companies

Source: (TCC, n.d.)

All in all, it can be said that the commodity chain of conventional coffee is characterized by small primary producers in liberated producing markets and an overall concentration of monopoly and monopsony power on the processing level in consuming countries.

The top 10 importing markets, including the US, Germany, France, Japan, Italy, Belgium, Canada, Spain, United Kingdom and Netherlands (assorted in order of importance), account for almost 70 % of world imports of coffee. Hence, most of coffee imports are concentrated in *developed advanced* economies, 7 of them being members of the EU and accounting for 40 % of world imports (ITC, 2011d). However, importing figures do not really reflect consumption patterns as they do not take into account re-exportation and changes in inventory stocks held in importing countries. The average world per capita coffee consumption varies according to countries and regions. For instance with regard to Europe, coffee consumption in 2010 varied from almost 10 kg in the Nordic countries (Finland, Denmark, Norway and Sweden) to around 5 to 7 kg in Western and about 3 kg in Eastern European countries (ECF, 2010/2011).

While the annual average growth in coffee consumption in traditional markets such as the US, the EU and Japan increased only slightly in the wake of the last 20 years, coffee consumption in the so-called BRICS countries (Brazil, Russia, India and China) – the four largest high-growth emerging economies – has increased considerably within the last two decades due to higher income and population growth in these countries. While consumption figures in 1991 and 2001 were still not available for countries like Brazil and India or were still very low (for example in China), overall consumption in these countries increased significantly in the last 20 years. For instance, in China coffee consumption decreased after 1991 and during the subsequent 10 years, but coffee consumption in the first decade of the 21st century increased by about 467 % or about 23,37 % annually (Table 5). Not only in China, but also coffee consumption in Russia more than tripled in the last 20 years and increase by about 14 % annually. Additionally, in some developing countries such as the Philipines or advanced economies such as Switzerland, coffee consumption recorded a considerable growth since 1991.

Consumption in major coffee producing countries such as Brazil, Indonesia, Mexico, Ethiopia, India and others, increased on average by about 4,3 % annually in the first decade of the 21st century (Table 6) (Roberio Oliveira Silva (ICO), 2012, p. 8).

The overall global consumption of coffee in December 2011/2012 is estimated at a total of 133,855 million bags. Of the total, about 46,500 million bags are consumed in EU-27 member countries accounting for almost 35 % of total world consumption (FAS-USDA, 2011, p. 9). However, coffee consumption in Europe has been stagnant over the last two decades showing just a slow annual growth rate of around 1 % since 1991 (Table 5). Moreover, at-home coffee consumption has slightly declined in developed coffee markets after the economic crisis whereas coffee companies have adapted to the changing market condition and prompted the out-of-door consumption via the expansion of coffee chains and single-cup brewing methods (TCC, 2012, p. 15).

Table 5: World coffee consumption evolution 1991 – 2011/2012

	1991*	2001**	Dec	Average	Average
			2011/2012***	growth (1991	annual
				- 2011)	growth
EU-27			46,500		
Total Europe	39,325	44,649		18,25%	0,91%
US	18,662	19,343	24,152	29,42%	1,47%
Brazil	n.d.	n.d.	19,760		
Japan	6,038	6,935	7,125	18,00%	0,90%
Russia (former	1,049	2,801	3,975	278,93%	13,95%
Soviet Union)					
China	141	32	800	467,36 %	23,37 %
India	n.d.	n.d.	1,150		
Switzerland	949	819	2,300	142,36%	7,12%
Philippines	n.d.	n.d.	2,255		
Other	9,185	10,856	27,752	202,14%	2,02%
Grand Total	73,21	81,790	133,855	142%	7%

(in thousand 60-kg bags)

Source: Own calculation with data from * (FAS-USDA, 1997), ** (FAS-USDA, 2005), *** (FAS-USDA, 2011)

Table 6: Total consumption growth rates inproducing countries
(in thousand 60-ka baas)

	(in thousand of Ng bags)		
	2000	2010	Annual growth rate
Brazil	13,075	18,945	3,8 %
Indonesia	1,664	3,333	7,2 %
Ethiopia	1,938	3,253	5,3 %
Mexico	1,189	2,239	6,5 %
India	938	1,400	4,1 %
Others	7,579	12,161	3,9 %
Total	26,383	41,331	4,3 %

Source: adapted from (Roberio Oliveira Silva (ICO), 2012)

4.1.2 The international alternative coffee market

The market for alternative coffee is composed, on the one hand, of *speciality* or often also used as *gourmet* coffee and, on the other hand, of *sustainable* coffees. Speciality coffees received the name due to their higher quality coffees which consisted of both single origin as well as blends and which are usually sold in specialty stores and coffee shops/bars in order to differentiate them from mainstream-type of coffees. However, with the expansion of these types of speciality coffees in mainstream retail outlets and catering

establishments, the term "speciality" has become a generic indicator for a differentiated type of coffee that is distinguished from the conventional coffee by its price premium paid for "quality" and a varying taste of coffee. These types of coffee are exclusive in the market, this is why they are found in niche markets²⁰, due to their limited availability. Generally, however, there is no universal definition of "speciality coffee" and hence this term is subject to quality and taste requirements of different consumer markets (ITC, 2011a, pp. 38-39). To promote consumption of higher quality coffee, the Speciality Coffee Association of America (SCAA)²¹ has been created in the early 80s and the Speciality Coffee Association of Europe (SCAE)²² in late 90s, which ever since led to an establishement of a specialty coffee market and an increase in demand for speciality coffees, both in the United States and Europe, but also in other consuming countries like Japan (ITC, 2011a, pp. 41-43).

Another alternative way to distinguish a certain coffee in the market is by indicating its geographic origin. The characteristics and qualities of coffee depend on their place of origin and specific local factors such as altitude, latitude, climate, topography and more in general, the specific environment of a noted region where coffee is grown. One famous coffee example is the Colombian *Juan Valdez*²³ trademark that is distinguished from the coffee blended with beans from other countries by its 100 % Colombian coffee. This trademark is recognized in all important import markets and was in 2007 protected by law from fraudulent use and competition by the EU (Terranoticias, 2007). Thus, the "Denomination of Origin" reflects a certain quality and reputation of a coffee region for which producers obtain a premium price for their authentic product that is comercialized with a registred trademark or logo (ITC, 2011a, p. 52).

Allthough price-quality requirements among major consumer differ, consumer in main Northern consuming countries look beside the quality more and more on issues regarding a sustainable coffee production. Sustainable coffees are named in this study as *differentiated* or *alternative* coffee since they are are claimed to bring better economic, social and environmental benefits to producers than conventional coffees and are supposed to construct alternatives to the dominant free market economy. The differentiation from conventional coffee products is done through sustainable certification labels which guarantee that certain economic, social and environmental requirements in production and comercialization have been met. This is confirmed and independently certified by an accredited third party (Pierrot & Giovannuci, 2011e, p. 10).

Sustainable coffee initiatives arose after the breakdown of the ICA and gained increasing attention among consumer markets during the coffee crisis between 2001 and 2005, when coffee prices were very low (50cts/lb) having a direct impact on producer countries (ITC,

²⁰ Def.: "A niche combines a set of conditions that enable a single species or a single product to thrive within the greater ecological or commercial environment" (ITC, 2011a, p. 39)

²¹ See www.scaa.org

²² See www.scae.org

²³ See www.juanvaldez.com

2011a, p. 53). The overall market for sustainable coffees has grown significantly ever since and accounted in 2010 already for 16 % of global coffee production (21,4 million bags) and 9 % of global consumption (12,1 million bags) (TCC, 2012, p. 4). There are several sustainable coffee labels, but main certification and verification-based schemes in use are: Fair Trade (FLO), Organic (IFOAM), Rainforest Alliance (RA), Utz Certified (UTZ) and the Common Code for the Coffee Community (4C Association) (Pierrot & Giovannuci, 2011e, p. 8). There are also other (private) initiatives like CAFE Practices from Starbucks, or Nespresso's private AAA guidelines which seek to verify farm practices. However, the publicly managed certification standards are much more used and recognized at the consumer end of the coffee supply chain (Pierrot & Giovannuci, 2011e, p. 10).

Depending on different countries, there are huge differences in the availability and consumption of sustainable coffees and the types of certified coffee demanded. Regarding the latter, for instance, in Germany and Italy organic coffee dominates the sustainable coffee market segment; in the United Kingdom and France it is Fairtrade coffee; in Switzerland, the Netherlands and several Scandinavian countries it is UTZ certification; and in Japan Rainforest Alliance (RA) play a more dominant role in the market share. However, all mentioned certified coffees are present in all major consuming markets and are growing not only in emerging coffee markets such as the Republic of Korea, Australia and Singapur, but also ingreasingly demanded by urban citizens from emerging countries like China, India, Mexico and Brazil (Pierrot & Giovannuci, 2011e, p. 11).

As seen in the market share figures above, there is a large gap of sustainable coffee produced and actually purchased as sustainable or "certified" coffee (21,4 million bags produced versus 12,1 million bags consumed). There are several reasons for this, on the one hand, coffee sales under the sustainable label depends on several attributes, such as quality and origin which have to match purchaser's requirements and portions. On the other hand, buyers may buy sustainable coffee but not sell all of them as certified coffee. But it also has to be noted, that double and triple certification distort the current estimates. To give an example, in 2010 out of 358 metric tons of Fairtrade certified coffee available on the market, just about 94 tons has been purchased as certified Fairtrade coffee which represents not even 26,3 % that is sold under the Fairtrade label. Organic coffee, in turn, show better figures as about 77,8 % of organically certified coffee has been sold under the certified label (105 out of 135 metric tons) (TCC, 2012, p. 14). However, within this volume there is a certain amount of coffee that is certified under both labels since generally more than 30 % of Fairtrade coffee is also certified as organic coffee (Fairtrade International, 2011a, p. 56). Thus, the same coffee might have been sold under one or the other label though it bears both certification labels (Pierrot & Giovannuci, 2011e, p. 10).

Most of sustainable coffee is produced in a small number of countries, most of which are in Latin America which supply about two-third of sustainable coffee to major coffee consuming countries in North America, Europe and Japan, but are also expanding supply to new markets. Peru and Mexico are the world's largest exporter of sustainable coffees, but exports of certain types of certified coffees are also growing across other Latin American, Asian and African countries (IISD and IIED, 2012 as cited in TCC, 2012, p. 9;. Raynolds, T. et al., 2007, p. 11).

In the US and in many western and northern European countries sustainable coffees are emerging from just a niche, since they have gained increasing importance in coffee sales (Figure 6) and mainstream consumer demand drives growth in certified coffee demand.



Figure 6: Share of differentiated coffees in the total volume of traded coffee (from 2006-2009)

The Netherlands are at the forefront with 40 % of now certified coffee, followed by the US with 16 % market share and some Northern European countries that have passed the 10 % market share (Pierrot & Giovannuci, 2011e, p. 11). Germany, the EU largest coffee consumer country has seen the market share of certified coffee - particularly organic and Fairtrade – grow faster than nearly any other segment accounting in 2010 with about 5 % of market share (CBI, 2011a).

4.2 Coffee market in Germany

4.2.1 The overall market context

Germany is, after the United States of America, the second largest importer of coffee, representing a share of almost 15 % in world imports. The total value imported in 2011 was 5,634,048 (USD thousands) representing a total quantity of 1,168,674 tons. While the annual import figures in quantity hasn't increased (or on average just by 1 %) within the last 5 years, the annual growth of value of the imported coffee quantity has increased by 16 % between 2007 and 2011. Between 2010 and 2011 the value of imports has even

Source: (Pierrot & Giovannuci, 2011e)

grown by 59 $\%^{24}$ - significantly more than triple that faster than the 5 years average of 16 % and the world's annual growth of 16 % (ITC, 2011c; ITC, 2011d).

Overall green coffee consumption in Germany remained unchanged in the last couple of years, as was the per capita coffee consumption of an average of 6,4 kg (green coffee equivalent) between 2000 and 2010. These are about 150 liters of coffee consumed per person per year, which is with 23 % of the total EU market share among the highest consumption rates in the world (ECF, 2010/2011, p. 30; ICO, 2010).





The difference between the imported coffee and consumed coffee results from the fact that Germany is in addition to being the largest EU importer (accounting for 35 % of total EU coffee imports of green coffee) also one of the largest coffee re-exporter to other EU neighboring countries and the USA. About 31 % (356,663.68 tons) of total green coffee imports are directly re-exported and about 17,9 % (205,870 tons) of green coffee imports are roasted and then re-exported (173 thousand tons of roasted coffee) to other EU countries like France, Austria, The Netherlands and Poland. This reflects the presence of a large domestic roasting coffee industry in Germany which not only roasts coffee for its own domestic needs but also in order to re-export it to other countries (CBI, n.d.).

Source (ECF, 2010/2011)

²⁴ The difference between value and quantity could be because (1) the demand is greater than supply which causes prices to rise; (2) demand is shifting towards the higher quality, higher priced goods within the basket or (3) demand is shifting towards the more value-added presentations, i.e. packages, easy to use-consumer sized packs, of the same product or (4) transportation and insurance cost have risen pushing up the value of imports which are generally reported in CIF (Cost, Insurance and Freight costs). These are general assumptions retrieved from: www.trademap.org

4.2.2 Market segments

Roasted coffee accounted with 91,8 % (406,500 tons = 483,735 gbe) for the greatest share in the coffee market in 2010, while soluble coffee constituted about 8,19 % (16,600 tons = 43,160 gbe) of the market volume (ECF, 2010/2011, p. 31). Within the roasted segment, classical roasted coffee still plays quantitatively the greatest role in the coffee market, but it is on a continuous decline. In turn, particularly Espresso/Caffè Crema and the single-consumption coffee pads/-capsules increased considerably. For instance, Espresso/Caffè Crema²⁵ grew more than doubled (to 53,500 tons in 2010), partly because of increasing fashionable coffee drinks such as latte, macchiato and cappuccino in cafes for which espresso is the basis. Simultaneously, the ready-to-drink coffee pads and/or capsules such as Nestlé's Nespresso²⁶ increased more than fourfold (to 35,100 tons in 2010) in the period from 2005 to 2010 reaching a market share of 8 % in 2011. This is due to the increasing prevalence of espresso and cappuccino systems at home and at work, where whole roasted coffee beans or single-portion pads and capsules are increasingly used. Thus, these two coffee segments record ever-growing sales both at the household and non-household level (ECF, 2010/2011, p. 31; ECF, 2006, p. 32). Hence, the German coffee market can be divided into two consumption segments:

At-home consumption – This market accounts for about 70 % of total coffee consumption. Here, coffee is used to be consumed as ground coffee for coffee filter machines which still accounts for 75 % market share, or as soluble coffee. As mentioned before, ground coffee is now also increasingly packaged as single-consumption pods and pads and is an increasing market segment. Coffee consumer can buy these forms of coffee in supermarkets/discounters, specialty coffee stores, at other shops, but also sales over the internet are gaining in importance (CBI, n.d.).

Out of home consumption – About 30% of the coffee is consumed out of home, in locations such as restaurants, hotels, coffee bars/shops, cafés and at work. For several years now, US-style coffee chains played an increasing role alongside the classical cafés and supermarket concepts serving coffee. Last year alone, about 150 coffee shops and bars opened up (German Coffee Association, 2011).

4.2.3 Conventional trade structure and channels

Imports of coffee are directly sourced from developing countries (DCs), the most important suppliers of conventional coffee being Brazil and Vietnam with imports that accounted for

²⁵ Caffe Crema (engl. cream coffee) is the original term and synonym for espresso. Espresso is a concentrated beverage brewed by forcing a small amount of nearly boiling water under pressure through finely ground coffee beans. It often has a thicker consistency than coffee brewed by other methods, a higher concentration of coffee and crema which is the light brown foam on espresso. See also http://www.brownbean.com/index.php?option=com_content&view=article&id=233:what-is-crema&catid=5:articles&Itemid=13

²⁶ Nestlé's Nespresso is an espresso that is brewed from coffee capsules by a Nespresso machine which can easily be used at home and thus replicate the espresso culture at household-level http://www.nespresso.com/#/mx/es

about 48.5 % in quantity in 2011. Colombia has dropped from the third place in 2007 to the eleventh place in 2011 due to significantly lower crop volumes and a diversification of exports. Imported volumes from other countries like Peru (third place), Honduras, Ethiopia, Indonesia, India, Uganda, El Salvador, Papa New Guinea (assorted in order of importance) have increased their exports to Germany by 2011. The overall imported growth in quantity rose about 6,4 % between 2007-2011. Volumes of conventional coffee imported from Mexico also dropped from 17.734 tons in 2007 to 5.127 tons in 2011, a decrease of more than 70 % since 2007 (ITC, 2011b).

Most of coffee is imported as green coffee beans and roasted in Germany. All big coffee players have their headquarters or at least their affiliates in Germany, most of which are located at the port of Hamburg, European's main entry point for coffee. The main players in the German coffee market are Kraft Foods (importer and roaster), Melitta (roaster), Tchibo (importer and roaster), Aldi (discounter), Dalmayr (roaster). Due to the continuing consolidation of coffee companies, there is an oligopolistic buying power of mainstream roasters and retailers. For instance, the five main players dominate about 80 % of coffee roasting and sales (Figure 8) (TCC, n.d.).



Figure 8: Main players in the German market

Source: (TCC, n.d.; Heinzelmann, 2011)

There is also an increasing number of small domestic roasters which sell roasted and soluble coffee under their own brand name or supply retailers with private label products. However their overall market share is less important (TCC, 2012, p. 16). The German Coffee Association, which is the representative body of the coffee industry, actually hosts 6 coffee agents and brokers, 10 green coffee importers, 3 warehousing companies, 55 coffee roasting companies, 2 decaffeinators, 9 producers of soluble coffee and soluble coffee beverages, 21 coffee associated members and other 20 supporting members (Deutscher Kaffeeverband, 2012).

At the end of the coffee supply chain, the coffee is delivered by the roasting companies as roasted coffee (as beans or grounded) and/or soluble (instant) coffee to wholesale/retail outlets or catering services. Conversely to the roasting industry, among wholesale traders and on the retail level there is a more competitive environment (see section 4.3.3).

Nevertheless, like in other coffee consuming countries, a growing consolidation of coffee trade/roasting companies increasingly dominate the coffee sector in Germany (CBI, n.d.).

4.2.4 Consumer price development

In 2009, the average retail price of roasted coffee in Germany was with 3,76 EUR/500gr (7,52 EUR/kilo) among the lowest between the EU countries. The price stayed at this level between 2005 and 2009, but was on average about 18 % lower during the coffee crisis between 2001 and 2005 (ECF, 2010/2011). Consumer prices, however, increased by about 17,3 % on average in 2011 (Table 9) (Federal Statistical Office, n.d.). But still, the low coffee price in comparison to other EU countries reflects the general low price level of food products in Germany, the high consumption rate and the fierce competition among the major players in the coffee market (ECF, 2010/2011, p. 31; TCC, 2012, p. 16).

Because Germany has a *coffee tax law*, there is a specific excise duty on coffee. This excise tax is about 2,19 EUR per kilo of roasted coffee and about 4,78 EUR per kilo of soluble coffee. Depending on the volume of roasted or soluble coffee per kilo that a product contains, there is a certain amount of excise duty to be paid (Table 7).

Volume of roasted or soluble Roasted coffee		Soluble coffee
coffee per kilo product		
10 g to 100 g per kg	0,12	0,26
> 100 g to 300 g per kg	0,43	0,94
> 300 g to 500 g per kg	0,86	1,91
> 500 g to 700 g per kg	1,32	2,86
> 700 g to 900 g per kg	1,76	3,83

Table 7: Excise duty for products containing coffee - in EUR -

Source: (Federal Ministry of Justice, n.d.)

The coffee tax was primarily introduced in 1953 as a result of a sharp rise in coffee consumption and revalidated in January of 2002 (Federal Ministry of Justice, n.d.). The overall objective of the coffee taxation is to generate income in order to finance public expenditure and is levied in Europe only in Germany, Belgium, Denmark, Latvia and Romania (ECF, 2010/2011, p. 66). According to the Federal Statistical Office (Statistisches Bundesamt Deutschland), the annual revenue from the coffee tax reaches a level of about one million Euros (Federal Statistical Office, 2010). The Value Added Tax (VAT) rate in Germany for coffee remains at 7 % which is the common VAT on food and drinks in retailing and 19 % for coffee consumed in the catering sector. These taxes are included in the price of coffee that is bought in German retail or respectively in coffee shops and/or restaurants (ECF, 2010/2011, p. 32).

Thus, as seen in Table 8 below, the actual coffee consumer price of about 3,70 EUR per 500 g is composed by about 44,9 % of taxes, custom duties and freight costs, 23,7 % of wholesaling and retailing costs, 17,8 % of trading and roasting cost, while only 8,5 % go to producer groups and 5,1 % to wages of workers (Deutscher Kaffeeverband (cited in Die Zeit), 2011).

Taxes, custom duties and freight costs	1,66 €
Retailers	0,88€
Traders and roasters	0,66 €
Producer groups	0,31 €
Wage of workers	0,19€
Consumer Price	3,70 €

Table 8: P	rice compositior	of consumer	price for	conventional	coffee
			P	•••••••	

Source: (Deutscher Kaffeeverband (cited in Die Zeit), 2011)

These numbers show that coffee producers not even get 14 % of the final coffee prices although overall import prices for conventional (green) coffee have shown a favorable trend since 2005 (Table 9). Moreover, what is astonishing in the price calculation above, is that approximately 1,10 Euros coffee tax per 500 g (about 2,19 EUR per kilo) of roasted coffee has to be paid to the German government, which is about the double of that amount of what producer groups get for their coffee.

Nonetheless, if seen from a long-term perspective, although the producer share of the terminal market price has increased over time, the producer value share of the consumer price has declined over the three past decades. This makes clear that the larger margins are to be found in processing and retailing in consuming countries like Germany. On this view, Gilbert (2007) reveals that the average gross retail coffee margin over the ICO Indicator price increased in Germany by about 385 % between 1989 and 2005. In contrast, the value share for the main coffee producers Brazil, Colombia, Guatemala, Kenya, United Republic of Tanzania, for example, just increased by about 22,1 % for Arabica coffee and by 13,2 % for Robusta coffee in the same period. According to the author, rising retail margin can be due to a "higher cost associated to coffee transportation, processing and marketing, but also "increased profit margins induced by high levels of industrial concentration" as well as "higher quality beans" (Gilbert, 2007, p. 29).

Nevertheless, when comparing the development of consumer prices (about 4 % increase on average since 2003/2004) with the development of import prices for green coffee (18,4 increase since 2003/2004) in the last couple of years (Table 9), one can see that significant increases in green prices has only rudimentary been passed on to consumers. Particularly in 2011, import prices of green coffee have increased on average by almost 45 %, while consumer prices have increased by only 17,3 % (Federal Statistical Office, n.d.).

	Import price trends for raw coffee1		Producer price trends for coffee		Consumer price trends for coffee	
Month / Year	Index 2005=100	Year-on- year change	Index 2005=100	Year-on- year change	Index 2005=100	Year-on- year change
2004 AA	69.9	+ 9.1 %	90.8	- 1.1 %	87.5	- 5.0 %
2005 AA	100.0	+ 43.1 %	100.0	+ 10.1 %	100.0	+ 14.3 %
2006 AA	104.3	+ 4.3 %	103.8	+ 3.8 %	104.7	+ 4.7 %
2007 AA	106.0	+ 1.6 %	104.3	+ 0.5 %	104.1	- 0.6 %
2008 AA	113.3	+ 6.9 %	106.8	+ 2.4 %	106.4	+ 2.2 %
2009 AA	119.6	+ 5.6 %	106.5	- 0.3 %	104.3	- 2.0 %
2010 AA	157.9	+ 32.0 %	108.4	+ 1.8 %	104.8	+ 0.5 %
Jan 2011	218.0	+ 71.8 %	116.0	+ 8.6 %	110.0	+ 6.0 %
Feb 2011	224.8	+ 76.2 %	118.3	+ 10.3 %	114.1	+ 9.0 %
Mar 2011	229.8	+ 70.5 %	124.4	+ 17.4 %	120.8	+ 14.7 %
Apr 2011	234.0	+ 74.2 %	124.8	+ 17.8 %	123.0	+ 17.8 %
Mai 2011	228.5	+ 60.5 %	127.5	+ 20.2 %	124.5	+ 21.7 %
Jun 2011	222.8	+ 38.8 %	127.5	+ 20.2 %	123.3	+ 18.8 %
Jul 2011	214.6	+ 28.9 %	127.6	+ 20.4 %	125.7	+ 20.4 %
Aug 2011	223.8	+ 30.1 %	127.6	+ 17.3 %	126.2	+ 21.8 %
Sep 2011	217.0	+ 24.6 %	131.6	+ 20.0 %	126.2	+ 21.8 %
Oct 2011	203.8	+ 17.5 %	131.2	+ 17.5 %	128.6	+ 19.6 %
Nov 2011					127,4	+ 19.0 %

Table 9: Changes in coffee prices

1 not roasted.

Source: (Federal Statistical Office, n.d.)

4.2.5 The alternative coffee market

4.2.5.1 The overall market for organic/Fairtrade coffee

The German market for organic/Fairtrade products has seen considerable growth in the last two decades thanks to the market entry of the organic/Fairtrade certification marks (Figure 10 in section 4.2.7) and the initiatives of some roasters and Max Havelaar, who have promoted an increasing consumption of organically and Fairtrade certified products. Although, the recession and economic crisis of 2008 affected overall sales of organic/Fairtrade products, the growing number of LOHAS (Lifestyle of Health and Sustainability) consumers which are much more cause-conscious in their buying habits regarding issues of their health, food safety, the environment and social accountability, place particular trust in organic and fairly traded products (see section 4.3.5). These markets hold the greatest promise of market growth, offer a premium, and pledge to adhere to a combination of social, environment and economic standards (SIPPO and FIBL, 2011).

In the wake of several food poisoning scandals in the last couple of years, beginning with the outbreak of the mad-cow disease (BSE) at the beginning of this century and later the dioxin-contaminated feed to pigs, chickens and turkeys at the end of 2010/beginning of 2011 as well as the outbreak of the E. coli bacteria (EHEC) in the same year, the organic industry came out tops, seeing a 9 % rise in organic sales value just in 2011. Accordingly, the organic share of the total grocery market reached a level of 3,7 % with sales of 6,59 billion Euros in 2011. This growth was predominantly recorded in specialized natural food stores (Naturkostfachgeschäfte) and discount supermarket chains but also in other selling shops (BÖLW, 2012, p. 16). Hence, according to the Research Institute of Organic Agriculture (FIBL), Germany has become the largest organic food market in Europe and continues to grow. About 40 % of all organic product value is estimated to be imported by Germany (SIPPO and FIBL, 2011).

Whereas organic consumers are more concerned about the personal and environmental health when buying organic products, fair-trade buyers are more concerned about social accountability and solidarity. Hence, like in other countries, the Fairtrade market in Germany has also seen a significant increase. For instance, the sales revenue of Fairtrade certified products were reported to be of 340 million Euros in 2010, representing an increase of 27 % since 2009. The largest share of Fairtrade products are groceries followed by other, non-food-products (Fairtrade Deutschland, 2011a, p. 14).

Within the Fairtrade products, coffee is the most important one. According to the TransFair annual report 2010/2011, Fairtrade coffee sales in Germany have increased substantially in the last couple of years to 7.218.000 kg in 2010, an increase of 26 % from 2009 to 2010 (Figure 11 in section 4.2.7). There are about 300 different Fairtrade coffee goods and particularly single-portion, instant and Café Crema, are more and more demanded (Fairtrade Deutschland, 2011a, p. 15).

The share of organic coffee is about the same size as the Fairtrade coffee segment representing about 2 % of total coffee sales. However, the organic coffee imports have according to the German Coffee Association seen a decrease from 8,400 tons in 2009 to 7620 tons in 2010 (TCC, 2012, p. 16).

Hence, with regard to overall certified coffee demand in Germany, the market share is estimated to be between 5-7 % consisting mainly of organic and Fairtrade (about 4 %) and to a smaller extent Rainforest Alliance and Utz certified coffee (TCC, 2012, p. 16).

Although sustainable coffees still represent a niche market, the market for certified coffee is expected to grow as the main players in the coffee market – Kraft Foods and Tchibo – are increasingly promoting sustainable coffees albeit not necessarily just organic and Fairtrade coffee (see section 4.3.7). Growth of certified coffees in Germany is also driven by American coffee chains like Starbucks and McCafé (McDonalds) and the Balzac company (Worldcoffee chains), thus making the out-of home consumer market and with it the *coffee to go* trend to one of fastest growing sustainable coffee sectors (TCC, 2012, p. 16).

4.2.5.2 Certification systems

As mentioned before, in Germany organic and Fairtrade coffee are the leading certification schemes, but in general also other alternative coffees like RA and UTZ certified coffees have been gaining rapidly importance during the last couple of years (which are however not considered in this study) (TCC, 2012, p. 16).

With the introduction of the national organic logo in early 2000, the "Bio-Siegel" – a hexagon in its green-black-white shape – and the implementation of the Federal Organic Farm Scheme, the organic market in Germany increased to find greater acceptance. Currently, there are about 4,023 companies promoting a total of 64,145 products²⁷ with the Bio-Siegel. The use of the logo is free as long as



they comply with the minimum organic production guidelines laid down by the EU Organic Farming Regulation. This is why there is an added inscription "Bio nach EG-Öko-Verordnung" which means "pursuant to EU Organic Farming Regulation" (BLE, 2010).

However, with the introduction of the EU-wide label – a green rectangle that shows twelve stars (from the European flag) placed like it forms the shape of a leaf in the wind – for organic products in 2010 by the European Commission, the national organic product labels became obsolete although still legally valid. Hence, like before



producers of organic products have to comply with the rules laid down in the Council Regulation (EC) No 834/2007 on organic production and labeling and subsequent amendments thereto. General EU requirements for organic coffee production include: very strict limits on synthetic pesticides or other synthetic fertilizers for a minimum of two years; a sustainable crop rotation plan to prevent erosion, the depletion of soil nutrients, and control for pests as well as an efficient use of on-site resources, among other requirements. However, what changed is that from 1 July 2010 it is stipulated that all prepackaged goods within the EU have to carry the EU organic product label accompanied by the origin of the agricultural ingredients and the code number of the certification body²⁸. Simultaneously, it is still allowed to display both, the EU and the national label to mark organic products (European Commission, 2012a).

Thus, in order for coffee to be certified and sold as organic in the German market, it must be produced according to the EU Organic Farming Regulation (which complies with the basic IFOAM standards for organic production) and be independently and externally verified by a third party certifying organization (List of Control bodies and control authorities (web page in the footnote)) that is subject to this regulation (European Commission, 2012b).

²⁷ (Status quo from 29th February 2012)

²⁸ See List of EU control bodies and authorities with their code numbers for Germany. Retrieved from:http://ec.europa.eu/agriculture/organic/files/consumer-confidence/inspection-certification/EU_control_bodies_authorities_en.pdf, p. 7-11

Additional to the EU regulation, many organic farming associations like Demeter and Naturland²⁹ have developed their own private standards which go beyond EU standards. The products sold under one of this label, however, have to be inspected by one of the EU approved inspection bodies. The most important inspection and certifying organization for organic coffee in Germany is IMO Control³⁰, which often inspects farming practices of coffee and other products sold under the Naturland label. Most of inspection bodies have their subsidiaries in producing countries (Richter, 2005, S. 21-22).

Hence, importers of organic coffee do not only have to meet the EU standards, but also the private label standards if they want to sell the coffee under the certified organic and private label. As a result, roasters of organic coffee which are members of one of the organic farming associations thus have to display several labels on their retail packages in order to demonstrate that the coffee is organically certified according to the three – the EU, national and private label standards – which makes it difficult for consumers to maintain the overview about the labels (ITC, 2011a).

In contrast to the organically certified products, Fairtrade certified products³¹ are not subject to governmental regulation, but rather follows private regulations. The Fairtrade Labeling Organizations International (FLO-International) serves as an umbrella organization for 19 national Fairtrade organizations covering 24 countries (most of which are consumer countries); 2 marketing organizations and one associate member, which is Comercio Justo Mexico. In Germany, the national Fairtrade organization that licenses the Fairtrade certification mark on products and promotes Fairtrade product sales, is Fairtrade Deutschland (TransFair e.V.). As an independent non-profit organization, TransFair is supported by various institutions coming from areas such as the church, development politics, consumer protection, women and environmental organizations. The label was introduced to Germany in 1992 and the market for Fairtrade products has seen considerable growth ever since (Fairtrade International, 2011c).

In the case of Fairtrade coffee certification, all actors in the supply chain from producer to roasters of Fairtrade coffee are subject to inspection by the independent certifying agency FLO-CERT which is located in Bonn, Germany. The FLO-CERT auditors check the compliance of producers and traders with Fairtrade standards³². For this purpose, qualified inspectors are on-site on a regular basis in order to supervise if the Fairtrade standards (e.g., economic, social, and environmental standards) have been met. An overview of the

²⁹ Naturland promotes organic agriculture throughout the world. With its 46,000 farmers, it is one of the major organic farming associations. Among its members there are over 30,000 coffee growers producing 29,900 tonnes of organic coffee a year. See also www.naturland.de

³⁰ IMO - Institut für Marktökologie GmbH (www.imo.ch)

³¹ There are also other private company certification schemes for fairly traded coffee, for instance, the leading organic food manufacturer Rapunzel and the El Puente program. However these coffee, are not issue of this study and of lower importance in the market.

³² FLO-CERT ensures that relevant social and environmental standards are met and that producers receive the Fairtrade Minimum Price and Premium. See also Fairtrade standards, available at: http://www.fairtrade.net/standards.html

international Fairtrade network and its functions is given in Figure 22 in Appendix I. FLO-CERT is accredited according to ISO65³³, the leading quality norm for bodies operating a product certification.

The Fairtrade certification mark is a black-green-blue consumer label showing a cheering person which represents both the producer that receives a fair deal and consumer contributing to a sustainable development through Fairtrade. It is an independent consumer label that is used to convey the message that disadvantaged producers of a certain product get a better deal than producers of its conventionally traded counterpart product. Since most of Fairtrade coffee is also



organically certified, producer groups have to comply with the EU Organic Farming Regulation and, thus, undergo also the organic inspection and certification process mentioned in the previous page. Summarizing, the Fairtrade certification mark assures that consumers contribute to a sustainable production and a *fair* trade when buying Fairtrade certified products since producers are guaranteed a fair price and an extra premium payment for social, environmental and economic development projects (Fairtrade International, n.d.). Currently, there are about 180 member companies that use the Fairtrade mark for about 1,000 certified products, which are sold in over 30,000 retail shops, world shops and about 18,000 catering services in whole Germany (Fairtrade Deutschland, 2011a, p. 4).

4.2.6 Retail prices for alternative coffee

The average price per 500 g of conventional coffee is about 3,70 Euro (see section 4.3.4). About 500 g of organically certified Fairtrade coffee costs between 6,00 and 9,00 Euro, depending on where it is bought. To illustrate the price composition of a conventional coffee versus an alternative coffee, the Fairtrade coffee *Café Orgánico* from the Fair Trade Company GEPA is taken as an example and contrasted to the conventional coffee price composition depicted in section 4.3.4. The end consumer price for 500 g of this coffee (grounded) is 7,38 Euro. The coffee is pure Arabica coffee and is sourced from the upland of Mexico (GEPA, n.d.a, p. 14).

	Conventional coffee	Alternative coffee (Gepa)
Producer groups	0,31 € (Producer groups)	0,31 € (Cooperative share)
	0,19 € (Wage of workers)	<u>1,20 €</u> (Payment to producer)
	0.50 €	1,51 €
Transport, traders	0,32 € (Custom duties	0,59 € (Transport, storage,

Table 10: Price composition of conventional versus alternative coffee

³³ ISO 65 certification guarantees that a quality management system is in place, transparency in all processes and independence in the certification decision making ; See also: http://www.iso.org/iso/catalogue_detail.htm?csnumber=26796

and roasters	and freight costs)	roasting, processing)
	0,66 € (Traders and roasters)	<u>2,03 €</u> (Gepa product
	0.98 €	 2,62 € management, distribution, administration, storage, shipment)
Coffee tax	1.10€	1,10€
		0,36 € Certification fees (organic,
		Fairtrade)
Retailer	0,88 €	1,31€
VAT (7 %)	0,24 €	0,48 €
End consumer	3.70 €	7.38 €
Price		

Source: (GEPA, n.d., p. 14; Deutscher Kaffeeverband (cited in Die Zeit), 2011)

As seen in Table 10, producer groups of the alternative coffee receive three times more for their certified organic Fairtrade coffee than conventional producers do. They receive about three times as much as conventional producers get for 500 g of roasted coffee (595 green coffee equivalents). However, in order to be able to compare, if alternative producers are generally better off than conventional producers, it is necessary to compare also the cost structure of both.



Figure 9: Price composition of conventional (left) vs. alternative coffee (right)

Source: (GEPA, n.d., p. 14; Deutscher Kaffeeverband (cited in Die Zeit), 2011)

When comparing the conventional chart with that of certified organic Fairtrade coffee (Figure 9), one can see that from the conventional coffee end consumer price about half of the value share is split in both cases among traders/roasters and retailer (50 % for

conventional and 53 % for alternative coffee). The producer share of the end consumer price for alternative coffee is higher (20 %) than that of a conventional producer (13 %). About 1,20 Euro per 500 g go to the producer, and additional 0,31 Euro per 500 g is paid by the purchasing company to the producer cooperative, which includes the development and the organic premium and the paying of farmers. In total, the producer group in the producer country receives a 20 % value share of the final price that consumer pay in Germany for this certified organic Fairtrade coffee.

Nonetheless, what however stands out in both price calculation is that most of the value share – 87 % for conventional and 80 % for alternative coffee – is made *outside of the producer country*, and the largest part of the added value remains in Germany, even in the case of organic Fairtrade or *fairly traded* coffee. About 37 % (incl. excise duty and VAT) in the case of conventional coffee and about 22 % (incl. excise duty and VAT) in the case of alternative coffee go into the German treasury. This represents almost three times the share that producer of conventional coffee get. In the case of alternative coffee, this number represents a slightly higher share (by 2 %) of what alternative coffee producers (in this case in Mexico) get for their green coffee. Hence, although consumers pay almost twice as much for alternative coffee in comparison to conventional coffee, is still a large share of the end consumer price is retained in the consuming country Germany (Deutscher Kaffeeverband (cited in Die Zeit), 2011; GEPA, n.d.a).

4.2.7 Market structure and sales channels for alternative coffee

The most important coffee suppliers of Fairtrade coffee to the German market are Peru, Colombia, Mexico, Nicaragua, Brazil, Guatemala, Indonesia, Costa Rica and Ethiopia (Fairtrade Deutschland, 2011b). For organic coffee, the main suppliers are Peru, Mexico, Honduras, Indonesia and Ethiopia (Pierrot & Giovannuci, 2011e). In 2010, Fairtrade certified coffee imports amounted to 7,218 tons of which about two-thirds are double-certified organic (Fairtrade Deutschland, 2011b). The overall organic coffee (among which may be also double certified organic Fairtrade coffee) amounted to about 7,620 tons, which saw a slight decrease from 8,400 tons in 2009. Both, organic and Fairtrade coffee are on a constant increase since more and more coffee consumer demand that coffee companies participate in certified production (TCC, 2012, p. 16).

Thus, the market has seen a diffusion of sustainable coffee since the entry of the different certification marks in Germany (Figure 10).



Figure 10: Market entry of the certification marks

Source: (Heinzelmann, 2011)

Particularly, certified organic Fairtrade coffee has seen a substantial growth since the introduction of the Fairtrade certification mark at the beginning of the 90s and the organic label at the beginning of this century. Fairtrade coffee sales, for instance, increased by 26 % just from 2009 to 2010 out of which 67 % is also certified as organic coffee (Figure 11) (Fairtrade Deutschland, 2011a).



Figure 11: Fairtrade coffee sales Germany (MT)

Source: (Fairtrade Deutschland, 2011a)

Not just Fairtrade certified coffee, but also other sustainable coffees have seen an increasing diffusion through main coffee manufacturer (roasters), retailer, supermarkets and restaurants/coffee shops in the last couple of years (Heinzelmann, 2011).

The main coffee companies operating in the German market engage in sustainable coffees in order to keep their reputation high. The German market leaders Kraft and Tchibo, for example, increasingly use certification on their several European coffee brands. In 2010, Kraft Foods purchased 7 % of sustainable coffees out of its total volume, principally RA certified, and pledges to increase its share of sustainable coffees of all its European brands to 100 % by 2015. Tchibo, on the other hand, in 2010 had a share of 10 % of all its coffee purchasing being certified coffee. Its different European brands contain

mainly RA but also Fairtrade, organic and since 2011 UTZ certified coffee. Tchibo pledges to reach 25 % by 2015 and 100 % in the near future. Both coffee companies are also $4C^{34}$ members and are large buyers of 4Cverified coffees. Other players operating in the German market like Aldi, Dalmayr and Melitta, which are also members of the 4C Association, did however, not disclose any procurement figures or commitments regarding a sustainable coffee sourcing (TCC, 2012, p. 16).

A recent survey³⁵ of the social and environmental commitment (Corporate Social Responsibility (CSR)) of 19 German coffee providers and 31 roasted coffees revealed that the major coffee companies operating in Germany, like Kraft Foods, Tchibo, Dallmayr and Melitta do only rudimentarily commit to a sustainable coffee sourcing and can often only track their coffee back till the importer. Other coffee provider, mostly those who provide the German market with organic and Fairtrade (coffee) products like Gepa, Alnatura, Ulrich Walter and Darboven show, in turn, a high commitment to CSR and socially responsible and environment-friendly coffee sourcing practices. With regard to major selling outlets of sustainable coffee in Germany which are basically the mainstream retail like Rewe, Edeka, Kaiser's Tengelmann, Metro, Norma, Rossmann demonstrated low to middle commitment to disclose their sourcing practices and enhance a sustainable coffee sourcing. The discounter Aldi and Lidl, conversely, demonstrate a higher commitment regarding its organic and Fairtrade coffee sourcing. They are, however, not transparent with regard to the social and environmental conditions under which its conventional coffee is produced and sourced (Stiftung Warentest, 2009).

Although the mainstream retail shops and discounter which have seen a considerable growth in the organic and Fairtrade product range in recent years, remain the most important retail channels for both organic and Fairtrade products (with 57 % of total sales of organic products), there are more and more specialized retail stores like World Shops (Weltläden), organic and health food shops which exclusively sell natural and sustainable products. As seen in Figure 12 below, about 25 % of total sales of organic products were made through specialized retail trade in 2008 and the share of new specialized supermarkets is on the increase (Hamm & Rippin, 2009).

Since the beginning of this century the number of specialized organic supermarkets continued to grow. In 2008, there were already 18 organic supermarket chains with 6 to 45 outlets (Figure 13). In 2011, 16 new specialist organic shops and 50 organic supermarkets were opened. As seen in Figure 12, the biggest organic supermarket chains are Alnatura with 45 outlets, Denn's Bio with 28 outlets and Basic with 22 outlets in whole Germany. The other two among the top 5 are Vitalia, a health food store which has about 29 outlets

³⁴ The 4C Common Code Coffee Certification is a set of baseline standards to enhance economic, social and environment factors in coffee growing. However, there is no 4C label that makes it visible for consumers. For more information and actual members see: www.4c-coffeeassociation.org

³⁵ The study is based on 40 Corporate Social Responsibility (CSR) criteria. It was done by surveying 19 coffee companies and analyzing their coffee brands and with it their green coffee sourcing practices by evaluating companies responses to hidden customer inquiries, their internet presence and information on the packaging. The study was realized between 12/2008 and 04/2009. See also http://www.test.de/Kaffee-CSR-Werproduziert-oekologisch-und-fair-1772547-1771532/

and ebl, a natural food store with about 15 oultets in Germany (www.organic-market.info, 2012).



Figure 12: Sales channels for organic products (2008) in Germany (according to turnover and shares)

**Farm gates sales and box schemes
*** Bakeries and butchers
**** Drugstores, filling stations, home delivery services
Source: (Hamm & Rippin, 2009)

Figure 13: New organic supermarkets in Germany 2000 – 2009 (estimated)



Source: (www.organic-market.info, 2012)

Today about 3000 organic and 1700 health food stores sell organic products, but they are also increasingly available in all food stores (Strauch & Schaer, 2008).

Fairtrade products, on the other hand, are sold in 33.000 food stores, supermarkets, drug stores, discounters such as those mentioned above and more and more via mail-order companies such as, Otto, Puma and Gepa. There are about 800 World Shops which promote organic and fairly-traded products in Germany. But also the institutional (out-of-home) market is flourishing and sales of Fairtrade products such as coffee, tea, drink chocolate, wine, ice-cream, fruit juices and others increased by about 49 % compared to last year. Here, the number of canteens, cafeterias, restaurants, coffee shops, bakeries selling Fairtrade products rose by about 20 % to 18.000 outlets (Fairtrade Deutschland, 2011a, p. 14).

With regard to coffee, although Fairtrade coffee still represents a niche market of 2 % of total coffee sales, the expansion has been particularly evident at the retail level (about 18 % increases to 4.795 tons) and the out-door-market (about 42 % increase to 2.423 tons) compared to 2009. About 67 % of Fairtrade coffee sales were also organically certified. There is not just an increasing demand for the well-known coffee brands, but also the number of fairly-traded own coffee brands have found increasing diffusion in food stores and in gastronomic outlets (Fairtrade Deutschland, 2011a, p. 15). To give an example, in Germany the coffee company Starbucks changed all its espresso-based varieties to Fairtrade coffee in 2010 (Forum Fairer Handel, 2011).

4.2.8 Demand trends for organic and Fairtrade products

Since the demand for organic/Fairtrade and more in general sustainable products in Germany is increasing, several surveys have been conducted which analyze the motivations that mobilize consumers to change consumption patterns. Most studies found out that the motivations herein differ according to age, gender, education level, social status, and generations:

The recent published OTTO Group Trend Study 2011³⁶ on ethical consumption³⁷ in Germany revealed that the interest in ethical products has increased significantly since its previous studies in 2009 and 2007. While in 2009, for instance, only about 26 % of the surveyed consumer indicated that they buy ethical products *frequently*, there were already 41 % in 2011. And while in 2009, only 7 % were prepared to pay more for ethical consumption, the number rose to 44 % in 2011. The buying interest for ethical products is no longer limited to a small elite of better earners or cause-conscious consumers

³⁶ The OTTO Trend Study 2011 is based on desk-research, experts workshop, experts interviews, representative consumer telephone survey (n= 1000; age range: 14-74). See http://www.ottogroup.com/media/docs/de/studien/Otto-Group-Trendstudie-2011-Verbauchervertrauen.pdf, p. 49

³⁷ Ethical consumption is a consumption behavior where consumers place importance on ecological and social criteria when making their purchasing decisions. Ecological and social criteria include organically produced materials and ingredients, regionally produced products, good working conditions and fair wages, no child labor, etc. (definition translated from OTTO Trend Study 2009)

("LOHAS"), but ethical products are also increasingly gaining acceptance among mass consumers. According to the study, there were already eight in ten (84 %) consumers in 2011 who bought at least *casually* ethical products compared to six in ten (67%) in 2009. At the same time, the number of buyers who bought ethical products *rarely* or *never*, has halved from around one third of the interviewees in 2009 to around 17 % of the respondents in 2011 (B.G.W., 2011, pp. 5-10).

Hence, more and more consumers in Germany want to know where a product comes from and under what conditions it is produced. Sustainable certification labels ensure consumers that certain economic, social and environmental standards during production, processing, and distribution have been met. The knowledge of consumers about sustainable certification labels varies. However, according to an empirical survey realized by Henseleit (2011)³⁸, the BIO-label is very familiar to most interviewed people, since almost 80 % of the surveyed persons indicated that they know it quite well. Regarding the Fairtrade certification marks, more than half of the respondents have seen it and have an idea about its significance (Figure 14). Remarkable is that most of the respondents that knew the Fairtrade certification mark, also knew the organic label (Henseleit, 2011).



Figure 14: Knowledge about relevant organic and Fairtrade certification mark

Source: (Henseleit, 2011, S. 9)

A recent published market study by GlobeScan³⁹ carried out on behalf of Fairtrade International revealed that about 69 % of surveyed consumers know the Fairtrade label

³⁸ The author surveyed about 213 persons which were above 16 years old (average age: 36) and of which about 36 % are man and 64 % women. This reflects a typical distribution between sexes in making purchases. Most of respondents had an above-average educational level of at least A-Level and about 20 % of respondents had kids. See also http://ageconsearch.umn.edu/bitstream/114495/2/Henseleit.pdf

³⁹ GlobeScan Study 2011 is a comprehensive global study of 17,000 consumers in 24 countries carried out for Fairtrade International by the opinion research consultancy GlobeScan. See also: http://www.globescan.com/news_archives/flo_business/

and about 93 % of German consumer trust the Fairtrade mark to be a better deal to producers (Globe Scan, 2011). Moreover, among 407 analyzed sustainable brand names in Germany, Fairtrade was acknowledged first as being considered the most sustainable brand (brands & values, 2009). The high trust in Fairtrade products is reflected in rising Fairtrade sales figures in recent years. Despite the financial crisis, the Fairtrade revenues increased considerably in the last couple of years (Figure 15) and reached around 413 million Euros in 2010, a plus of 28 % compared to 2009. It went up by 17 % to around 187 million Euros just in the first half of 2011 compared to the previous year (Fairtrade Deutschland, 2011c).





Source: (HORIZONTstats 2012 adapted from Forum Fairer Handel, 2012)

The reasons for buying Fairtrade products are related to decent working conditions, social justice, environmentally-friendly and organic production, as well as a fair trade (Globe Scan, 2011). The growth of the Fairtrade market is due to the increasing product range, particularly supported by an increasing number of Fairtrade certified own brand products of the retail sector, and more than 26.000 outlets where Fairtrade products are sold (Fairtrade Deutschland, 2011c).

Not just Fairtrade products, but also the demand for organic products has gained increasing importance. As depicted in Figure 16, the statistics shows the amount of people buying organic products from 2007 to 2011. In 2007 there were 0.45 million people that bought almost exclusively organic products and 2,92 million people who predominantly bought organic products. In 2011, conversely, the number of people who exclusively bought organic products has doubled and the number of people buying predominantly organic products rose to 4,01 million people (VuMa, 2011).



Figure 16 Number of people buying organic products (2007-2011)⁴⁰

Source: (HORIZONTstats 2012 adapted from VuMA, 2011)

According to another representative population survey (n = 1,006 persons above 14 years old) carried out on behalf of the Federal Ministry of Food, Agriculture and Consumer Protection at the beginning of this year, the most important aspects for buying organic products are: the freshness and quality of products (61 %), avoidance of pesticide residues (59 %), the compliance of social standards and a reliable/fairer income for producers (49 %), and to make a positive contribution to climate protection (39%), among others. In addition, the reasons for buying organic products are for most of interviewed persons strongly related to the protection of animal welfare, supporting (regional) producer groups, contribution to environmental protection, but also self-interested reasons such as personal health benefits, security and a better taste of organically produced products. Most of organic products are bought in mainstream supermarkets (84 %) and discounters (63%), but also in natural food stores (47 %) and organic supermarkets (36 %). (BMELV, 2012, pp. 15-19)

As a result of an increasing demand for organic products, the sales volume of organic products almost tripled in the last ten years, reaching a sales volume of about 5,9 billion Euros in 2010 (Figure 17).

⁴⁰ Information on population: German-speaking population aged 14 and over Information on the entire sample:

^{2007: 23 532} respondents, extrapolation to 64.82 million persons

^{2008: 23 362} respondents, extrapolation to 67.03 million persons

^{2009: 23 165} respondents, extrapolation to 67.04 million persons

^{2010: 23 147} respondents, extrapolation to 70.51 million persons

^{2011: 23 022} respondents, extrapolation to 70.33 million persons

The values shown are based on the following studies:2007: Vuma 2008 and 2008: Vuma 2009; 2009: Vuma 2010; 2010: Vuma 2011; 2011: Vuma 2012. For more information on the methodology can be found at: http://www.vuma.de/de/die-studie.html



Figure 17: Development of organic food sales in Germany (without out-of-home market)

Source: (BÖLW, 2012, p. 18)

What stands out in all of these studies is that particularly women, the generation x (26-45 years) and the babyboomers (45-65 years) have an increasing interest in organic and Fairtrade products. They take the lead in the purchase of alternative products. However, also men and network kids (16-27 years) demonstrate growing interest. The number of ethical consumers among them has increased compared to the previous years. Remarkably is also, that most people who buy sustainably produced products are also those who have gained a higher education level and have access to information. (B.G.W., 2011; BMELV, 2012; Henseleit, 2011)

With regard to *organic and Fairtrade coffee consumption* trends, comprehensive studies are missing and there is a need to further analyze the alternative (organic/Fairtrade) coffee market in Germany. However, in order to give a general idea of the tendency towards organic/Fairtrade coffee purchase, out of 8419 persons that participated in an online inquiry⁴¹ carried out by the product-testing foundation Stiftung Warentest in 2010, about 43,78 % (3684) of respondents did agree that they buy organic/Fairtrade coffee *frequently* because a social and environmental-friendly production is important to them. About 27,14 % (2285) answered that they don't buy organic/Fairtrade coffee, but it makes sense to do so. Just about 14,24 % (1199) respondents stated that they don't buy these coffees because they are too expensive and 14,86 % (1251) because conventional coffee is also fine for them (Stiftung Warentest, 2010).

⁴¹ This inquiery is not representative. It gives just a general idea about the organic/Fairtrade coffee purchasing tendency. See also: http://www.test.de/vote/?ft=show&fd=vote_test_kaffee

4.3 Coffee sector in Mexico

4.3.1 Evolution of the Mexican coffee sector

Until 1989, Mexico was one of the main export countries of coffee, occupying the 3rd place in worldwide coffee production (FAOSTAT, 2011). Coffee at that time was the third greatest source of foreign exchange (after petroleum and automobiles) and represented 3 % of total exports and 42 % of total agricultural exports (Pérez Grovas et. al., 2001). About 760,000 hectares were planted with coffee of which about 66 % of coffee production came from producers with less than 10 hectares and about 44 % from producers with less than 5 hectares (Pérez-Grovas et. Al., 2001, p. 2, citing SAGAR, 1999, p. 36.).

Until that time, coffee production and comercialization in Mexico was controlled by INMECAFE⁴² - the National Coffee Institute of Mexico, which supported coffee production and commercialization among small farmers and supervised export quotas. INMECAFE played an important role in supporting coffee producers by forwarding technical, financial and investigation services and by participating actively in the purchase, storage, transport and sale of Mexican coffee. Hence, by that time, INMECAFE was the principal buyer and exporter of coffee produced by smallholders. Private national and international agents played a minor role in coffee production and exportation (Equal Exchange, n.d.; Pérez-Grovas, Cervantes, & Burstein, 2001, pp. 2-3). In the meantime, coffee production had become an important economic source of income for many smallholder farmers, particularly those in the states of Chiapas, Oaxaca, Veracruz, Puebla and Guerrero. Here, the land area devoted to coffee production expanded considerably during the time of state control, not only in mountainous zones, but also in lowland areas where high-quality coffee production is inadequate. Hence, Mexican coffee growers were more and more pushed to produce low-grade coffee in mass production by using fertilizers and pesticides (Jaffee D., 2007).

However, in Mexico like in other coffee producing countries, the suspension of the International Coffee Agreement (ICA) and, thereby, the abolishment of the quota system led to a deregulation of the internal market (Brown, Charveriat, & Eagleton, 2010). As a result, INMECAFE collapsed since the Mexican government decided to curtail state intervention in the coffee sector and withdrew its regulatory forces and subsidies in the first half of the 90s (Pérez Grovas et. al., 2001; Renard, 2010).

Into that came 1994 the North American Free Trade Agreement (NAFTA), in an effort to liberalize the trading market and eliminate trade barriers between Canada, Mexico, and the United States. With the NAFTA, the Mexican government withdrew its remaining agencies which supported the (coffee) farmers, with the purpose to attract Foreign Direct Investments (FDI) by the private sector that should modernize the countryside and convert low-yield farms (including coffee farms) "into highly productive and profitable commercial

⁴² INMECAFE (Instituto Mexicano de Café) was a federal government organization created in 1958 with the mandate to support, market and promote Mexican coffee production and sales through providing financial, technical assistance, investigation, transport, processing facilities, and marketing.

farms" (Dally, 2006). Though, this was not really the case since investments were rather made in manufacturing industries in the Northern part of Mexico and just a small part flow into modernizing agriculture (mainly in horticulture and livestock breeding), leaving behind small-scale coffee farmers in rural areas. (Dally, 2006)

The effect of the dismantling of the ICA and the entrance into the NAFTA was that the coffee industry entered a crisis with volatile price periods between 1989 and 2009 (see Figure 21 in Appendix I). Frequent low price periods affected the economic situation of national producers and, hence, the household revenues of half a million small farmers and their families. Meanwhile, the control of the coffee sector returned from state-control to the private sector, particularly to private intermediaries (export firms) and transnational companies. These had sufficient (access to) financial resources to grow internationally and to merge with national intermediaries and exporters, which could not survive anymore alone. Like that, some of the largest transnational (coffee) companies in the world like Nestlé, Philip Morris, Sara Lee and Procter & Gamble gained control over Mexican coffee production and commercialization. They thwarted any governmental programs that have sought to improve the quality of coffee for the national or international market and, hence, had an influence on the worsening situation of small-scale producers. In turn, some of these companies (like Nestlé) have promoted the expansion of inferior-quality (Robusta) coffee production and consumption in Mexico. They even have received import-permits to import this kind of low quality-coffee to Mexico which also has an effect on the low price level paid to producer (Pérez Grovas et. al., 2001, p. 4; Renard, 2010, p. 5).

This situation gave rise to the exploitation practices by predatory coffee brokers and intermediaries – also called *coyotes* in local parlance – which are financed by multinational companies to buy coffee from small-scale farmers and sell it to them. They took advantage of farmers' situation and exerted price pressures on coffee growers. Hence, coffee producers had to sell their coffee crops to a lower price than it took to grow it. As a result, the corresponding farm income decreased considerably and with it productivity per hectare dropped (on average from around 3,13 tons per hectare in 1989 to 1,80 tons per hectare in 2010 (SIAP, 1989, 2010) since producers have had no means to invest in their plantations (pest-control, weeding, fertilizers, plant renovation, etc.). This lack of investment impinged on coffee producers in ways that they have had to sell the few bags of coffee they have grown to low-quality markets at a low price level.(Renard, 1999, p. 340, In: Pérez-Grovas, Cervantes, & Burstein, 2001, p. 3).

Hence, given the fact that the market prices declined, government support ended, rapid structural adjustments were made, coffee producers lost access to basic extension services such as transport, processing facilities, financing and information about the market. Ever since, coffee farmers in Mexico have faced more and more challenges to maintain their source of subsistence from coffee. Thus, the situation of long periods of low and fluctuating prices and the restructuring in the international as well as national market led to:

- a decapitalisation and indebtedness of coffee farmers
- the replacement of coffee cultivation by drug or subsistence crops

- the abandonment or selling of coffee lands
- the migration out of coffee-growing regions to cities or the United States
- and more in general, to an increasing unemployment and, thus impoverishment rate in coffee-growing communities (Equal Exchange, n.d.; Pérez, 2010)

Moreover, in view of the fact that about 60 % of the worldwide coffee production nowadays is concentrated in the three countries Brazil, Vietnam and Colombia (USDA, 2010) and commercialization is controlled by a few multinational companies (like Nestlé) which concentrate their purchases in these three countries (Jaffee D. , 2007), more and more Mexican coffee producers have sought out for new opportunities in alternative niche markets. Among these alternative coffee markets – often also referred to as "sustainable coffees" – are, among others, gourmet, organic and fair trade coffees (Pérez, 2010).

Summarizing, as a consequence of the deregulation and the oligopolization of the coffee market as well as due to overproduction on an international level, participation of Mexico in global production has fallen considerably and coffee has lost its previous importance in agricultural exports. With regards to the latter, (green) coffee exportation in Mexico fell by more than half between 1989 and 2009 from around 265.919 tons in 1989 to around 128.746 tons in 2009, becoming in 2009 the twelfths largest exporter in the world after occupying the fourth place (in terms of quantity) in 1989 (FAOSTAT, 2011).

Out of this problematic situation, several grassroots organizations, cooperatives and other social enterprises arose, that searched for alternative strategies of survival and increasingly participated in alternative commercial trade schemes. Thus, with the help of such organizations, some small-scale producers have diversified their sources of income, for example: by planting also other crops than coffee; by establishing eco-tourism projects and by increasing the value added of coffee and selling it to the national market. Others, in turn, have opted for niche markets such as gourmet, organic and/or Fairtrade which allow coffee growers to get access to new consumer markets and commercialize their coffee at a reasonable price, thus keeping coffee production and commercialization as a mean of subsistence. Hence, these organizations were crucial to the survival of the coffee farmers and the appearance of alternative systems of coffee production and trade. (USDA, 2010; Barrera & Vargas, 2011)

4.3.2 The situation today

4.3.2.1 Conventional coffee production

In Mexico, coffee cultivation represents one of key activity because of its socio-economic and environmental importance. It is an income source for many small-scale producers, it generates foreign currency and employment, and has an increasing relevance when it comes to provide environmental services. Nonetheless, conventional coffee production has decreased considerably in the last two decades due to recurrent price crisis and the institutional transformations that affected coffee producers in Mexico in severe ways and aggravated the development level in coffee producing areas, (Sistema Producto Café, n.d.) At present, coffee occupies the sixth place in terms of area cultivated in Mexico (after corn, pasture, sorghum, bean, forage oat) with about 781,015.99 hectares of cultivated land (SIAP, 2010b). Coffee is one of the main income sources of the primary sector in the national economy and accounted in 2009 for 4,5 % of the agricultural value with regards to perennial crops. In the southern states, about half of the economically-active population work in the coffee sector and depend directly on coffee for their livelihoods of which about 65 % have an indigenous origin (Renard, 2010, p. 4).

There are more than 504.372 coffee producers (producer data differs in different sources) that generate coffee in the following 12 states in central and southern Mexico (assorted in order of importance): Chiapas, Veracruz, Oaxaca, Puebla, Guerrero, Hidalgo, San Luis Potosi, Nayarit, Jalisco, Tabasco, Colima and Queretaro which together cover 398 municipalities. The states of Michoacan, Morelos and Mexico have very low level of coffee production, this is why there are not mentioned in the tables below (Sistema Producto Café, n.d.).

State	Producers	Average	Average	Percental
	Per state in	surface	surface	variation
	2010	(ha) in 2010	(ha) in 1992	
Chiapas	180.856	1,39	3,1	-123 %
Veracruz	89.049	1,57	2,3	- 47%
Oaxaca	102.159	1,27	3,1	-144 %
Puebla	47.784	1,37	2,0	-46 %
Guerrero	22.544	1,78	4,8	-170%
Hidalgo	34.996	0,69	1,7	-146%
Jalisco	1.413	1,89	3,8	-101%
Querétaro	329	0,7	1,4	-100%
Colima	859	1,55	2,8	-81%
Tabasco	1.054	0,83	3,5	-322%
San Luis Potosí	14.254	0,79	5	-533%
Nayarit	5.315	3,1	1,8	
Total	504.372	1,37	2,7	

Table 11: Producers per state and comparison of average surface

Source: (Data from INMECAFE, 1992 y AMECAFE 2011, cited in SAGARPA-COFUPRO-UACH-SPC-AMECAFE-INCA, 2011, p. 50)

As seen in Table 11, the average production surface has decreased by almost half from an average of 2,7 ha in 1992 to about 1,37 ha per producer in 2010. Thus the number of small-holding producers has increased, while the average surface of the coffee plots has decreased significantly, for instance in the states of Chiapas, Oaxaca, Guerrero, Hidalgo, Jalisco, Queretaro average coffee surface has been reduced by more than double. The states of Tabasco and San Luis Potosí stick out, since average surface of coffee plots in these states have decreased by 322 % and 533 % respectively. In fact, as seen in Table 12 below, of the total producers in the country about 98 % have less than 5 hectares; about 88 % less than 2 hectares and almost 70 % have less than 1 hectares of land. Small-scale producers with less than 1 hectare of coffee land cover about 35 % of the total surface cultivated by coffee in Mexico. On the other extreme, just about 2,04 % of the larger-scale coffee producers have more than 5 hectares of coffee land, but they cover
almost 21 % of land cultivated by coffee. This clearly shows that the land has been splitted up either by inheritance among family members or parts of lands were sold as a consequence of the coffee crisis (SAGARPA-COFUPRO-UACH-SPC-AMECAFE-INCA, 2011, p. 51).

Size of coffee land (ha)	Producers	% of producers
Less than 1,00	375.550	69,42 %
1,01 – 2	99.977	18,48 %
2,01 – 5	54.364	10,05 %
5,01 – 10	8411	1,55 %
10,01 – 20	1.673	0,31 %
20,01 – 50	641	0,12 %
More than 50	342	0,06 %
Total	540.958	100 %

Table 12: Stratification of coffee lands in Mexico (2011)

Source: Data from AMECAFE-SIAP, 2011 cited in (SAGARPA-COFUPRO-UACH-SPC-AMECAFE-INCA, 2011, p. 51)

According to the last statistics (2010) of the Coffee Product System⁴³ (Sistema Producto Café), the states with the greatest importance in coffee production and commercialization are Chiapas, Veracruz, Oaxaca and Puebla representing about 90 % of coffee production and about 83 % of coffee surface in Mexico (Table 13) (Sistema Producto Café, n.d.).

State	Area of	Area of	Production	Productivity	Share in
	coffee	coffee	(Ton)	(Ton/Ha)	production
	cultivation	harvested			
	(Ha)	(Ha)			
CHIAPAS	255,285.19	253,541.19	546,689.47	2,16	41,03 %
COLIMA	2,633.50	2,526.50	2,557.10	1,01	0,19 %
GUERRERO	54,735.02	53,914.22	38,214.90	0,71	2,87 %
HIDALGO	26,333.26	25,949.26	29,219.11	1,13	2,19 %
JALISCO	4,497.00	4,467.00	5,704.84	1,28	0,43 %
NAYARIT	20,097.42	20,097.42	27,325.06	1,36	2,05 %
OAXACA	165,971.35	153,105.35	154,595.39	1,01	11,60 %
PUEBLA	75,045.23	51,536.73	135,986.87	2,64	10,21 %
QUERETARO	300.00	298.00	268.20	0,90	0,02 %
SAN LUIS	21,283.00	21,283.00	15,492.48	0,73	1,16 %
POTOSI					
TABASCO	1,040.16	1,040.16	635.00	0,61	0,05 %
VERACRUZ	153,311.07	153,173.07	373,725.62	2,44	28,05 %
	781,015.99	741,410.69	1,332,263.19	1,80	100 %

Table 13: Coffee production in Mexico in 2010

Source: (SIAP, 2010a)

⁴³ The Coffee Product System (Sistema Producto Café) has integrated all actors involved in the coffee production chain together in one leading organization that participates in a set of policies, strategies and actions realized in the production chain. It has established itself as a plural and inclusive body within the legal framework with own assets. See also http://www.spcafe.org.mx/wb3/wb/spc/spc_spc

Of total production, about 85% is "washed" Arabica coffee (wet-processed), 12% are sundried "natural" Arabica (sun-dried and dry-processed) and the remaining 3% are Robusta coffee (Sistema Producto Café, n.d.). Within the washed Arabica, Mexico is a prime producer of "other milds". Due to its favorable topography, climate and soils conditions Mexican producers grow different kinds of Arabica coffee varieties (Typica (33 %), Caturra (26 %), Bourbon (17 %), Mundo Novo (10 %), Garnica (6 %), Catuaí (3 %), Catimor (2 %)) (Pérez Grovas et. al., 2001, p. 13). More than one-third (35 %) of coffee is grown in altitudes above 900 meters which is the best quality of coffee that can be grown (highland coffee). Most of Mexico's coffee production (43,5 %) is "prima lavado" (prime washed) coffee which is grown at altitudes between 600 and 900 meters and is of low-to-medium quality, the rest (21,5 %) are grown in lowland areas below 600 meters where coffee of inferior quality is produced (Sistema Producto Café, n.d.).

In Mexico there are five main production systems listed from the most diverse traditional polyculture to the most technified monoculture growing method (see Figure 23 in Appendix I) depending on the site conditions and the state of the plantation. The first two types are traditional shaded agroforestry systems with native trees and are cultivated principally by small-scale farmers, most of which are indigenous groups. The third is a commercially oriented polyculture shaded system, and the last two are modern shaded and unshaded monocultures. Just about 10 % of the Mexican coffee land has been converted to sun-grown mechanized cultivation system, while more and more coffee growers were forced to abandon or to clear their traditional shade-grown coffee land for other purposes since coffee growing was not profitable anymore during the coffee crises (Moguel & Toledo, 1999, S. 11-21). However, coffee production in traditional polyculture systems dominates and characterizes small-scale coffee cultivation in Mexico.

4.3.2.2 Commercialization (Exportation) and internal consumption

At international level, Mexico is currently the seventh largest producer of conventional coffee after Brazil, Vietnam, Colombia, Indonesia, India, Ethiopia, accounting for 3,21 % of total global production (FAS-USDA, 2011). Colombia, which is among the top three coffee producing countries, suffered heavy production loss in last several years due to heavy rains, coffee rust and the coffee cherry borer. Mexico, in contrast, has raised its production from 3,7 million in the cycle 2010/2011 to 4,3 million bags in the cycle 2011/2012 due to improved yields from renovated trees and recovery of coffee production from cold temperatures in the State of Puebla in the previous year (FAS-USDA, 2011). In March 2012, coffee represented about 6,4% of total agricultural exports (INEGI, 2012).

Table 14: Mair	destinations of	coffee from	Mexico
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Destination	Share in	
	Exports	
United States	63,76 %	
Belgium	16,42 %	
Germany	4 %	
Italy	2,55 %	
France	1,91 %	
Japan	1,58 %	
Canada	1,57 %	
Sweden	1,29 %	
Netherlands	0,93 %	
United Kingdom	0,80 %	
Others	5,19 %	
Total	100 %	
Source: (AMECAFE, 2012, p. 1)		

In May 2012, Mexico exported coffee to 42 countries', of the five continents, of which the greatest part went to the United States. Other importing destinations among the top ten importing countries of coffee from Mexico are found in Table 14. Just 1 % of total coffee exports were toasted and grounded coffee, about 15 % was exported internationally as industrialized products, thus about 84 % were exported as green coffee (AMECAFE, 2012, p. 1).

As seen in Table 15, total production and total exports of coffee from Mexico has decreased considerably in the last 10 to 15 years, while coffee imports and

domestic consumption seems to have more than threefold with regards to imports and doubled with regards to domestic consumption. Mexico's average exports in the last decade accounted for more than 80 % of national coffee production (FAS-USDA9 1997; 2002; 2007; 2012).

(
Cycle	Beginning stocks	Total Production	Total Imports	Total supply*	Domestic consumption	Total Exports	Ending Stocks
1996/1997	51	5,600	80	5,731	970	4,500	0
2001/2002	0	5,500	0	5,500	1,000	4,700	0
2006/2007	700	4,200	190	5,090	1,356	3,500	234
2011/2012	89	4,300	370	4,759	2,000	2,600	159
Evolution since 1996/1997		-1,300	+290	-0,972	+1030	-1,900	
Evolution since 1996/1997 in %		-23,21%	+362,50%	۔ 16,96%	+206,19 %	-42,22%	
Evoluation since 2001/2002		-1,200	+370,000	-0,741	+1,000	-2,100	
Evolution since 2001/2002 in %		-21,43%	+370 %	۔ 12,93%	+200%	-46,67%	

Table 15: Coffee figures in five-year sections (in thousand 60-kg-bags)

* Beginning stocks + Total production + Total Imports

Source: Own elaboration with data obtained from FAS-USDA9 1997; 2002; 2007; 2012

As a result of the coffee crisis, caused by the fall in international prices in 1999 until 2001 (see Figure 21 in Appendix I), exports of coffee from Mexico has more than halved from its maximum point of 5.3 million bags (60 kg each) in 2000 to almost 2 million in 2005 (Figure

18) (ICO, n.d.; ICO, 2007). This fall in production and exportation within this period of time resulted as a consequence of the abandonment of coffee plantations together with the absence of effective policies to promote the sector, and by the damage caused by weather conditions (e.g. in the state of Chiapas). The decline in export rates by 15,9 % in the crop year 2007/2008 is due to the biennial cycle of the crop cycle. Coffee bushes tend to produce less grain the following year after a very productive crop. Moreover, the 2006/2007 exports of 2.7 million bags (60 kg) were based on the strength of the market and government incentives to producers (Ocana, 2007; ICO, 2007).





Source: Own elaboration with data from ICO, n.d.; ICO, 2007

Although after 2006/2007 the rise in prices had an impact on a slight increase in production, the overall export importance has declined by almost half of its previous export rates even though it is still one of the main agricultural export products (FAS-USDA, 1997, 2011). Domestic production totaled 4.3 million bags on average in the coffee cycle 2011-2012, of which approx. 40 % (2.6 million bags) are exported as seen in Table 14, principally to Northern America, some Western countries of the EU, Japan and Australia (FAS-USDA, 2011; AMECAFE, 2012).

4.3.2.3 Domestic consumption

As seen in Table 15, above domestic consumption in Mexico shows a constant increase between the periods 1996/1997 and 2011/2012. Coffee consumption has more than doubled from 1996/1997 with 970 thousand 60-kg bags to about 2 million 60-kg bags in the period 2011/2012 (data taken from USDA). According to Arturo Hernandez, the president of the Mexican Coffee and Specialty Coffee Association (Asociación Mexicana de Cafés y Cafeterías de Especialidad, A. C (AMCCE)), the increase in coffee consumption is due to the increase of cafeterias and coffee bars (about 75000)

establishments in 2009) in the last decade that are used as a place to socialize, work, study and meet for business purposes (Ruelas, 2009).

According to an online poll on coffee consumption in cafeterias realized by Profeco in 2009, in which they obtained 971 responses⁴⁴ from all states of Mexico (56% female and 44% male), about 95 % of the respondents affirmed that they drink coffee: at least 1 to 3 days per week (14 %); 4 to 6 days per week (28 %) or on a daily basis (53 % of the respondents). Just about 5 % drink coffee sporadically or never. About 29% of respondents drink coffee in coffee bars, but there is also an increased at work or on the street (42%) (Muñetón, 2011; Ruelas, 2009).

In another study about *coffee consumption habits in the internal market* realized by IPSOS Marketing on behalf of AMECAFE in February 2010, 610 persons in 2009 and 606 persons 2010 were interviewed in the cities of Monterrey, Guadalajara and Mexico City. About 58 % of the interviewed persons in 2010 responded to drink coffee, about 5 % less than in the previous year. Most of the coffee drinkers are women (53 %), and about 47 % men. The remaining 42 % were non-consumer of which about 21 % never consumed coffee and 21 % abandoned coffee consumption (AMECAFE (IPSOS), 2010, pp. 3-5). Among the coffee drinkers, 58 % drink it on a daily basis in form of soluble coffee (57 %), grounded coffee (23 %) or both (15 %). Regular or frequent coffee consumption in the out-of home market, for instance in convenience stores (like Oxxo, 7 Eleven, Extra), at work (vending machines (Nestlé)), in restaurants (Vips, Sanborns, etc.) and in coffee shops (Starbucks, Coffee station, etc.) has increased considerably if compared to the figures from 2009 (see results in Figure 24 in Appendix I). In 2010, particularly young people increased their coffee consumption (AMECAFE (IPSOS), 2010, pp. 7-9).

The reasons for the higher number of soluble coffee drinkers are given: since instant coffee is easier and more quickly to prepare; because it is a custom in the family or because it is cheaper than ground coffee. This is also reflected in the fact that about 42 % of the interviewed persons have not considered the possibility to buy a coffee machine, just about 19% does have and 39% already have one. However, the number of respondents that acknowledged the reasons mentioned for soluble coffee consumption has declined from 2009 to 2010 (AMECAFE (IPSOS), 2010, pp. 10, 22).

About half of the coffee drinkers responded in 2009 as well as in 2010 that they do not know the origin of their coffee. More than 90 % in 2009 and 2010 that knew the origin responded that the coffee was national and just about 8-9 % imported (AMECAFE (IPSOS), 2010, p. 11). Outstanding in this study is that there are several negative ideas associated with coffee consumption, e.g. that it is harmful to the health. This conception has increased by 11 % from 2009 to 2010. At the same time, more and more people recognize the health benefits such as the antioxidant, anti-stressing and energizing effects (among others) that coffee consumption. Nonetheless, even knowing the benefits of coffee

⁴⁴ The age of most of the respondents ranged between 26 and 45 years (64 %) of which most are employees (56%) with at least a bachelor degree (59 %)

consumption, only 17% of the non-coffee drinkers interviewed demonstrated their intention to take coffee in the future (AMECAFE (IPSOS), 2010, p. 27).

The same study about drinking habits in Mexico was realized in 2011 and reveals that between 2010 and 2011 the demand of coffee rose by about 13 % at the national level. As in the previous years, the increase can especially be noted in convenience stores and coffee shops which recorded an increase of 30 % just between 2010 and 2011. While in 2010 about 58 % of the respondents indicated that among the beverage options presented (energy drinks, soft drinks, milk, chocolate, tea and water, among others), they would prefer coffee; in 2011 there were already 71 % who favored coffee. About 62 % of the respondents indicated that they drink coffee on a regular basis and about 48 % on a daily basis. Among the important points revealed by the study are that consumers are more aware of the benefits of coffee and its health attributes. Moreover, coffee is seen as a mean to socialize as about 66 % of the coffee drinkers take it when being with friends and family. Most consumers (53 % in 2011 compared to 46 % in 2010) responded that they know the origin of the coffee they buy, and of these over 86 % (compared to 92 % in 2010) prefer the Mexican beans. More than 85 % of the consumers consider that Mexican coffee can compete with coffee from other countries in terms of quality, mainly due to its characteristics such as flavor, color and taste⁴⁵ (SAGARPA, 2011a).

These studies show that consumers in Mexico are more and more aware of the benefits that coffee consumption provides not just related to the health but also related to the different types and qualities that exist in Mexico. Hence, according to SAGARPA, coffee consumption has increased to around 1,8 million 60-kg bags in 2011, representing an annual per capita consumption of estimated 1,3 kilograms (SAGARPA, 2011b) in comparison to about 0,4 to 0,5 kilograms per capita, now 15 to 20 years ago. This is especially due to: the increasing number of coffee bars, international and national coffee shop franchising systems in the country such as Starbucks, Italian Coffee, Café Punta del Cielo and other large conglomerates that entered the coffee (shop) market (e.g. Coca Cola, Unilever). In addition, there are other large food and non-food chains (e.g. bakeries, restaurants, bookstores, cinemas, etc.) as well as some producer organizations (like CEPCO in Oaxaca with its coffee shop "La Organización") that elaborated their own coffee concepts in order to reach the final customer directly without intermediaries. The buildup of coffee bars has contributed to:

- a change in the quality of coffee consumed in the country
- an improvement in preparation methods
- give an individual and personalized touch to each coffee cup
- create an alternative market for the producer
- create an area for social relations
- an increase of coffee consumption and new coffee drinkers in the country
- educate people about coffee

⁴⁵ Note that the Mexican coffee has two denominations of origin: Chiapas, published in the Official Journal of the Federation on November 2, 2006, and Veracruz, dated August 12, 2003

 create new professions (barista) and commitment with the sector (Article presented in the seminar "El café, del campo a la taza: situación y perspectivas en México", UNAM Acatlán (Fujigaki, n.d.)).

Thus, there is no doubt that coffee consumption in Mexico is on an increasing trend and that the consumption habits are slowly changing. Nonetheless, the per capita consumption of coffee of about 1.3 kg in Mexico is very low compared with other producing countries such as Brazil which consumes on average about 5,2 kg per capita per year or consumer countries like Nordic Europe that consume on average between 8 and 12 kg of coffee per person per year (SASI Group and Mark Newmann, 2006). Thus, there are several challenges and opportunities to reach such a consumption level within the domestic coffee market in Mexico (will be discussed later).

4.3.2.4 Institutional framework and current public policies towards the coffee sector in Mexico

Since the dissolution of the coffee state organization INMECAFE in 1989 and the structural adjustments in policy during the following years, measures to support the coffee sector in form of public programs that offered training, credits, subsidization, technical assistance, investigation, insurance against natural disasters, marketing and commercialization assistance, have drastically been cut. The immediate consequences was that national brokers and exporters went out of business and/or were bought by large private companies, small-scale farmers could not compete anymore with large-scale producers, and in general Mexico – as one of the major coffee producer country - lost considerably in international market share (Pérez Grovas et. al., 2001, p. 33).

To counteract the effects of the worst price crisis in history (1999-2004) and as a response to the increasing social movements and economic instability in coffee producing areas, the different economic actors revealed the importance of the need of an institutional response. As such, the multi-sectoral advisory body, the Mexican Coffee Council (Consejo Mexicano del Café A. C. (CMC)) – a civic association - was created which should serve as the responsible technical agency for the operation of programs to support coffee producers in coordination with state and regional councils. This organization acted in part as a replacement of the processing, transportation and marketing functions of INMECAFE, whose power with regard to price guarantees, processing and marketing programs was restricted in comparison to INMECAFE. This council was later (in 2005) transformed in the Coffee Product System with the Mexican Association of Coffee Production Chain (Asociación Mexicana de la Cadena Productiva del Café A.C. – AMECAFE) that was constituted as a civic association with legal personality and which should function as the juridical figure of the government within the Coffee Product System (Sistema Producto Café, n.d.).

Various institutional actors form part of AMECAFE and the Coffee Product System that conform the coffee chain in Mexico such as state-level producer associations ((CNOC⁴⁶

⁴⁶ Coordinadora Nacional de Organizaciones Cafetaleras

(small); CMPC⁴⁷ (medium); industry associations (ANACAFE⁴⁸, AMEC⁴⁹), state-level advisory councils (Consejos Estatales) in the producing states. Since these organizations do not have adequate financial recourses, their main function is to lobby for governmental resources. Hence, the institutional framework that conform the coffee chain in Mexico is complex and since there is no adequate financial support from the government and a lack of overall consensus among these organizations, they lack the ability to develop and implement effective support programs that the coffee sector urgently needs (SAGARPA-FAO, 2007, p. 60).

Some of the programs and public policies that were created after the international price crisis in 2001/2002 are shortly presented in the following:

- Register of National Coffee and Information System of the National Coffee (Patron Nacional Cafetalero (PNC) y Sistema Informático de la Cafeticultura Nacional (SICN)) (since 2002/2003). PNC is a platform for the identification of individual producers through a geo-referenced registration of each producer as well as some technical and socio-economic data of their farms. SICN is an information system that is aimed to register main transaction data during the (export) commercialization process - from the initial sale by the producer until reaching customs and the ports of exit. This program serves as a mean to trace the commercial transactions of coffee produced in the country (SAGARPA-FAO, 2007, p. 39).
- Program for the Support of Coffee Production and Quality Improvement in • Mexico (Fomento Productivo del Café y Mejoramiento de la Calidad del Café de México) (since 2002) is a direct support program that transfers a certain amount of money directly to the producers (if registered in the PNC) according to their coffee land surface. Its objective is to contribute to the intensification of farm management practices in order to contribute to the productive reconversion of the coffee plots, to improve the coffee quality, and to help producers that differentiate themselves through organic certified production. For that purpose, there are two forms of support: per hectare and per producer. The per hectare modality is directed to producers who have between 1 and 10 hectares of which those above 600 meter above sea level receive 900 Mexican Pesos (MXN) per hectare, and those below 600 meter above sea level about 600 MXN per hectare. Those producers having less than 1 hectare get a fixed support per producer of 300 MXN if they have less than 0,5 hectares and 600 MXN if they have between 0,5 and 1 hectare. (SAGARPA-FAO, 2007, p. 43; SAGARPA-COFUPRO-UACH-SPC-AMECAFE-INCA, 2011, p. 79)

⁴⁷ Confederacion Mexicana de Productores de Café, A. C.

⁴⁸ Asociación Nacional de la Industria del Café A.C.

⁴⁹ Asociación Mexicana de Exportadores de Café A.C.

- Fund for the Stabilization of Coffee Price (Fondo de Establilización del Precio del Café) (since 2002) is a mechanism of stabilization of income for producers during low price periods. Depending on the evolution of the international coffee price at the New York stock-exchange, it establishes a certain price reference that can represent three situations: (1) the international price is quoted at the time of commercialization below the price reference. In this case, the producer gets the difference up to 20 US-Dollar per quintal and up to 20 quintals per registered hectares; (2) the coffee price is quoted close to the price reference, in which case no transactions are made and (3) the international coffee prices is above the reference price which means that a certain amount of producers income from coffee sales is retained to recover the fund. This fund is directed to all producers that form part of PNC and have registered their coffee sales in SICN. (SAGARPA-FAO, 2007, p. 40; SAGARPA-COFUPRO-UACH-SPC-AMECAFE-INCA, 2011, p. 77)
 - Support to Producer Income and Certainty (Apoyo al ingreso del productor y certidumbre). Since the majority of coffee producers sell their coffee before being processed to green coffee as coffee cherry or as parchment (and hence the price on the exchange market and the Stabilization Fund is not relative to them), this fund acts as an mechanism to manage the risk associated with the price received by the producer. It is an instrument to increase the minimum price that can be received in periods of low prices and reduces the variance in their income in future cycles. Thus, producers can receive a compensatory transfer when prices decline and have to recover these when prices are high. (SAGARPA-COFUPRO-UACH-SPC-AMECAFE-INCA, 2011, p. 78)
- Removal program of low quality coffee (Retiro de Café de Calidades Inferiores) (2002). This program was created in 2001 as agreed with the ICO and five other countries to remove low quality coffee from the national and international market. Mexico committed itself to remove about 5 % of the lowest quality coffee from the market. The purpose was to send signals to the market about quality improvements and thus support a higher (national and international) demand for Mexican coffee. This should work by discounting 2 % of the value of the producers coffee sale by the intermediary which in turn had to deliver 5 % of the volume to the warehouses designated by the CMC. Later, the producer that participated in this program got 1,5 times the value before discounted back. Unfortunately, several operating problems and a lack of distribution of the program among producers and intermediaries were the reasons (among others) for the failing of this program at the end of the 2003-2004 cycle (SAGARPA-FAO, 2006, pp. 59-60).

Promotion of Coffee Consumption in Mexico (Promoción de consumo de Café de México) (2002). This program was implemented as an intention to increase coffee consumption in Mexico from 0,6 kilogram per capita during the last years of the 90s to about 2 kilograms per capita and to improve the image of Mexican coffee in the international market. However, the measures planned such as to promote Mexican

coffee consumption at local, regional, national and international events, the distribution of advertising material and other public relation strategies communicated through the media, failed to reach the objective and the program has so far not been continued. (SAGARPA-FAO, 2007, p. 60)

Summarizing, although some of the government programs towards the sector have continued until the present, they have just undergone partial decentralization and the programs are implemented rather from a social development than from an economic and agricultural support perspective. Thus, they are more focused to provide technical and credit assistance rather than processing and commercialization support. The policy programs implemented by the government are directed towards ensuring the survival of small producers, compensating them in times of low prices, instead of creating a long-term national strategy.

As a consequence, processing and commercialization of coffee in Mexico passed to be dominated by big transnational coffee trading companies such as AMSA (ECOM Trading); Cafés California (Neumann Group); BECAFISA (VOLCAFE) and Nestlé. These transnational companies (TNCs) have enjoyed an empowerment in their role in coffee commercialization from Mexico and their interests are more protected by the national organism AMECAFE than those of the producers themselves (F. Villegas, personal communication, April, 29, 2012). Moreover, these TNCs have the power to prevent the implementation of a national strategy and public policy measures that could bring the sector forward with regard to improve coffee quality and hence the access of producers to higher prices as well as to increase internal consumption (CEPCO, 2011, p. 17).

4.3.3 Importance of alternative (organic/Fairtrade) coffee

4.3.3.1 Key trends organic and Fairtrade coffee in Mexico

As seen in the map below, several producers in the Southern and to a lesser extent in Central coffee regions have specialized in production and trade of alternative (or differentiated) types of coffees such as certified organic and Fairtrade coffee Hence, major states for organic coffee cultivation in order of importance are: Chiapas, Oaxaca, Veracruz, Guerrero and Puebla with some producer cooperatives participating in the Fairtrade scheme in this regions (Figure 19) (Pérez, 2010).



Figure 19: Alternative systems of coffee in Mexico

Source (Pérez, 2010, p. 91)

Most producers that participate in organic and Fairtrade certification are organized (which is a requisite for partipating in Fairtrade), most of which are from indigenous communities. Well-known organizations in the organic coffee market that are also Fairtrade-certified are for example, UCIRI⁵⁰, Majomut⁵¹, La Selva⁵², Tosepan Titataniske⁵³, among others. They have reached access to increasing alternative coffee consuming markets like the US and European countries where they have established contacts with diverse roaster clients. Through the success of these organizations, organic coffee production and the participation in Fairtrade markets has considerably augmented in the last couple of years:

Organic cultivation of coffee has increased significantly in the last decade, from about 70,838.08 hectares in 2000, to 147,136.74 hectares in 2004/2005 and 185,192.95 hectares in 2007/2008. This represents an increase of about 260 % in organically managed coffee surface since 2000, an average annual growth rate of more than 37 %. While in 2000, organic coffee cultivation participated by about 10,44 % of total coffee surface , in 2004/2005 it was already almost 19 % and in 2007/2008 almost 24 % of total coffee surface that was cultivated organically (see Table 18 in Appendix I)

⁵⁰ Union de Comunidades Indigenas de la Region del Istmo, Oaxaca

⁵¹ Unión de Ejidos y Comunidades Cafeticultores Beneficio Majomut de R.I.C.V., Chiapas

⁵² Unión de la Selva, Chiapas

⁵³ Unión de Cooperativas Tosepan, Puebla

(CIIDRI/CONACYT, 2008, p. 10). In some states, organic coffee even accounts for almost the whole organic agricultural area, for example in the states of Chiapas (90 %), Oaxaca (85,69 %), and Querétaro (99,97 %) (CIIDRI/CONACYT, 2008, pp. 9-12). Moreover, about half of the surface cultivated by main organic crops in Mexico was in 2007/2008 dedicated to coffee (Figure 20) (CONACYT/UACH, 2009).



Figure 20: Surface of the main organic crops (in hectares and percentage with regard to the total organic surface

Source: (CONACYT/UACH, 2009, p. 23)

An important driver for the increase in surface of organic coffee cultivation after the second half of this decade (2005-2007) was due to the relatively low NY coffee prices (Figure 21 in Appendix I). Hence the price paid for organic coffee was between 15 and 20 US Dollars above the conventional coffee price at NY price and about 155 US Dollares per *quintal* (46 kg of green coffee) for organic coffee which is certified as Fairtrade. Moreover, the interest in promoting organic production is mainly due to the external demand, which has influenced considerably the structure and the participation in organic certification of products such as coffee. (Cruz, Schwentesius Rindermann, Rulfino, & Gómez Tovar, 2010, págs. 25-26)

The first organic coffee certified by a third-party came from a small production farm called *Finca Irlanda* in Chiapas during the 60s. Since then, third-party certification expanded not only to other crops but also to other regions in Mexico and the world (Akaki, 2010, pp. 71-72). Today, there are twenty-one agencies involved in organic certification in Mexico. With the exception of CERTIMEX⁵⁴, all of these agencies are based in foreign countries – 11 in the United States, four in Germany, one in Italy, one in Switzerland, one in Sweden and

⁵⁴ CERTIMEX (Certificadora Mexicana de Productos y Procesos Ecológicos) is the first and only local certifying agency in Mexico

one in Guatemala. CERTIMEX is with almost 26 % of the production units certified (74 % of organic production are certified by foreign certification agencies), the most important certifying agency in the country (CONACYT/UACH, 2009, p. 65). The local certification agency has to pay each year an accreditation fee to international certification bodies to be accredited. Certification is done in function of the number of producers in the group and the programs to which they want to adhere (EU, Japan, US) (T. R. Santiago, executive director CERTIMEX, personal communication, May, 1, 2012).

Since 2006, the Mexican government's involvement in organic production has increased considerably. This is shown by the implementation of the "Organic Products Law" (Ley de Productos Organicos) at the beginning of 2006 and the National Council for Organic Production in 2007. However, since the Guidelines for Organic Operations⁵⁵ stuck for being reviewed by SAGARPA, the regulatory framework is not comprehensive and valid (Salcido, 2011, p. 3). Hence, organic production is still not recognized at the national level, since there is a lack of law guidelines that prevent having an official Mexican "organic" certification label (L. M. Villanueva, personal communication, May, 23, 2012).

With regard to Fairtrade certification, the small-producer cooperative UCIRI in Oaxaca was not only one of the first that participated in organic coffee production and certification (through the German certifying agency NATURLAND⁵⁶) but initiated also the fair-trade movement and introduced the Fairtrade seal, Max Havelaar. Thus, UCIRI was the first organization being Fairtrade certified (Boersma F. V., 2002, p. 3). In the meantime, about 44 coffee producer organizations (41 Arabica coffee producers, 2 not specified coffee producers and 1 Robusta coffee producer) and 14 trading organizations (13 of coffee Arabica and 1 of not specified coffee) in Mexico are Fairtrade certified and produce and commercialize coffee through Fairtrade channels (complete list of FLO-certified coffee organization in Table 22 in Appendix I) (FLO-Cert GmbH, 2012).

In the meantime, Mexico has become the world's largest producer of organic coffee and was in 2009-2010 with 9,500 million tons the third world's largest producer country of Fairtrade organic certifiable coffee (after Peru and Indonesia) (CIIDRI/CONACYT, 2008; Fairtrade International, 2011).

4.4 Case study area: Oaxaca and Huasteca Sur

The importance of coffee in the lives and the economy of Mexico were subject to 18 interviews among which 10 were producers of the regions of Oaxaca and Xilitla. The geographic locations and some of the socio-economic and environmental characteristics of these two coffee regions are presented in the following:

⁵⁵ "The Guidelines for Organic Operation" will provide the legal framework and standardization for organic production and commercialization in Mexico including the establishment of labeling requirements for organic products, among several other important policies related to the organic sector.

⁵⁶ NATURLAND is accredited by IFOAM, the European Union and the United States.

• Oaxaca

Oaxaca is located in Southwestern Mexico and is the second largest coffee producing state at national level, with a surface of 165,971.35 hectares (Table 13) of coffee cultivation with an estimated production of 154,595.39 tons (Table 13) which represents about 11,6 % of national production. Oaxaca has with about 1,01 tons per hectare (Table 13) among the lowest productivity rates in Mexico. About 90 % of the total producers 102.159 producers have less than 2 hectares. More than half of the producers have their coffee plots above 900 meters a.s.l. (CEPCO, 2011). There are about 7 coffee producing regions in Oaxaca which are: Canada region, Istmo Coast, Mixteca, Northern Highlands (Sierra Norte), Southern Highlands (Sierra Sur), and the Papaloapan region which has about 150 municipalities. There are different varieties cultivated such as Typica, Pluma Hidalgo, Bourbon, Mundo novo, Catuai, Otros. *Pluma Hidalgo* is a municipality in the East of the Costa Region in Oaxaca. It forms part of the Southern highland and the coffee variety from the region is named after Pluma Hidalgo (or vice versa) which is known for good quality coffee (CEPCO, 2011, pp. 41-43).

In Oaxaca, about 300.000 people work and depend directly or indirectly from coffee production and commercialization. The coffee crisis has led to a deterioration of living conditions of most coffee producing families with regard to food security, health and education, which is why there is an increasing migration from the region. Most of the people that work in coffee regions are indigenous people that speak about 12 indigenous languages (CEPCO, 2011, p. 43).

Due to the confluence of the Sierra Madre Oriental and Occidental in the state of Oaxaca, there are two slopes of coffee production with own characteristics and microclimates. This is why it is possible to produce different qualities of coffee. Since a great part of coffee is organically grown, organic coffee production plays an important role in the provision of water, carbon sequestration, protection of biodiversity, protection of soils, protections of watersheds and regulation of microclimate (CEPCO, 2011, pp. 43-44).

• Xilitla – Huasteca Sur

Xilitla is a municipality in the southern Huasteca (Huasteca Sur) region located in the north-central state of San Luis Potosí. The southern Huastecan region is crossed by the Sierra Madre Oriental and divided in two subregions: Sierra Media Baja and Sierra Media Alta, where among other main crops, coffee is grown. In this region, coffee cultivation takes place from 73 a.s.l. to 1300 a.s.l. by 17,031 producers on 13,565 hectares. Hence, producers have on average about 1,2 hectares. Overall production is estimated about 65.000 *quintales* (one quintal is 46 kg) being about 16250 tons of coffee cherries. Most of coffee from the region is commercialized unprocessed via local and regional intermediaries that collect and sell the coffee to regional toasters and/or to the agro-industry established in the Huastecan part of the state Veracruz⁵⁷. Hence, a general

⁵⁷ Veracruz is the second most important coffee state in Mexico

problem of coffee cultivation in this region is the low value added that is given to the coffee and a low participation of producer organizations in the supply chain. Efforts have recently been made to commercialize coffee from Huasteca regionally and to export directly without going through intermediaries. The efforts consist in adding value locally (e.g. by organizing in producer cooperatives and adhering processing technology) in order to become less dependent on coffee companies and their processing infrastructure in other main coffee states such as Veracruz and Chiapas. (SAGARPA/Inca Rural/SEDARH/HECHOS, 2011)

More than half (53 %) of the people that live in the southern Huasteca, are from indigenous origin. The economic basis of the people living in this region is agriculture cultivating crops like corn, coffee, vanilla, litchi, etc. People in highland areas often depend exclusively on the cultivation of coffee and corn. This makes them economically very vulnerable, particularly when prices on the commodity market collapse. Hence, many producers cannot live just from agriculture, which is why off-farm labor opportunities and migration are an important source of survival. However, most producer families and indigenous groups live in marginalized regions with high poverty levels and without labor opportunities, hence they face more and more problems to satisfy basic needs with regards to education, health, access to services and income level (SAGARPA/Inca Rural/SEDARH/HECHOS, 2011, pp. 63-64).

In both regions, Oaxaca and southern Huasteca as well as in other coffee regions, there are different organizational processes with very specific interests such as independent (private) organizations (e.g. Café Blason⁵⁸) as well as organizations that are supported and promoted by the institutional sector such as financial⁵⁹ (regional and solidarity funds), economic (e.g. producer organizations like CEPCO), managerial/network (e.g. SOMEXPRO⁶⁰), political (parties), cultural and labor organizations, NGOs and/or planning instances (Municipal council of rural development, Coffee Product System). Although, these organizations are to some extent interrelated with each other, there is a low participation in planning instances and public policy decision-making. Hence, there is an overall deficiency in inter-institutional coordination (CEPCO, 2011).

Summarizing, the characteristics that the regions in Oaxaca and Huasteca as in many rural regions in Mexico have in common is that agriculture (and with it coffee) contributes to a decreasing share of household income since their lands are too small and productivity too low to make a living out of agricultural crops. For instance, producers that have less than 2 hectares of land, considering their low productivity level and the techniques currently applied, face more and more difficulties to support the family from the income

⁵⁸ Café Blason is a private company based in the state of Oaxaca, that produces toasted and grounded highland coffee for the domestic and international market

⁵⁹ E.g. FIRCO (Fideicomiso de Riesgo Compartido) and FIRA (Fideicomisos en relacion con la agricultura) are financial organizations/programs that provide financial resources to productive projects and entrepreneurial capacity building

⁶⁰ SOMEXPRO (Sociedad Mexicana de Producción Orgánica, A.C.) is a national forum for the organization and planning of the Mexican Organic Movement. It was founded in March 2007 and is composed of representatives of producer organizations, processors, consumers, retailers, certification bodies and academics involved in the organic sector in Mexico

generated from farm-activities. Hence, their survival is highly dependent on off-farm opportunities. Moreover, the increasing number of the population and with it the pressure on resources as well as other rigorous weather events such as droughts and frost⁶¹, are additionally affecting the crops cultivated and is also one of the reasons why productivity is relatively low and living standards are deteriorating. Hence, migration and off-farm labor are of vital importance to producer families to survive. This was acknowledged by several of the interviewed producers in Oaxaca and Xilitla.

Concluding, a high population pressure, lack of local off-farm opportunities and environmental pressure on their land, is resulting in the loss of food self-sufficiency, the deterioration of living standards and a decapitalization of farmers in these and other coffee regions in Mexico. Hence, the ability to meet basic needs such as food, housing, education and recreation, among others, is very limited and insufficient in these regions.

⁶¹ For instance, frost affected in 2010 more than 180.000 hectares of coffee lands in the states of Puebla, Veracruz, Chiapas and San Luis Potosí. Regarding the latter, frost affected about 3000 hectares of coffee land in the Huasteca region which led to a decreasing productivity level in the subsequent year (García, Rivas, Jiménez, Morita, & Vazquez, 2010)

5 Results and Analysis

5.1 General challenges found in the Mexican coffee sector

The Mexican coffee sector faces various (cross-cutting) challenges when it comes to coffee production, consumption and trade. Some of these *general challenges* with regards to coffee growing in Mexico are recapitulated in the following:

• Vulnerability of coffee farmers due to volatile coffee prices

Since prices depend on the evolvement of commodity trading on the New York market, producers face uncertainty about the price volatility in the local market. When market prices are low, producers face real challenges to cover their cost of production and to make a living out of coffee. This has considerably reduced investments in coffee plots since producers do not want to take the risk associated with low prices. During the coffee crisis, for instance, "coffee producers had to spend little by little their savings and/or sell their tools in order to survive. Hence, "today's low coffee productivity in Mexico (conventional and/or organic) is a result of the crisis of low prices and the reason for a decapacitating of producers, poverty and the abandonment of their land and migration" (F. Villegas, conventional coffee producer, personal communication, April, 29, 2012).

• Low productivity and low quality

Small-scale growers in Mexico have had chronically low yields as a consequence of the coffee crisis and hence the negligence of and the low reinvestment in coffee cultivation. Hence, coffee producers began to focus rather on quantity than on quality, thus deteriorating the reputation of Mexican quality coffee (Pérez Grovas et. al., 2001). Conventional (or natural) coffee producers in Oaxaca have reported production levels between 2 to 5 *quintales*⁶² per hectare (F. Villegas, conventional coffee producer; P. Ramos, natural coffee producer; R. Ordaz, natural coffee producer, A. Rodriguez, president CUCOS⁶³ cooperative, personal communication, April, 29, 2012). If considering that about 15 *quintales* of processed green coffee per hectare was suggested by organizations to be commercially viable (CRS, 2009, p. 2), this fall in productivity has led to/is due to:

- Declining farm income
- o Negligence/abandonment of coffee plots due to low productivity
- o Replacement of coffee cultivation by other crops
- Low socio-economic level of producer groups
- Indebtedness of coffee farmers
- Aging coffee trees (old farms) and low production plantations
- High production costs and low coffee prices

 $^{^{62}}$ 1 quintal (qq) = 46 kilograms of green coffee

⁶³ Cafetaleros Unidos de la Costa

- Inadequate input levels (nutrients)
- Low knowledge about quality parameters
- Poor production techniques and overall farm management

These factors are also those that affect coffee quality since there is a lack of capacity, technical knowledge and access to financial services to improve overall farm management. Moreover, there are factors accounting for quality that are beyond control, like severe weather events. (CEDRSSA, 2005, pp. 52-53)

• Limited post-harvest capacity and infrastructure

Unorganized producers often lack essential post-harvest capacity, infrastructure and coordination to add value and to transport their coffee. "The coyote, for example, often has the only transport vehicle in the coffee region, which is why there is a high dependency on him and he has the power to negotiate the price" (J. Celis, inspector CERTIMEX, personnal communication, May, 2, 2012). "He sells the coffee to coffee companies in Mexico like Cafés California and to private roasters" (F. Villegas, coffee producer, personal communication, April, 29, 2012). Hence, the added value through processing goes to the next actors in the coffee chain since there is a:

- Difference in availability of post-harvest (processing) technologies
- Lack of transport vehicles
- o Quality loss due to deficiencies in the production process
- Lack of quality control and a quality laboratory
- Lack of a national roasting industry
- Lack of coordination between the actors
- Debasement of coffee that is sold to consumers at high prices
- Insufficient infrastructure for industrial transformation (CEDRSSA, 2005, pp. 52-53)

• Lack of comprehensive and long-term policy measures as well as institutional participation

As seen in section 4.4.2.4 principal public policies and government support are directed towards compensatory programs in times of low prices rather than on promoting political strategies to increase quality, domestic consumption and access to higher price markets. Mexico is actually embracing open door policies to foreign companies that entry the sector rather than protectionism which is why, several plans and programs to enhance quality and domestic coffee consumption have failed. AMECAFE, the national association for coffee production, seems to be dominated by the interests of large commercialization and industrialization firms rather than by the problems that small-scale producers face (Paper issued by CEPCO at its event "XI CONGRESO de la Coordinadora Estatal de Productores de Café de Oaxaca, A.C." in July, 2011). As Villegas, a conventional coffee producer in Pluma Hidalgo, depicted in a letter directed to the senator of the Oaxacan state [translated to English]: "against the backdrop of the 20 years of low prices, what we

need today and what otherwise if continuing this path will lead us to disappear as producers" is reproduced in the following:

- $\circ~$ "There is a lack of a serious and responsible national organization that provides the basic services to producers like that of INMECAFE
- $\circ~$ We need the law of coffee production that was proposed in 2002 and stucks today in the Chamber of Senate
- There is contraband coffee in both senses in the country
- There is a need of a national Mexican coffee roaster that could supply coffee to the classes most needed and to all economic classes of the country with industrialized coffee
- There is no (coffee) bank that supports the producer of coffee as it exists in most advanced countries
- There is no organism where to request technical assistance to work the coffee plot
- We need long-term credits that we are obliged to re-pay in order to work and maintain our plantations on an annual basis" (F. Villegas, conventional coffee producer, personal communication, April 29, 2012)

He also stated that "the agricultural programs of the state government do not include coffee producers, the support granted to producers is insufficient and that programs like "Pro Àrbol⁶⁴" (Pro Tree) do not contemplate the improvement of national coffee production" (F. Villegas, conventional coffee producer, personal communication, April, 29, 2012).

• Decreased participation of Mexico in the international coffee market

Due to the changes in the development of international coffee sector and the institutional transformations on a national level, Mexico lost its importance in the international market. Its participation in the international market decreased from being the fourth largest exporter in 1989 to being the twelfth largest supplier in 2009. Hence, the Mexican coffee market has seen declining export rates and increasing imports of low-quality (instant) coffee. The constraints with regard to coffee commercialization are:

- Limited access to information about the coffee market
- Dominance of the coffee sector by an oligopolistic structure and large multinational companies like Nestlé
- o Price pressure by intermediaries through low quality coffee delivered
- Lack of capital access to strengthen the integration in the coffee supply chain
- Limited information about advantages that quality markets offer
- Lack of collection and commercialization support for producer organizations to take advantage of alternative markets within and outside the country

⁶⁴ Pro Árbol is a federal program to support the forestry sector that grants incentives to owners of forests and landowners to take actions to protect, conserve, restore and sustainably exploit the resources in forests and arid zones of Mexico (see also http://www.conafor.gob.mx/portal/index.php/proarbol)

- Utilization of blends with different qualities from different regions and highlands
- Lack of policies that promote the development of an national coffee industry which sells processed coffee at national and international level
- Lack of information and capacity of producers to access high-value coffee markets with better market and competition conditions (CEDRSSA, 2005, pp. 52-53)

• Lack of domestic consumption

Mexican coffee consumers have so far paid just little attention to the coffee quality, methods of preparation and in general knowledge about its origin. So far, the high-quality coffees were destined for exportation, while low-to-medium quality and damaged coffees remained in the country (S. G. Robles, CEPCO, personal communication, May 3, 2012). In addition, soluble coffee is more demanded in Mexico and its consumption represents 65% of total coffee consumption in Mexico (Muñetón, 2011). General challenges with regard to the domestic market are:

- Low per capita consumption
- Lack of consumer awareness about benefits of coffee consumption
- Lack of adequate information about preparation methods and quality differentiation of roasted and grounded coffee
- Increased homogenization of lower quality coffees available in the national market, especially soluble (Robusta) coffee
- Increased distortion of coffee taste through added supplements
- Lack of public policies that enhance (quality) coffee consumption
- Imports of low-quality (instant) coffee
- Coffee substitutes by other drinks (such as soft drinks) (CEDRSSA, 2005, pp. 55-54)

• Cross-cutting challenges

The constraints identified above – low productivity and quality, lack of post-harvest infrastructure as well as lack of market access – are due to:

- Insufficient technical assistance and capacity building with regards to: agricultural extension workers, coffee processing, quality control, farm management, financial management, market information and research, negotiation capacity, organizational management, at the farm as well as at the organizational level. Organizations might give or receive technical assistance in one or more of these areas, but there is a lack of an concurrent and integrated support for all of these areas (CEDRSSA, 2005, pp. 52-54)
- There are *financial constraints* for producers since there are high requisites and interest rates to access and obtain credits. Hence, there are just few financial operators (banks) that lend money to farmers/primary (agricultural) sector. "Most affected are particularly those that are not organized, since they cannot compete with big companies that have access to credits" (L. M.

Villanueva, technical consultant UCIRI, personal communication, May 23, 2012)

- There is a competition between organizations and coyotes, both buy coffee from producers since coyotes often lend money to producers in pre-harvest time and establish a forward contract at a pre-established price. When coffee is then harvested, coffee producers have to deliver the coffee to the coyote as a re-payment. These practices reduce the total income of producers at harvest time and generate a cycle of indebtedness of producers with local lenders on the long run (S. G. Robles, CEPCO, personal communication, May 3, 2012)
- As discussed previously, *labor scarcity due to migration* of young people is a frequent problem in coffee regions. Producers that are not organized or do not enter the alternative market through certification schemes or quality niches, have often no other choice than to migrate. This makes labor scarce or for those who remain, more expensive, during harvest time. Those who stay and work the coffee farm are often the elderly, women and children. In the meantime, almost each farmer has a family member that migrated and coffee growers receive more remittances from migration than they get from coffee sales. "As a consequence of the 20 years-crisis, the coffee plantations and their owner are old, so there is a need of renovation of coffee plantations" (F. Villegas, conventional coffee producer, personal communication, April 29, 2012)

5.2 SWOT: Alternative coffee production, consumption and trade in Mexico

The following SWOT-Analysis depicts the main benefits and limitations that were found in alternative (organic/Fairtrade) coffee production in Mexico next to those challenges of conventional coffee production discussed in the previous section. The most important points are discussed subsequently on the basis of the previous study of the Mexican coffee market based on literature review and, to a larger extend, on the information gathered from qualitative interviews.

STATUS QUO / OPPORTUNITIES	STATUS QUO / CHALLENGES
Strength	Weaknesses
Production/Certification	Production/Certification
 Mexico is one of major producer of organic and Fairtrade coffee Diverse geography and best agroclimatic conditions to produce quality coffees Most part of coffee cultivation is shade-grown coffee that provides best conditions to produce organic coffee (and/or denomination of origin) 	 Increased cost of production (increased labor input needed) for organic management Less income and higher cost during transition to organic Missing awareness of producer on organic management and integral production systems Problem of preparing fertilizers
 Production without chemical inputs 	(compost)

 Conservation of biodiversity and ecosystem services Improved productivity by organic methods (in some cases) Improved quality through organic and Fairtrade certification (e.g. through funds established by price premiums, technical assistance programs, renewal 	 Aging coffee plantations Work practices have to be controlled and registered constantly Inconsistency in organic management on paper and in reality Necessity of being organized to participate in Fairtrade Coffee land and productivity too small
of coffee plantations, etc.)	for producers to make a living out of coffee
 Minimum pre-established fixed price for conventional Fairtrade Fairtrade premium for economic, social and environmental development projects Additional organic premium Enabling of pre-financing opportunities for producers Establish long-term and direct contracts with importing companies Access of the organization to organic/Fairtrade coffee certification for the export market Increased access to financial and technical services Well-established infrastructure in most important coffee regions (e.g. Pluma Hidalgo) Capacity building of producers on value adding activities, organic management and quality improvements Better organizational and community relationships Benefits beyond economic merits due to coffee development projects Diversified employment and income 	 High certification requirements and costs Increased (double) certification costs due to separation of organic and Fairtrade inspection and certification process (because the majority of Fairtrade coffee is also organic certified) Mistrust in the benefits of certification Lack of knowledge about alternative trade (Fairtrade) systems False certifications issued by "black sheeps" leaves a bad image Changes in Fairtrade policies in favor of large plantations Lack of consistency and continuity in meeting certification standards and in the commitment with the producer organization Remittances from migrated family member and off-farm income opportunities sustains (conventional and/or organic) coffee growing Lack of value adding activities due to poor infrastructure for production, processing, storage and transport in some areas
opportunities (also for disadvantaged people in rural areas)	Organization/Comercialization
 Better planning security and social stability Increased self-esteem to sell to higher priced markets Planning instruments for rural development 	 Lack of processing and commercialization support from government Dominance of coffee commercialization by AMSA (ECOM Trading) and other trading arms of large TNCs
Policies/Institutional participation	 vveak tarmer organization and lack of providing basic services
 Existing political programs that supports coffee cultivation and (to a lesser extend) quality and productivity 	 Mistrust in organizational management /Lack of transparency Lack of consistency and continuity

 improvements Existing geo-reference, socio-economic and technical data coffee farms (registered in PNC) Existing information system for registering commercialization transaction (SICN) 	 Limited commercial contacts Lack of guaranteed organic premium Limited economies of scale due to low productivity and lack of volume Lack of alternative coffee demand in the domestic market Lack of an integrated system for evaluation of quality Lack of campaigns to promote coffee consumption on a national level <i>Policies/Institutional participation</i> Insufficient, untimely and ineffective governmental support Lack of involvement of the state in alternative production and commercialization
	Eack of responsible institution for the sector
Opportunities	Inreats
Production/Certification	Production/Certification
 Potential to improve quality coffee and be positioned at the forefront in the specialty coffee market, nationally and internationally Potential of integrative organic management of all crops Natural inputs available for organic management and/or development of a market for organic fertilizers Potential of generating credits for carbon sequestration Provision of environmental services Interest of producers and state policy (e.g. Oaxaca/Chiapas) to promote organic coffee Differentiation of Mexican coffee 	 Labor scarcity in rural areas could threaten the continuity of coffee production and expansion of organic management Replacement of coffee cultivation by other crops that are more economically viable Lack of communication and involvement in decision making between producer organizations and FLO Presence of unexpected weather events (climate change) Organization/Comercialization Organic/Fairtrade coffee market is still
Differentiation of Mexican coffee through quality	 Organic/Fairtrade coffee market is still a niche
 Traditional knowledge of producers about natural management of resources facilitate organic production process Organization/Comercialization Increasing international market demand 	 Competition by other coffee producing countries that enter or expand the alternative coffee market with lower production costs and certified quality coffees counting with an institutional support Growing role of large corporate players
for alternative (specialty) coffee with	in the market represents increasing

increasing requirements and traceability

- Strong consumption patterns and increasing awareness for alternative and innocuous products in main importing and some emerging countries
- Great potential to develop the national consumption market for quality coffees (and promotion of "denomination of origin" coffee (e.g. Pluma Hidalgo) nationally and internationally
- Sustainable coffee demand in urban areas (Mexico)
- Existing of alternative market in Mexico (Comercio Justo/organic coffee)
- Strengthening of the organizational capacity to attend producers' needs
- Creation of the ability to negotiate with new clients
- Organizations help other producers and producer groups to enter the alternative market
- Fairtrade certification increases the credibility of producer organizations
- Political capital building
- Empowering rural and indigenous people

Policies/Institutional participation

- Existing national register of coffee producers (PNC) and their commercialization transactions (SINC) as a basis for defining relevant strategies directed the sector
- Existing coffee policies and funds directed to the sector
- Existing social policies directed to rural development
- Access to technical assistance and capacity building provided by different institutions
- Access to governmental programs that support the acquisition of infrastructure and equipment
- Link of the coffee sector with research institutions (e.g. Universidad de Chapingo)
- Access to other opportunities
- Bottom-up creation of certification standards created by CLAC and the Small Producer Symbol (SPS)

barriers to alternative production, consumption and trade (e.g. dominance of the coffee market by Nestlé's Nescafé (soluble coffee)

- Not all coffee can be sold under certified premium
- Reliance on international market
- Benefits of alternative coffee (organic/Fairtrade) decrease if market prices are high
- Modest price-differential paid to producers risk losing members during high coffee prices
- Market-based price premium for organic coffee insufficient when prices are low
- Lack of access to international markets with processed (toasted and grounded) coffee
- Lower priced Fairtrade coffee (e.g. from large Fairtrade plantations) threatens economic viability of smallscale producers

Policies/Institutional participation

- Discontinuity of support programs
- Change in coffee policies
- High interest rates for credits leads to indebtedness of producers
- Equivocated institutional policies in conjunction with private sector that are directed towards producers (e.g. Program 2011-2016)
- Competition for governmental support with transnational companies
- Poor implementation of support programs
- Lack of interest in regulate soluble coffee imports/consumption
- Change in Fairtrade policies ("Fairtrade for all" Fairtrade US)

Others

• Climate change impact

As shown in the SWOT-Analysis above, alternative coffee production in Mexico has many advantages when it comes to organic production and the participation in the Fairtrade scheme. Some of these *positive effects* and potentials are elucidated in the following:

As corrobated in the literature review as well as confirmed by some of organic producers that have been interviewed, organic production methods in some cases pay off in terms of improved productivity and quality which is an important double-effect for Mexican coffee growers as they can benefit from higher-priced global markets through quality and productivity gains. Additionally, there is an opportunity of organic practices to be transferred to other crops than coffee. For instance, as revealed by Jaffee (2008), a positive environmental effect of organic production is that some techniques and practices are copied by conventional coffee farmers and adapted to other cultivated crops. This is not only beneficial to the environment, but also makes producers less dependent on financial resources for buying fertilizer from external sources since organic matter can be used and the crops are produced in a closed cycle.

For a producer to enter the Fairtrade market, he has to be a member of a legal organization (association, cooperative, company, etc.). Although it is not a requisite for solely organic producers to be organized, a great part of them are group-certified and, hence, organized in a so-called cooperative in order to guarantee guantity and guality of coffee available for the alternative (export) market. However, each individual organization is different in its functioning and according to Reyes Santiago, the executive director of CERTIMEX, the success factors related to organizational management are "control and transparency of where the organization's money is invested, monthly assemblies, communication and a neutral position of the organization's leader" (R. Santiago, personal communication, May 1, 2012). With regards to the experiences made by Jurado Celis, an organic inspector working for CERTIMEX, selected best-practice examples of successful alternative coffee organizations are UCIRI, TOSEPAN and J'amteletic. Each of these organizations has its own success story which is shortly represented in Appendix II. The success factors and benefits these and other well-functioning alternative coffee producer organizations that participate in the organic/Fairtrade system have in common are discussed in the following:

On the one hand, through organized efforts and the commitment of producer with the organization on a long-term basis, producer cooperatives could establish long-term and direct contracts with importing companies and, hence, improve quality and positioning of their coffee in the alternative (international) market. On the other hand, the other more important points of success are that alternative producer organizations do not just concentrate their efforts on improving the price of coffee sold, but also on other aspects that improve the welfare of producers. Hence, in spite of the increased incomes received through the sale of Fairtrade certified coffee, it is not really owed to the increased revenue that producers could improve their standard of living. The more important and indirect benefits of being organized, are rather related to the services provided by the organization that improved the health, education, housing, infrastructure and employment situation of a certain region. The latter is due to the projects created by the cooperatives that generated new income opportunities and that have opened new spaces for disadvantaged people in

rural areas (young and elderly people, women). They diversified employment and, hence, income opportunities that are not directly related to coffee production, thus preventing people from migration. Hence, as seen in the best-practice examples of organized producers (Appendix II), the benefits of being organized can go beyond just economic stability and the direct access to the coffee market. Jurado Celis also stated, that these organizations are just few best-practice examples of cooperatives that have managed to overcome major market constraints and to be well-positioned in the alternative (international) market as well as to contribute to rural development of producer communities (J. Celis, organic inspector, personal communication, May 2, 2012).

An important environmental strength is that organic coffee is grown without the use of pesticides or fertilizers, which are common in conventional coffee cultivation. Only natural methods are used throughout the process of cultivation, harvest and processing of organic coffee. Therefore, organic coffee cultivation contributes to the conservation of biodiversity and ecosystem services. For instance, the structure and soils of shaded organic coffee cultivation are more resilient to such climate hazards which are evidenced in the reduction of erosion and runoff, moisture uptake, filtration and retention (Giovannucci & Koekoek, 2003). Thus, the cultivation of organic coffee in diversified agroforestry systems plays an important role in sustaining ecosystem-protecting services which can help producers not only to buffer climate change impacts, but also to diversify their sources of income, for example, by planting and selling other crops than coffee and/or by generating credits for carbon sequestration (Jaffee D., 2008). Blas Bustamente, a coffee expert in the coffee growing region in Oaxaca, therefore emphasized that there is a need of an integrative organic management of all crops cultivated on a parcel. He suggested that organically produced coffee such as bird friendly coffee should not only be viewed from an socioeconomic perspective (to sell the crop and to generate income for coffee farmers and their family), but also from an ecological value perspective (to sell the environmental services in form of taxes to users such as hotels, for example (H. B. Bustamente, personal communication, May 05, 2012).

Out of the strength discussed previously, there are several *opportunities* that result from an increasing international demand for alternative coffee. While the conventional coffee demand is stagnating in main coffee consuming countries, coffee consumption is shifting towards more expensive alternative coffees based on quality and environmental and social production criteria. The participation of coffee producers in alternative coffee markets through e.g. organic/Fairtrade certification is an opportunity for Mexican producers to differentiate their coffee on the market and thereby find better conditions of sale. Moreover, alternative coffees help to protect the health of the producer and consumer and to benefit from a range of other advantages. However, profits from organic and Fairtrade coffee commercialization are to be seen on long distances, rather than in the national market, since there are already strong coffee consumption patterns and an increasing awareness for alternative and innocuous products in main coffee consuming markets (J. Celis, personal communication, May 2, 2012). Nonetheless, Mexico's domestic market has great potential to promote domestic coffee consumption that has to be developed. Hence, it is very important to promote overall national coffee consumption in places such as coffee shops, stores, markets, government agencies, universities, organizations, etc. (R. Santiago, personal communication, May 1, 2012). Here, the potential lies particularly in the promotion of denomination of origin and natural coffee such as that of Pluma Hidalgo, as well as sustainable coffees whose demand is increasing in urban areas. Although alternative coffees such as certified organic and Fairtrade (Comercio Justo) coffee are available in the national market, there are just few places where it can be bought (e.g. special shops or directly via mail-order from cooperatives). Hence, more than to focus on the international demand for these coffees, it is important to raise awareness and expand sales of these types of coffee at the national level in order to benefit from domestic market opportunities.

Opportunities on the organizational level are related to a strengthening of the organizational capacity to attend producers' needs, the creation of the ability to negotiate with new clients, the help of producers and producer groups to enter the alternative market, among others. By being organized and participating in the (organic) Fairtrade system, producers get easier access to credits, financial and technical services since they form part of an organic/Fairtrade organization. These are supposed to have access to higher-priced markets which therefore increases the credibility and liquidity to access traditional sources of credits. Hence, producers have a higher economic planning security and social stability since they can better plan their investments in coffee production and personal or family necessities. Although conversion to alternative coffees has not necessarily translated to higher income levels for producers, it has created valuable opportunities related to social capital creation such as to enhance the self-esteem and empowerment of rural and indigenous people and to benefit from the traditional knowledge of producers about natural management of resources that facilitate the organic production process. Simultaneously, through the organized efforts of individual organizations and by joined forces of several small-producer organizations, for example in CNOC⁶⁵, the National Coordination of Peasant Organizations, or in regional associations such as CEPCO⁶⁶ in Oaxaca and the COOPCAFE⁶⁷ in Chiapas, political capital could be created by calling the attention of political actors to the situation of producer families in rural areas claiming the reactivation of agriculture and an enhancement of rural development (Renard, 2010, p. 29).

While certification labels such organic and Fairtrade pledge to improve small-scale farmers livelihood, other regional certification initiatives such as the Latin American and Caribbean Network of Small Fair Trade Producers – (CLAC)⁶⁸ and the Small Producer Symbol (SPS) were created as a counter-movement to producers' isolation in defining certification

⁶⁵ Coordinadora Nacional de Organizaciones Campesinos

⁶⁶ Coordinadora de Pequeños Productores de Café de Oaxaca

⁶⁷ Coordinadora de pequeños Productores de Café de Chiapas

⁶⁸ Coordinadora Latinamericana y del Caribe de Pequenos Productores del Comercio Justo

standards imposed by certifying agencies from the North and the non-involvement in policy changes and decision-making by such organizations like FLO. The symbol and the administrative office - Foundation of Organized Small Producers (FUNDEPPO)⁶⁹, a non-profit organization based in Mexico City – were launched in 2006 and 2009 respectively (Prujin, n.d.). The difference to other certification standards (imposed by the North) is that it is an unique initiative created by small producers from the South that is based on the values of a fair trade considering the problems and the reality experienced by small producers (R. Santiago, executive director CERTIMEX, personal communication, May, 1, 2012).

On the contrary, the production of coffee underlying organic and Fairtrade standards involves many *problems and constraints*. Producers and other coffee actors that have been interviewed, reported that organic coffee cultivation faces, among others, the following challenges:

As mentioned in the previous sections, labor scarcity is frequent in the coffee regions which represents a real problem for organic growers to work their coffee plantation and increases the cost of production considerably (R. Santiago, CERTIMEX; G. Robles, CEPCO, producers in Xilitla; personal communication, May 1, May 3, and May 10, 2012, respectively). Additionally, the work-intensive preparation of organic fertilizers represents a difficulty for producers since organic coffee production does not only involve labor for collecting, preparing and application of organic fertilizers, but also high amounts of organic compost and manure. Hence, the preparation of fertilizers is a complicated process which takes many days. This is especially true for small-scale farmers that don't have livestock for getting the manure and have just limited means (capital and labor) of assessing and preparing organic materials. Thus in the end, organic fertilizers might end up as costly as non-organic chemicals do (F. Villegas, conventional coffee grower; producer 3 (anonymous), personal communication, April 29, and May 11, 2012).

With regard to certification, the following weaknesses have been identified:

• High certification requirements and costs for organic and Fairtrade certification

The certification process takes up to three years where producers have less income, higher costs (including certification costs) and (in some cases) less productivity. Hence, the transition process to organic represents a poverty trap for producers that want to enter organic production. As Villegas puts it "organic coffee is the way from poverty into misery, since productivity is low and organic producers do not live better from the selling of organic coffee" (Villegas, conventional coffee grower, personal communication, April, 29 April, 2012). The general impression that was given by the persons that have been interviewed (about the fulfillment of certification standards and the cost of certification) was that the requirements are much too high and too costly. The certification standards were

⁶⁹ Fundación de Pequeños Productores Organizados, A.C.

established by certification agencies from developed countries in the North without taking into consideration producers' ability to comply with the standards. Jurado Celis argues that the conversion to organic is often not worthwhile since the costs of certification are too high for one producer and it just pays off if there is really a market and if producers can sell their certified coffee. Moreover, she also emphasized that organic certification is just worthwhile if productivity is high or producers are organized to reach a higher volume. At the same time, "for being certified, there is a need of qualified and trained people at the farm-level, hence there is a possibility to send sons of producers or the producers themselves to be trained about organic management" (J. Celis, inspector CERTIMEX, personal communication, May, 2, 2012).

Fairtrade certification costs for producer organizations and hence producers were reported to rise each year and are higher than just organic. Since many cooperatives are organic and Fairtrade certified, they have to undergo double certification process by two different certification bodies, for instance, FLO-Cert and CERTIMEX for "organic Fairtrade" certification. A couple of years ago, both inspections could be made by the local certification agency CERTIMEX on behalf of FLO-Cert. However, due to further nonagreement and mismatch between the two organizations CERTIMEX and Fairtrade, the convention was cancelled. Now, producer organizations have to go through the two different certifying organizations and processes to be organic Fairtrade certified, which means that certifiers/inspectors from different regions or countries (for example from the FLO Costa Rica office⁷⁰ and from an organic certifying agency based in Mexico or other parts of the world) have to do the inspection process in Mexico. This increases considerably the costs of certification for producers since both inspection fees have to be paid during the three-year transition (2 to 3 visits of inspectors from both agencies to the coffee farm) and double-certification fees have to be paid each year (R. Santiago, executive director CERTIMEX, personal communication, May, 1 2012). Since certification process and certification requirements get more stringent, producers face more and more challenges to adopt and maintain certification. C. Jurado puts it that way "FLO is not working well anymore for Mexico, those who were certified go on, but it has become more difficult for new entrants to get double certification" (J. Celis, organic inspector for CERTIMEX, personal communication, May 2, 2012).

• Mistrust in the benefits of certification

A widely held view among producers interviewed, particularly those in Pluma Hidalgo, was that those who most profit from certification were the certification agencies that are behind the certification system rather than the producer cooperative or the producers themselves. Therefore, some producers preferred to rather increase the value added of their coffee through acquiring processing technologies and/or amplifying their product portfolio and to sell directly to clients locally, rather than to enter the alternative and/or international market (F. R. Orodnaz; A. P. Perez Ramos; Villegas, F.; S. Casas, personal communication,

⁷⁰ Since there is no FLO-office in Mexico and there are just few FLO-inspectors in the country

April, 28 and 29, 2012). Many of the producers therefore have diversified their income by cultivating and selling also other crops than coffee or by producing other products made by coffee like in the case of Semiras Casas, coffee cookies. She commercializes (Pluma) highland and organic coffee via mail-order and directly under the name of Bule (productos de café) (S. Casas, personal communication, April 29, 2012).

• Certification standards depend on production and trade rules set by certification agencies from the North

Certification depends on foreign certifying agencies whose certification costs are increasing. Although certification by the local certifying agency CERTIMEX is less expensive, the cost of certification depend on the number of producers that want to be certified and the programs they want to adhere to (EU, Japan, USA). Since organic requirements and changes in certification in international markets have regularly to be revised, certifying agencies have to have their internal system of control and inspectors as well as certifying agencies have to be constantly trained and accredited. Thus, the local certifying agencies have to pay each year accreditation fees to international certification bodies. This increases cost of operation and, thus, of certification along with the fact that there are sometimes not enough projects to keep certification costs down, for instance, during the economic crisis). (R. Santiago, executive director CERTIMEX, May 1, 2012)

Next to organic and Fairtrade coffee certification, there are other alternative coffee certification labels that play an important (Bird-Friendly, Rainforest Alliance, Shade-Grown) or less important role (Utz Kapeh) in coffee production in Mexico (Pérez, 2010, pp. 92-93). These are however less stringent and none of these certifications offer price guarantees or pre-harvest financing opportunities to producer (Renard, 2010, p. 30). According to Reyes Santiago, adopting other private or voluntary certification labels such as Naturland (Germany) is not really worthwhile for producers since the requirements are too stringent and the certification cost too high, but there is not really a higher premium visible. Since CERTIMEX is already accredited for the European market, the additional labeling by Naturland is not really necessary since this bears higher certification costs (R. Santiago, executive director CERTIMEX, personal communication, May, 1 2012).

• False certifications in the market

There are some "black sheeps" among the certifying agencies that operate in Mexico that were reported to issue certifications to producers without undergoing the complete certification and inspection process and thus without fulfilling organic requirements. This leaves a bad image and workload among other certifying agencies and is misleading for producers, since producers might take this as a normal certification process (R. Santiago, executive director CERTIMEX, and J. Celis, May 1 and May 2, 2012).

Regarding organization and commercialization, the following *limitations* have been identified:

When it comes to commercialization, small-scale coffee growers cannot survive in the international markets unless they are organized in order to reach economies of scale and access to higher priced markets. However, while there are some best-practice examples of successful small-producer coffee organizations like UCIRI, TOSEPAN, J'amteletic, etc., Jurado Celis also mentioned other bad practices of cooperatives (whose name will not be mentioned here) that failed to overcome major problems provoked by persons with divergent interests to those of the community or other organizational problems (J. Celis, inspector CERTIMEX, personal communication, May 2, 2012). Some of the problems and criticism that producer organizations face are related to:

• Weak farmer organization and lack of providing basic services

Many smallholder farmer cooperatives lack the management and technical capacity necessary to enter the alternative market and to: guarantee consistent supply of high-quality coffee that meet certification standards, negotiate sales and improve access of their members to collection, transport, financing and commercialization services. Moreover, small-producer organizations have usually high operative costs (R. Santiago, executive director CERTIMEX, personal communication, May, 1, 2012) and there is often "a malfunctioning and a hierarchical management that do not bring benefits to its members" (F. Villegas, conventional coffee producer, personal communication, April, 29, 2012).

• Mistrust in organizational management/Lack of transparency

Those producers interviewed that were not part of a producer organization (most of those in Pluma Hidalgo), demonstrated mistrust in organizational leaders and the overall management of organizations. A widely held view was that the benefits of the premium price from certified coffee reaches at best the organization, but not the producers themselves. For instance, several producers in the region of Pluma Hidalgo do not see the benefits of being member of the state-level organization CEPCO in Oaxaca. Some of them had the impression that producers that form part of CEPCO were not really better off than other producers in the regions, although CEPCO participates in the organiz/Fairtrade system. At the same time, Jurado Celis said that producer organizations are sometimes not transparent enough in their economic resource management, which is why producers do not feel part of a whole (J. Celis, organic inspector, personal communication, May 2, 2012). On the other side, CEPCO stated that producers or the person in charge of the cooperative sometimes does not come to the (monthly) assemblies and/or does not report (precisely) to the other producer members, what was spoken about (G. Robles, personal communication, May 3, 2012).

• Lack of consistency and continuity in meeting certification standards and in the commitment with the organization

A general problem seems to be the lack of consistency and continuity, both of producers in their organic practices as well as of employed staff in organizations. Regarding the first, production of organic coffee without chemicals was reported to be sometimes inconsistent on paper and in reality, since producers face real difficulties to control and constantly register their work practices. Thus, as Blas Bustamente stated "producers sometimes even don't remember what they applied to their coffee plots. Likewise, sometimes coffee is grown organically, but other cultivated crops at the same plantation are managed with chemicals" (B. Bustamente, personal communication, May, 1, 2012).

On the organizational level, Oliver Hunkler, an inspector of IMO Control, emphasized that one of the problem in the continuity of certification is that there is a frequent change of employed staff and hence in contact persons in the organization. This makes inspection more difficult for the certifying agency and imperils producers' commitment in maintaining certification and to be committed with the producer organization (O. Hunkler, telephone (Skype) communication, April, 4, 2012).

Especially, during high prices, organizations face real problems to keep their members. For instance, as Jurado Celis acknowledged "high prices affected two cycles and organic coffee selling by cooperatives. Hence, when the conventional market price is high, producers sell to coyotes whose price difference is not much different to that what the certified cooperative would pay. The problem here is that in comparison to the organization, the coyote buys all the coffee without having high requirements on the coffee quality delivered and that the coyote pays directly, while the organization pays in several payments. This hinders the continuity in certification and the work practices underlying certification (producer 7 (anonym); J. Celis, personal communication, May 2 and 5, 2012). For instance, Villanueva, a technical consultant at UCIRI, revealed that currently there are about 2600 members forming part of the UCIRI cooperative, of which about 65 % (approx. 1700) are constant members. The remaining 800 are "opportunists which only see the economic benefit and sell sometimes to other intermediaries. This also has to be accepted" (M. Villanueva, telephone (Skype) communication, May 23, 2012).

Another problem with regard to employed staff is that while the technical adviser of an organization just in extraordinary cases will be changed, the technical adviser of the community⁷¹, is constantly changed in order to avoid his control over the community and, thus, the replacement and questioning of the organization's technical adviser and leader's function. This has to do with the structure of the government, which has the direct link with the organization's adviser and/or leader. This makes both indispensable in their function in the organization, since they have the negotiating power for resources and the function to manage commercialization of the organization's coffee (B. Bustamente, personal communication, May, 05, 2012). Thus, a lot of interviewed producers (mainly in Oaxaca) showed mistrust in the organizations leader and advisors since they might benefit or work just for their own pockets.

⁷¹ This might be a producer which becomes a technical adviser for work practices underlying certification for his community

• Limited volume and commercial contacts

Certified producers and producer organizations often have limited commercial contacts with direct buyers and as stated before, also lack the ability to achieve the required volume and to fulfill purchasing contracts with already established clients in the alternative market. This is due to the low commitment of producers to deliver their coffee exclusively to the organization, on the one hand, but also due to low productivity levels (for instance in Oaxaca and Xilitla), on the other. Hence, there is a direct competition between organizations and coyotes (or respectively the companies, they are working for) (R. Santiago, personal communication, May, 1, 2012). "Organizations loose producers' loyalty even for a small price differential that is paid by coyotes" (J. Celis, personal communication, May 2, 2012). According to Gonzalez Robles from CEPCO, "this affects efficiency of organizations (and also increases credit costs). Currently, just about 30 % of all coffee that comes from Oaxaca is from organized producer cooperatives." (G. Robles, personal communication, May 3rd, 2012)

Since producers of organic coffee, for example in Xilitla and/or Oaxaca – although organized – cannot generate enough volume to sell the coffee in organic markets, the price for their coffee is too low to cover basic costs and necessities. Therefore, many producers have diversified income resources. Beside coffee, they depend on off-farm labor opportunities, government subsidies and/or remittances from US migrants. (T. Reyes, personal communication, May 1, 2012)

• Lack of alternative coffee demand in the domestic market

There is a low-quality coffee rather than alternative coffee consumption in the national market. The little habit of coffee consumption in the whole nation, the attachment to consumption of soluble coffee and soft drinks, the poor quality of coffee available in the market, the fill-up system, the lack of preparation methods and the difference in prices, are just some of the constraints that have been found in domestic consumption of coffee in Mexico. Additionally, Nestlé's strong positioning in the market and the lack of interest of the government to regulate soluble coffee expansion with regard to imports, production and consumption, impede the increase of alternative coffee consumption at the national level. For instance, Nestlé blocked a program initiated by ICO to increase national consumption in the country, since it is increasingly boosting the consumption of imported soluble (Robusta) coffee and cappuccino coffee with artificial flavors, which are much cheaper and distort the pure coffee taste in the country (CEPCO, 2011, pp. 18-19). Adding to this, the increasing number in Robusta coffee imports and Nestlé's dominance in the national market makes it difficult to promote alternative coffee consumption, since the price is sometimes 30 % higher than non-organic coffee. At the same time, there is a lack of knowledge about the concept of organic and Fairtrade (Comercio Justo) coffee at the national level and investments in promoting alternative coffee consumption (Salcido, 2011, p. 5; R. Santiago; G. Robles, personal communication, May 1, and 3, 2012).

As many as weaknesses are identified in organizational support systems, likewise do policy programs and institutional participation in the sector fail to address major weaknesses of certification systems and in general coffee production. Here the following *weaknesses* have been identified:

• Insufficient, untimely and ineffective (access to) governmental support

As seen in section 4.4.2.4, there are various governmental support programs directed to the coffee sector, however, these are reported by Reyes (CERTIMEX), Robles (CEPCO) and various interviewed producers to be either insufficient, ineffective, the access to those complicated and/or involves high bureaucracy and paperwork. Furthermore, access to governmental resources and programs is limited, since communication means (internet) are often missing in rural areas and producers are not aware of the kinds of support, they could apply (Villanueva, telephone (Skype) communication, May 23, 2012).

At the same time, if any financial resources from such programs are to be reached producers, they do not arrive on time, when it is mostly needed (during harvest time) and/or producers just do not receive the whole amount that they are entitled to. For example, Villegas, a conventional coffee producer in Pluma Hidalgo (Oaxaca) reported that he just received 20 % of the amount that he was entitled to by the support program "Fomento productive" because of electoral budget cuts (F. Villegas, personal communication, April, 29, 2012).

• Lack of involvement of the state in alternative production and commercialization/Lack of long-term integrated policies

Since organic production is still not recognized at the national level, there is a lack of support programs for producers to enter the alternative market or the requisites to adhere to these programs are too high and complicated. Although there are various political programs directed to the coffee growing areas, it is difficult to local producers to assess these instruments.

There are also other governmental programs that are directed to the development of rural areas and low-income households in Mexico like that of "Progresa/Oportunidades"⁷² and "Procampo"⁷³, which are destined to improve the conditions of low-income families, particularly those in rural areas (Gitter, Lewis, & Weber, 2010). The problem here is,

⁷² Progresa/Oportunidades is a governmental program focusing on education and health of children that was implemented in 1995 and directed to low-income Mexican households. This subsidy is paid on a monthly-basis and the cash transfer is granted to mothers or fathers in return for school participation of their children.

⁷³ Procampo is an agricultural land-based support program that was created after the NAFTA in 1994 in order to help households in rural areas to deal with the potential effects of increased competition. An average payment of \$180 per year is granted to landholders.

however, that producers get used to get support from social programs and rely on this support to maintain coffee production and/or to cover basic necessities such as alimentation, clothing, health, housing, education, etc. Though, with regard to the latter, the higher the education level is the better off-farm labor opportunities can be found which enhances migration of (young) labor from rural to urban areas leaving behind the older ones. Thus, coffee cultivation is left in the hands of the older generation. With regard to the labor-intensive organic production, this represents a real challenge for producers in converting to and maintaining organic production. (F. Villegas, producer 1 and 2 (anonymous), M. Villanueva, personal communication, April, 29; May, 10 and May 23, 2012 respectively)

As seen in the previous section, there are many opportunities for Mexican coffee growers to enter the alternative markets. However, the ability of alternative production and trade system to increase its impact and to manage overall market risks has to be questioned. Conventional as well as alternative coffee producers are exposed to a range of *risk factors* that result from changing dynamics in the market. The growth of the international market for coffee that is organically produced and traded under fair-trade conditions is central to the future of alternative coffee producers in the South. Although, the alternative market in some countries is increasing, it actually still represents a niche market in many countries. Nonetheless, while there is a relatively low pace of growth with regard to demand for alternative coffee production with lower producing countries that enter or expand alternative coffee production with lower production costs and certified quality coffees as they count with an institutional support. (CEDRSSA, 2005, p. 54)

• Reliance on international market

The growing role of large corporate players in the alternative market (which is partly attributed to the policy changes of Fairtrade), represents increased barriers for producers with regard to production, consumption and trade following the strengthening and further consolidation of international traders and the requirements by certification agencies, roasters and import countries. At the same time, the participation of small coffee producers in Fairtrade networks, does not guarantee that they automatically find buyers of their Fairtrade certified coffee and that all coffee can be sold under the certified premium. Hence, the reliance on the international market and the dependence of alternative coffee commercialization on buyers from the North makes Mexican coffee producers vulnerable to unforeseen changes that might occur in these markets, e.g. recession could affect disponible income for customers and, subsequently, coffee demand for alternative coffee. Moreover, the competition and coexistence of large multinational companies, that enter or expand the alternative market, with small producer cooperatives that where those that helped to launch the alternative (organic/Fairtrade) movement, threatens to put small-scale coffee farmers out of business (see changes in Fairtrade policy).

• Risks associated to price volatility

Furthermore, although participation in the Fairtrade network offers producers a preestablished fixed price and Fairtrade certified cooperatives are not directly exposed to the developments of the coffee market price, they face a different set of challenges that are indirectly related to volatile market prices. This is seen in the following two examples of volatile market prices:

Between mid-2010 and mid-2011, when market prices have seen an upward trend (see Figure 21 and 25 in Appendix I), the Fairtrade advantage over conventional and organic coffee has weakened since the Fairtrade premium is fixed and not market-based⁷⁴. Thus the differential has become more modest (FAO, 2008). The same applies to organic coffee as high conventional coffee prices mean that the organic premium is reduced, while low conventional prices encourage higher premium percentages. This suggest that the economic benefits of alternative coffees such as organic and Fairtrade coffee decrease if market prices are high and, hence, raises the question about the necessity of organic and Fairtrade certification for small-scale farmers since maintenance of certification represent a high burden to coffee growers. Moreover, when the conventional market price is high, producers increasingly sell to intermediaries (coyotes). In that case, certified organizations loose members and volume, which puts at risk the cooperatives fulfillment of purchasing contracts. As stated by Reyes Santiago in Oaxaca and a by the board member of an organic producer cooperative in Xilitla, some producers are opportunists and sell to those that pay a higher price (R. Santiago; producer 8 (anonymous), personal communication, May 2, 2012 and May 10, 2012).

However, stock prices have seen again a downward trend since 2011. Right after the coffee harvest which is in Mexico from October till March/April, coffee prices went down after both coffee cycles 2010/2012 as well as 2011/2012 (Figure 25 in Appendix I) and affected considerably the price that is paid to both conventional producers as well as organic coffee producer (Callejas, 2012). As acknowledged by Calo & Wise (2005) (section 2.5), organic producers does not cover basic costs when market prices are low and only the organic Fairtrade model seems to have a positive outcome during low coffee prices. This represents a risk for coffee producers since during low coffee prices, certification does not really pay off.

• Competition for governmental support with large corporations

While governmental support systems should intervene and support producers during low market prices, many of these programs are not continued and/or changes in policies are rather made to satisfy the needs of transnational companies, than those of producers. They rather correspond to the own objectives of the corresponding institution and/or private initiatives. For instance, the "Program 2011-2016: Production of coffee with high

⁷⁴ If the market price is above the Fairtrade pre-established price, Fairtrade farmers receive just US\$.10/lb more for conventional Fairtrade and US\$.20/lb for organically certified Fairtrade coffee (Fairtrade International).
productivity"⁷⁵ that was launched by private companies, one of which is the largest coffee trading company of Mexico AMSA, in conjunction with the Oaxacan state government and other financial institutions (HSBC, FIRA-Banco) is directed exclusively towards increasing productivity in the coffee region (to about 30 quintals/ha) rather than on helping producers to overcome other major constraints, e.g. with regard to commercialization, organic productivity for their own needs" and that "that governmental officials support the program as they adhere to green revolution techniques" (G. Robles, personal communication, May 3, 2012). Moreover, the program is told to be supported by the governmental secretary of state rather than by the agricultural secretary. "This is why it is also a political question" (B. Bustamente, personal communication, May 1, 2012). Several persons interviewed about the program in the state of Oaxaca were of the opinion that the program is socio-economically (because of credit indebtedness of producers) and ecologically (because of inadequate varieties and intensive production methods) not adequate for the region (B. Bustamente; G. Robles, M. Villanueva, personal communication, May 1, 3 and 23, 2012).

• Changes in Fairtrade policy

Another threat to small-scale coffee producers in Mexico is the recent change in Fairtrade policies. The original idea to dignify the work of producers (through paying a Fairtrade minimum price, Fairtrade premium, pre-established contracts, etc.) is not anymore the same, since Fairtrade decided to certify big plantations and allowed big corporations to enter the market. As a consequence GEPA and several other European ATOs are increasingly taking off the Fairtrade seal from their products (M. Villanueva, telephone (Skype) communication, May 23, 2012).

Furthermore, Fairtrade participants in Mexico are exposed to new challenges, since Fairtrade USA decided in January 2012 to leave the Fairtrade umbrella organization – Fairtrade International – since it wanted to promote the certification of large plantations and to make it easier for large corporations to enter the Fairtade market (FLO-CERT, 2012). This is seen with large criticism as the Fairtrade movement from its origin was sought to support small-scale farmers in developing countries to get out of poverty by offering them a "fairer" price premium for their crops and to sell on upcoming markets via direct distribution channels (Hill, 2012). Critics accuse this decision of Fairtrade USA, since Fairtrade seems to follow the same capitalistic structure as it wants to increase market share "and increase revenue for its own sake" (Neumann, 2011). Fairtrade now seems to be more in favor of corporate strategies than of small-scale producers. Producers and cooperatives now fear that they might lose market access and that "larger coffee plantations will put them out of business" (Hill, 2012). Moreover, Fairtrade USA proposed

⁷⁵ The program has the objective to: increase productivity per unit per surface; apply sustainable technologies with traditional new generation varieties; reactivate financing for production and bundle subsidies; strengthen economic activities in the coffee zones, improve producer income and create jobs in the coffee communities; consolidate the organizational processes for the production, commercialization and industrialization (from Programflyer given by an interviewed producer in Pluma Hidalgo)

changes in its ingredient-labeling policy, meaning that products can be certified "with as little as 10 percent fair trade ingredients, compared with a minimum of 20 percent required in other countries" (Neumann, 2011). These policy changes will have several implications and confusion among the FLO-certified actors in the supply chain, particularly for those FLO-licensed customers and consumers in the USA, since they have to decide if they will further support FLO International or the new Fair Trade USA Model (FLO-CERT, 2012).

At the other extreme, there are social and environmental changes that threaten Mexico's ability to continue participating in alternative coffee systems which are:

• Labor scarcity in rural areas and low commitment of younger generation to coffee production

Organic management methods require additional labor to work the farm according to organic standards, however the market-based price premiums for organic certified coffee is often insufficient to pay a *fair* wage to recruit labor. As stated before, these is why people from rural areas rather search off-farm labor opportunities in cities or migrate to the US. This causes labor to be scarce in many coffee regions. In the coffee region in Oaxaca as well as in Xilitla, for instance, labor availability represents a real problem since many young people are not committed enough with coffee growing and/or are looking for better off-farm labor opportunities outside the coffee growing regions (T. Reyes, G. Robles, personal communication, May, 01 and 03, 2012). Several producers also acknowledged the overall low commitment of the younger generation to coffee cultivation, since coffee production does not really pay off in terms of economic benefits (A. Rodriguez; C. Ruizsilva, producer 2 and 3 (anonymous), personal communication, May 7, April, 29 and May, 10, 2012).

• Climate change impact

The negative environmental effects are that climate change is increasingly affecting coffee cultivation and productivity, particularly in lower regions. As a consequence, family income will decrease, which leads to increasing poverty and, in turn, migration either to higher regions or to other regions/cities in order to look for alternative income opportunities (Más Café, 2009). Moreover, other severe weather events are increasingly affecting coffee production in several parts of Mexico. For example, frost damaged more than 5000 (out of 14000) hectares and affected about 7000 producers (out of 18000) in the Huasteca region in the last two years. Olivares Morales, the president of the state system for the protection of coffee, stated in an article interview "that when there is no production there is much migration, there are no roots in coffee cultivation and coffee producers face difficult times". He added "that if there is no business to be made with coffee, people will start cutting trees to plant other crops" (Vázquez, 2012). Producers interviewed in Xililta, were also among those whose coffee plots were affected by frost, which is why their productivity in the last coffee cycle was relatively low.

STATUS QUO / OPPORTUNITIES	STATUS QUO / CHALLENGES		
 STATUS QUO / OPPORTUNITIES Strength Germany is after the US, the second largest importer and consumer of coffee (15 % of coffee imports) High per-capita consumption (with 6,5 kg (150 liter) per capita per year, one of the highest consumption rates in the world) Presence of a large domestic roasting coffee industry (roasts green coffee for domestic market and to re-export it) Dominance of roasted over soluble coffee consumption (Classical roasted coffee accounts for 91,8 % of market share/soluble coffee for 8,2 %) 	 STATUS QUO / CHALLENGES Weaknesses Fairtrade and organic coffee represent still a niche market (4 % of total coffee sales) Lack of mainstream consumer awareness and information about coffee generates less competition in terms of consumption compared to other drinks High price for alternative (organic/Fairtrade) coffee compared to conventional coffee price Cheap and low quality coffee-to-go trend Increased value share in coffee sales by traders, roasters and retailers 		
 share/soluble coffee for 8,2 %) Increasing coffee consumption due to fashionable coffee drinks and new (US-style) coffee chains Coffee shops play an increasing role in out-of-home coffee consumption Organic market on the increase (organic products represent a share of 3,7 % of total grocery market) Fairtrade market on the increase (largest share of Fairtrade products are groceries with coffee being the most important Fairtrade product) Increased demand in new market segments (single-portion and Espresso/Crema conventional and organic/Fairtrade coffee) Growth of sustainable coffee driven by main players in the coffee market and main coffee chains (McCafé, Balzac company, Starbucks) Coffee-to-go coffee trend becomes the forteet are fortee and to an fortee the segment in the coffee trend becomes the forteet are forteed. 	 Increased value share in coffee sales by traders, roasters and retailers Small and domestic roasters face fierce competition by multinational companies that are increasingly consolidating the German coffee market There is a glut of sustainable initiatives and labels Confusion about double and triple certification labels (EU, national and private label standards More efforts and resources (time, money and information) needed to consume ethically and sustainably 		
 Organic market is protected by law in 			

5.3 SWOT: Alternative coffee consumption in Germany

 Germany and Europe (bio-label pursuant to EU Organic Farming Regulation/EU-wide organic label) Increased sales channels for organic/Fairtrade products (mainstrefood stores, drug stores, discounters and specialized organic/natural retais shops and outlets, and via mail order companies) Increased out-of-home-market that sorganic/Fairtrade products (canteens cafeterias, restaurants coffee shops bakeries) Growing number of LOHAS that promote alternative consumption patterns Awareness of and high trust in the Fairtrade and Bio-label 	am , , i r ;ell s,
Opportunities	Threats
 Organic and Fairtrade products are intrend Potential to increase alternative coffeconsumption due to strong coffee consumption patterns Increasing health consciousness is influencing organic sales Awareness about quality, ethical issuregarding sustainable production and trade patterns are increasing the Fairtrade demand and preparedness pay a higher price Organic/Fairtrade product sales hav enjoyed considerable increase in Germany, creating opportunities for further development in these catego and further expansion of product rane Expansion of organic and Fairtrade coffee sales at the retail level and our door-market Potential to expand alternative coffee sales in market segments: At home consumption: Espresso/Caffé Crema and sing 	 Oligopolistic buying power of mainstream roasters and retailers that influence coffee demand Low level sustainable standards by private companies The greater the alternative market is growing, the greater the risk of <i>greenwashing</i> Economic downturn affects sustainable product sales Price-consciousness and sensitivity limits the preparedness to pay more for organic/Fairtrade products Coffee tax increases the price for organic/Fairtrade coffee

portion pads and capsules	
 Out-of-home consumption: 	
Coffee shops	
 Increasing diffusion of fairly-traded own 	
coffee brands in food stores and	
gastronomic outlets	
• Room for growth in private label coffee,	
e.g. with increasing number of small	
domestic roasters (Potential to sell	
alternative coffee under own brand	
name and/or private label ⁷⁶)	
 Potential to establish direct purchasing 	
patterns where manufacturer (roasters)	
buys directly from coffee farmer	
cooperatives rather than from	
intermediaries	

As seen in the German market study and the SWOT-Analysis, the strength and opportunities of alternative coffee consumption that have been identified are much more amplified than the weaknesses and threats. This is because alternative products are already well established in the German market and sales of organic as well as Fairtrade products are on the increase. Recent food poisoning scandals and the increasing health consciousness among consumers enhanced considerably organic sales in the last couple of years, while the growing awareness about environmental and social issues in the supply chain increased the interest for Fairtrade products. Hence, the increasing number of consumer that are cause-conscious in their buying habits regarding issues of health, food safety, the environment and social accountability, place particular trust in organic and fairly traded products. This is why, organic and Fairtrade product sales have enjoyed mainstream distribution and considerable increase in Germany creating opportunities for further development in these categories and further expansion of product range. By and large, the idea of sustainable and fair-trade products seems to have arrived in the public and is becoming a consumer standard for social and environmental responsibility in agricultural commodity trade. Nonetheless, the following main obstacles and limitations in the expansion of organic and Fairtrade markets have been identified from existing

⁷⁶ For example, the brand Moxxa caffè was established by a small-roasting company in Cologne that offers organically grown, fairly traded and traditionally roasted coffee to consumers directly and to gastronomic establishments in Cologne. The coffee is handpicked and directly traded from coffee cooperatives in the highland of Chiapas, Mexico. The coffee trade between the small-roaster and the cooperatives is based on a long-term and personal relationship and fair prices paid to producers that improves the situation of the coffee farmers as well as the quality of coffee delivered. See also at: http://www.moxxacaffe.de/

consumer-behavior studies (B.G.W., 2011; Henseleit, 2011; German Coffee Association, 2011):

• From the elite to mass

Among consumers, there is a great consciousness but there is still little willingness to change consumption habits. Hence, there is a gap between good intentions and actual purchasing decisions. People fear that they have to lose their living standard if they do. So, about 41 % of the persons interviewed in the Otto-Trendstudy (2011) said that they are not willing to inform themselves in detail about companies and their products. Particularly network kids and persons with low-education levels showed a lower interest in ethical purchasing. But also, the older a person is, the less is the willingness to change consumption patterns. (B.G.W., 2011, p. 17)

• The glut of sustainable initiatives and (misleading) labels

There are a number of certification bodies and sustainability labels that cause confusion among consumers. This represents a challenge for consumers to orientate themselves in the sustainable product market (B.G.W., 2011, p. 17). Simultaneously, double and triple certification, e.g. for organic products the EU-label, national Bio-label and private label standards (Naturland, Demeter, etc.), cause additional confusion. Moreover, companies through their marketing activities might try to benefit from the green movement and declare conventional products as organic and climate friendly and introduce misleading labels (B.G.W., 2011, p. 60). The more the market for alternative products is growing and becoming mainstream, the greater the risk that the trust is betrayed by anonymous structures or scandals in the industry. For instance, many companies create their own private label initiatives whose standards are sometimes lower (or above, e.g. Rapunzel, Hipp) that of a third-party certification bodies. Marketing activities try to benefit from the green movement and companies declare conventional products as organic and climate friendly labels by throwing misleading labels on the market (Greenwashing). For example with regard to coffee, the Alternative Trade Organizations Gepa, dwp and El Puente and the organic agricultural association Naturland criticize the commitment of major coffee companies to the Common Code for the Coffee Community (4C) to be just a marketing instrument to "deceive consumer as to its purpose" since according to them, the 4C does not comprise minimal pricing commitments with producers, adequate environmental and social standards and a supervised certification system. Thus are far away from a "fair" trade (Reese, n.d.).

• More efforts and resources (time, money and information)

Generally, sustainable consumption requires more efforts and resources like time, information and money. Having the option to choose between organic/Fairtade products and conventional products can also represent an obstacle, since consumers are not informed enough and/or information for decision making overstrains people. Moreover, a

general lack of mainstream consumer awareness and information about coffee generates less competition in terms of consumption compared to other drinks (Business Monitor International , 2010, p. 31).

In addition, since Germany has the cheapest groceries in Europe, there is a certain pricesensitivity among consumers and price-competition among producer companies that might further beat down the price for alternative products. With regard to organic Fairtrade coffee, the price is almost double that of conventional coffee (see example in section 4.2.4 and 4.2.6) and coffee tax makes alternative coffees even more expensive. Although there is a high preparedness to pay more for quality and organic and/or Fairtrade products, coffee consumer look for the less expensive alternative that exists in the market. "Due to the generally high price of roasted coffee (including taxes), the organic and Fairtrade certified coffee is less bought than other Fairtrade products" (F. Niehoff, mail communication, July, 31, 2012).

Despite these challenges, the overall strength and opportunities elaborated in the SWOT-Analysis, clearly offers a positive environment for the expansion of organic and Fairtrade coffees, which still represent a niche market. This is, however, growing faster than conventional coffee consumption. Since conventional coffee has a strong market in Germany, there is no need to convince consumers of the benefits of coffee, but rather to encourage them to consume a natural type of coffee or to substitute their conventional coffee by alternative (organic/Fairtrade) coffee. Though, there is a need for more promotional activities to increase the consciousness for quality, organically grown and fairly traded coffee among main coffee consumers in Germany in order to move the trend from cheap coffee towards more quality and sustainable coffee consumption. The commitment of several key players (like Kraft and Tchibo) to partly increase the share of sustainable coffees to 100 % within the next decades shows that sustainable coffees represent a dynamic market segment in Germany.

5.4 SWOT: Alternative coffee trade between Mexico and Germany

About 85 % of organic coffee from Mexico is exported. Main destinations for organic coffee exports are Germany, Denmark, France, Holland, Great Britain, Italy, Switzerland, United States, Canada, Japan and others (CIIDRI/CONACYT, 2008, p. 48). In 2011, Mexico was after Honduras the second largest supplier of organic coffee with an export rate of 132.925 60-kg bags, an increase of 240 % since 2006 (Table 20 in Appendix I) (ICO, 2012). Organic and Fairtrade coffee commercialization between Mexico and Germany began with the first organic coffee farm "Finca Irlanda" in Chiapas and the cooperative Union of Indigenous Communities of the Isthmus Region (UCIRI) in the Mexican southwestern state of Oaxaca. The first certifier that UCIRI worked with was with the German certifying agency Naturland⁷⁷ and with the German Alternative Trade Organization GEPA. UCIRI

⁷⁷ For organic to be recognized in the international market, it is necessary to undergo external inspections by certifying agency with international recognition. The agencies confer certification based on inspection. Naturland is accredited by IFOAM, the European Union, United States

was also the first cooperative that initiated the Fairtrade movement and the first that got the organic certification for a group of small producers in 1989 (Boersma F. V., 2002, p. 3).

In Germany, now there are four (organic) certifying agencies in the country, of which Naturland is with 8,88 % of the production units certified, the most important one. Others are Demeter, BCS Öko Garantie and LACON (CONACYT/UACH, 2009, p. 65). However, a lot of organic products imported from Mexico to Germany are also certified by other certifiers such as the Mexican certifying agency CERTIMEX. Mexico is not just one of the main exporter of organic coffee, but also the third largest exporter of Fairtrade coffee (after Peru and Colombia) (Pierrot & Giovannuci, 2011e). In 2011, Germany imported about 142.775 60-kg bags of Fairtrade coffee from different coffee producing countries. There are about 60 Fairtrade licensees that import and sell Fairtrade coffee in the German market. In Mexico, in turn, there are about 54 Faitrade certified producers and traders (see complete list of both in Appendix II) (Fairtrade Deutschland, 2011).

The following SWOT Analysis is pooling the two SWOT Analysises of the Mexican production market and German consumption market and discusses the challenges and opportunities of alternative coffee trade between the two countries

 Mexico has a competitive advantage in organic production (farming structures, social and capital resources available) Some well-established cooperatives in Mexico have developed the necessary infrastructure and capacity building to improve quality Main alternative coffee cooperatives (like UCIRI) have a significant customer base in Germany for organic and Fairtrade coffee and long experiences in commercialization with Germany 	 Coffee tax (2,19 per kilo of roasted and 4,78 EUR per kilo soluble) increases the alternative coffee price in Germany The weak organization of producers hampers the development of activities and learning about organic coffee production in Mexico (Lack of training capacity) Little alternative coffee from Mexico for the lower price range Low supply reliability of cooperatives and communication difficulties with small farmers Due to the general high price of roasted coffee (incl. coffee tax), organic Fairtrade coffee is less bought than other Fairtrade products Restriction to commercialize toasted and grounded coffee with Germany due to higher import tax for processed coffee Natural coffee production without certification in specific regions (e.g. Pluma Hidalgo) is not recognized as specialty coffees by traditional commercialization channels
 Opportunities Alternative (organic/Fairtrade) and high quality coffee give a comparative advantage over other coffees in the world since there is a high potential due to a growing market for organic products in Germany Differentiation of Mexican coffee by quality Increase quality awareness in Germany Price difference must be affordable for the consumer Growing niche market for alternative coffees (organic/Fairtrade) in Germany: consumer look beside the quality more and more on issues regarding a sustainable coffee production High potential due to huge market with regard to organic products Access of other possible markets in the 	 Threats Competition of less expensive organic Fairtrade coffee imports by other countries like Peru (third-supplier of conventional coffee and first of alternative coffee) replace organic Fairtrade coffee purchase from Mexico Differences in price paid, quality requirements and marketing of alternative coffee in the in different buying markets (e.g. US) threatens export of alternative coffee from Mexico to Germany Increasing bureaucracy for certification according to stringent law requirements and import permits Distribution of total income has shifted to the consuming country operators in Germany Fairtrade coffee commercialization

As discussed before, Mexico is one of the most important exporter country of organic and Fairtrade coffee and Germany one of the most important buyers of organic and Fairtrade coffee from Mexico. Germany has become the largest organic food market in Europe and organic products are increasing in each (food) product segment and increasingly sold through all possible sales channels. The organic market in Germany is protected by law (Bio-Siegel nach EG-Öko-Verordnung/EU-wide organic label) which protects consumers of deception and fraud and, thus, producers and consumers interests. With regard to exports of organic products from Mexico to Germany, CERTIMEX was accredited in 2003 as a certification agency by the German agency Deutsches Akkeditierungssystem Prüfwesen (DAP) (today Deutschen Akkreditierungsstelle GmbH (DAkkS)) which verifies that certification issued by CERTIMEX meets the demands of the country's organic products. In 2011, it went one step further when it got the official approval for imports of organic products in the EU under the EC Regulation No. 1267/2011⁷⁸. Hence, CERTIMEX is currently the only accredited Mexican certification agency that has the right to certify producers directly and be recognized by European Union's organic importers. As the

⁷⁸ Commission Implementing Regulation (EU) No. 1267/2011 amending Regulation (EC) No. 1235/2008 laying down detailed rules for implementation of Council Regulation (EC) No. 834/2007 as regards the arrangements for imports of organic products from third countries. See also http://eur-

lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:324:0009:0022:EN:PDF

director of CERTIMEX, Reyes Santiago stated "this facilitates the access to the EU market and through the accreditation, CERTIMEX has received confidence from international buyers" (R. Santiago, personal communication, May 1, 2012).

Reaching the recognition of organic product certification in international markets is just one advantage, however, more important is the overall competitive advantage that Mexico has in organic agriculture of which coffee is the main product. Mexico grows a wide variety of highly differentiated, exemplary coffees, most of which are shade-grown in high altitudes without chemical inputs by small-scale farmers. These traditional methods of coffee cultivation in accordance with its surrounding nature provides Mexico with a comparative advantage in the international and – particularly the German – alternative (specialty) coffee market. A number of other competitive factors are related to some well-established cooperatives, like UCIRI in Mexico that have developed the necessary infrastructure and capacity building to improve quality and have reached a significant and long-term customer base in Germany.

Nonetheless, alternative coffees like organic and Fairtrade certified coffee still represent a low share of the coffee market in Germany which, however, is emerging from just a niche market. According to Niehoff, the demand for organic Fairtrade coffee is still high, however the coffee tax is even more increasing the price for organic Fairtrade coffee. "Since consumers are very price-conscious, they prefer the less expensive alternative (organic) coffee imported from other countries over the organic Fairtrade coffee from Mexico. However, organic Fairtrade coffee from Mexico has a high potential because its high quality" (F. Niehoff, personal communication, July, 31, 2012).

If seen from the producer side in Mexico, Hernandez Balderas from CEPCO stated that other importing countries like the US offer better market conditions than Germany, since they pay a higher price differential, they have more demand, less quality requirements and its geographical location is closer. He also emphasized that due to changing market conditions in Germany and interest conflicts with main buyers, they have at time no organic Fairtrade coffee commercialization with Germany. He puts it that way "there are agreements between buyer and seller over a certain time, sometimes buyer and seller do not reach an agreement, so they do not continue commercialization" (H. Balderas, personal communication, May 5, 2012). Moreover, there is an increasing bureaucracy for certification according to stringent law requirements and import permits that hampers export of alternative coffee from Mexico to Germany (R. Santiago, personal communication, May 1, 2012).

Other important producer cooperatives in Mexico depend largely on Fairtraders and buyers in main coffee consuming markets like Germany, where unforeseen changes that might occur in the market, can influence consumers purchasing decision. To give an example, the producer cooperative UCIRI in Mexico and the Alternative Trade Organization (ATO) GEPA have a long-term relationship since the beginning of the organic Fairtrade movement. However, like other alternative products, GEPA's product sales were affected by the economic crisis which affected the disponible income for customers and, subsequently, the alternative product demand. In the case of alternative coffee, the higher price paid for alternative coffee purchase from cooperatives could only marginally be

passed on to consumers (M. Villanueva, telephone (Skype) communication, May 23, 2012). Hence, to avoid the dependency on just one product and market, both companies have diversified their product portfolio as well as customer base. Martinez Villanueva, from UCIRI, revealed that "now 5 years ago, 96 % of coffee was exported; today 75 % is exported and 25 % goes to the national market" (Villanueva, telephone (Skype) communication, May, 23, 2012).

Since Fairtrade coffee commercialization is dependent on Fairtraders as well as conventional traders, the distance between producer and consumer in the Fairtrade supply system is increased and similarities to the conventional supply channel are more and more visible. As a consecuence, GEPA reduced considerably the use of the Fairtrade label on its coffee products, since it engages 100 % in fairly-traded products which is why it wants to be distinguished from companies that offer only few products of their product range that are Fairtrade certified (GEPA, n.d.). Rainer Sakic, Head of the Bulk Consumer Department of GEPA, said in an article interview about Fairtrade: "We completely distance ourselves from discounters like Lidl and Schlecker, since our understanding of fairness does not include taking advantage of workers in Germany. When McDonalds approached us because they wanted to buy our raw coffee, we also refused." (Verfürth, n.d.).

The decision of Fairtrade to led big companies entering the Fairtrade market, have openly been criticized since companies can get the Fairtrade label, regardless of the percentage of products that they sell under Fairtrade conditions or their general (unethical) business practices. As discussed in the previous section, many companies just engage in organic/Fairtrade to *greenwash* their image.

The potential to directly process the coffee in the producing like Mexico and, then export it as toasted and grounded coffee is restricted, since the import tax for processed coffee is much higher than that of green coffee. Additionally, according to GEPA, this does not make sense in the case of coffee, since it requires diverse quality controls, the roasting and the coffee compositions/blends have to be adapted according to different consuming markets, whose coffee tastes deviate in different countries. Moreover, this would represent a problem with regards to coffee blends since they are composed of coffee from different origins (GEPA, n.d.).

Nonetheless, alternative coffees are considered as a viable alternative for Mexican coffee producers to compete with other supplier countries for market share in Germany. As emphasized by Niehoff, producers that can sell their certified coffee through organized sales channels, have a good advantage over conventional suppliers. However, according to him, the low supply reliability of cooperatives, the communication difficulties with small farmers as well as the little offer of alternative coffee from Mexico for the lower price range, still represent weaknesses in coffee commercialization with Mexico (Niehoff, mail communication, July 31, 2012).

In Germany, such coffees give a comparative advantage over other coffees imported, mainly because of differentiation through quality and organic management methods, since there is a high potential due to a growing market for organic products. Additionally, the sale of alternative coffee to Germany, can lead to increasing business opportunities in various other European markets, since Germany is one of the major re-exporter of coffee to other neighboring countries. Hence, Germany represents an opportunity to enter other possible EU markets.

As conventional coffee has a strong market in Germany, there is no need to convince consumers of the benefits of this product, but rather encourage them to consume a natural type of coffee or to substitute their conventional coffee by organic or other alternative coffees. Considering the development of the market for organic products in recent years, then you can clearly see the growth potential for organic and fairly traded coffee. However, as Niehoff pointed out the price difference must be affordable for producers. Moreover, it is important that there is a close relationship between supplier and buyers, "since a trusting relationship helps to eliminate problems" (Niehoff, mail communication, July 31, 2012). In alternative coffee commercialization, there are usually direct purchasing patterns where roasters buy directly from coffee farmers, rather than from intermediaries. Hence, a direct relation and cooperation with buyers in Germany that speak the producer's language facilitates the trust between producers and buyers (Villanueva, personal communication, May 23, 2012).

However, in order to expand consumption of alternative (organic/Fairtrade) coffee, the coffee sector in Germany has to transform its strength into capabilities by matching them with opportunities and by finding ways to minimize the weaknesses and threats. For example, if alternative coffees gain a greater share of the market, and people's awareness about social and environmental issues is increasing or, at least, undergoing gradual but continual change, then more will also be prepared to pay a higher price for better quality. Nonetheless, growth of the alternative coffee market requires large advertising campaigns on the issue and the commitment and contribution from all participants in the coffee market from the producers, traders, roasters, retailers to the consumer and the government.

With regard to the coffee producer country in Mexico, the results of the market study show that Mexico's competitive advantage in the future will not be in conventional production systems but rather in specialty and differentiated coffee production. However, in order to increase the competitiveness of the Mexican coffee industry in alternative coffee production, consumption and trade, the industry needs to capitalize on its strengths and create strategies for managing the various challenges and limitations that conventional and alternative coffee producer in Mexico actually face.

6 Conclusions and Recommendations for further studies

6.1 Conclusions

Several conclusions can be drawn from the outcomes of this study, but the most evident, is that a route towards alternative coffee production, consumption and trade is accompanied by complexity, contradiction, discrepancy, uncertainty and many challenges that have to be overcome in both markets – the consumption market in Germany and the production market in Mexico, in order to promote a fair trade of organically produced coffee between the two countries.

The most important finding in coffee trade between Mexico is that – even in the case of organic Fairtrade certification – larger incomes are to be found in the consuming country operators in Germany. In other words, those who most profit from the higher organic Fairtrade end consumer price are roasters, the German treasury and Fairtrade licensees, since 80 % of the value added of the coffee traded between the two countries, remains in Germany and just 20 % go to the producers in Mexico. Although consumers in Germany have to pay considerably more for organic Fairtrade certified coffee, producers in Mexico do not receive a considerable larger part of the *total value added in the coffee chain*. In the conventional coffee chain, producer groups receive about 13 % of the end consumer price while alternative (organic/Fairtrade) producer groups receive 20 %.

However, when looking at absolute values, organic Fairtrade coffee producers have a clear advantage over conventional producers. The price comparison in section 4.2.6. (Table 10) shows that alternative producer groups receive 1,51 EUR per 500 g for organic and Fairtrade certified coffee while conventional producer groups receive just about 0,50 EUR. This is three times that amount that conventional producers get. In addition to the higher price premium, the strengths in the SWOT-Analysis about alternative coffee production, consumption and trade in Mexico, have also demonstrated very concrete other benefits that go beyond just economic merits. These benefits are related to price stability; access to basic financial and technical services; capacity building of producers on value adding activities, organic management and quality improvements; increased self-esteem of producers; and conservation of cultural and environmental practices, among others. Nonetheless, on the other extreme, if the challenges are regarded that alternative coffee producers in Mexico actually face in transition and maintenance of organic Fairtrade certification, these benefits seem to lose importance. Some of the findings of coffee trade between Mexico and Germany show that, despite of the participation of Mexican's producers in organic and/or Fairtrade certification, certified coffee producers are not really better off in terms of monetary benefits than conventional coffee producers since:

- There are increased cost of certification due to double certification fees that have to be paid to two different certification bodies, e.g. FLO and CERTMEX in order to be organic and Fairtrade certified (inspection fees during the three-year transition and double certification fees on an annual basis)
- Not all coffee can be sold through certified channels and to the certified price

- Price premium of alternative coffee (organic/Fairtrade) decrease if market prices are high. Then, the price differentials paid to producers become more modest, which is why there is a lack in consistency and continuity in meeting certification standards and in the commitment of producer to deliver their coffee to the certified producer organization. This makes it difficult for the cooperative to generate economies of scale and to sell via certified channels.
- In the case of solely organic producers (without Fairtrade certification), the marketbased price premium for organic coffee is reduced when conventional coffee prices are high, and insufficient to cover organic production costs when prices are low, thus making certification just worthwhile if productivity is high and/or producers are organized to reach a higher volume. The premium price for these coffees is set by the market and the decreasing premium for organic coffee is a result of increasing supply of organic coffee by other coffee growing countries that compete for market share (e.g. in Germany).

With regard to the latter point, Fairtrade certified coffee producers, on the contrary to just organic producers, get a guaranteed minimum price that gives producers price security if market prices go down. However, the problem here is that, organic and Fairtrade certified producers do not have necessarily a buyer for their certified coffee, and that the high price for organic and certified Fairtrade coffee from Mexico that is offered in the German market, is limiting demand. A limited demand, in turn, implies that certified coffee producers have to sell their certified coffee as conventional coffee although the costs of production and certification are much higher. Since alternative coffees in Germany currently still represent a niche market – albeit increasing –, there is a lack of information and willingness of mainstream consumer to pay a higher price for this type of coffee.

Hence, a Fairtrade that is only emphasized on the fact that a higher price is paid to producers, is far away from the realities of the world economic order and just deceiving consumer, for example in Germany, to have a clear conscience in their purchasing decisions. Hence, there is an increased bias between the pre-conditions demanded by standard-setting organizations from consumer countries in the North and the little reward coffee growers, for example in Mexico, get for their efforts of producing organically and participating in the Fairtrade system. For that reason, Fairtrade is not just about the price, it is more about how much of the value added can be controlled by producers.

Moreover, Fairtrade's recent policy changes that seem to increasingly favor large companies that enter the Fairtrade market and compete with lower priced Fairtrade coffee (e.g. from large Fairtrade plantations), threaten the economic viability of small-scale producers. Hence, it seems that Fairtrade is seeking to increase revenue by larger licensing fees to be earned from certifying a higher volume of products from large companies, even though these companies commit just by a minimum percentage of their product range to Fairtrade principles.

On the contrary, other Alternative Trade Organizations (ATOs) like GEPA, which have all of their product range fairly traded, stand in direct competition with these large companies that imperil to push such ATOs out of the market by undercutting prices. This price

dumping policies with Fairtrade coffee are possible, since large coffee companies have quantitative effects in transport, storage, marketing, and roasting, which reduces the price competitiveness of Fairtrade coffee that is sold in the German market. For consumers in Germany that are beginning to be aware of the importance of fairly-traded and innocuous products, the result of this discourse could be confusion. Moreover, the glut of sustainable logos and (misleading) labels, and the increased efforts and resources needed to consume alternative to the conventionally traded products, are just some of the main limits to growth from the demand side in Germany.

All in all, it seems that Fairtrade has become a lucrative business at the expense of the coffee producers that continue to experience no significant change in their situation. In this, other alternative certification labels like that of the CLAC-Small Producer Symbol (SPS) are a more promising *alternative* for Mexican coffee producers to make a positive contribution to their situation and restructure the commodity chain from "below".

Concluding, the output of the SWOT-Analysises and the overall study could serve as a basic analysis for key decision-makers in the sector to develop a strategic planning in order to create a competitive advantage by matching the strength with the opportunities; by investing resources (e.g. in research; financial, technical and management support; advertising campaigns, etc.) to convert threats into opportunities; and by minimizing the negative effects of the weaknesses; as well as by linking key stakeholders more effectively (such as linking companies, NGOs, governments, standards initiatives, consumers, universities, with producers). Hence, improvement strategies should be related to providing access to farm credit, differentiated markets, improvements in the organizational management and the development of alternative economic opportunities to reduce vulnerability of small producer families that live from coffee sales and to ensure sustainable development of coffee growing regions.

6.2 Recommendations for further studies

This study has raised a lot of more questions than answers as many of the findings that emerged from the study indicate more need for more analysis. These recommendations for further research will be needed to guide and accompany the alternative trade movement in general, and between Mexico and Germany. Hence, further studies are necessary to evaluate:

- The reasons and the approximate estimate of the volume of certified coffee that is sold through conventional channels
- The further dynamics of the Fairtrade system with regard to its strategy changes towards opening the label to large companies and large plantations
- The implications that the certification exit of Fairtrade USA from the International Fairtrade system has on small producer organizations in Mexico
- The comportment and adherence of coffee producers to alternative (organic Fairtrade) coffee organizations during high conventional prices for coffee and vice versa
- The socio-economic and environmental impact of Nestlé's domination of the coffee market and the expansion of Robusta coffee production and consumption in Mexico

- Policy requirements to enhance organic coffee production and certification in Mexico
- Domestic potential to expand local high-quality and organic coffee consumption in Mexico
- The dynamics, efforts and overall trajectory of alternative product demand in Germany
- The impact of sustainable initiatives by private companies in the alternative coffee market that are associated with sustainable coffee sourcing
- The potential to get recognition for other differentiated coffees from Mexico, e.g. "denomination of origin" for Mexican coffee, and in building the Small Producer Symbol into a widely recognized label in Germany and in the national market in Mexico

These points are just a few recommendations for further analysis with regard to alternative coffee production in Mexico, consumption in Germany and trade between the two countries. However, the main findings in this study point out the need for more information on a range of emerging issues related to alternative (coffee) trade.

7 Appendices

7.1 Appendix I: Figures and Tables

	Arabicas		Robustas
Colombian Milds	Other Milds	Brazilian Naturals	
Colombia	Burundi	Bolivia	Angola
Kenya	Costa Rica	Brazil	Benin
Tanzania	Cuba	Ethiopia	Cameroon
	Dominican Republic	Paraguay	Central African Rep.
	Ecuador		Congo
	El Salvador		Congo Democratic Rep.
	Guatemala		Cote d'Ivoire
	Haiti		Equatorial Guinea
	Honduras		Gabon
	India		Ghana
	Jamaica		Guinea
	Malawi		Indonesia
	Mexico		Liberia
	Nicaragua		Madagascar
	Panama		Nigeria
	Papua New Guinea		Philippines
	Peru		Sierra Leone
	Rwanda		Sri Lanka
	Venezuela		Thailand
	Zambia		Togo
	Zimbabwe		Trinidad and Tobago
			Uganda
			Vietnam

Table 16: Distribution of green coffee imports by types of coffee (grouped according to different producing countries)

Source: (ICO, n.d.)

Table 17: Minimum price and premium information for Arabica and Robusta coffee

Status: 06. Jun 2012							
Product (specific product standard)	Product variety	Price applies to	Currency / Quantity x Unit	Price level / *special price conditions	Fairtrade minimum price	Fairtrade premium	Valid from
Coffee Arabica (Coffee)	Organic, natural	worldwide (SPO)	USD / 1 pound	FOB*	Organic differential: +0.30	see conventional coffee	01. Apr 2011
Coffee Arabica (Coffee)	Conventional, natural	worldwide (SPO)	USD / 1 pound	FOB*	1.35	0.20 (of which at least 0.05 for productivity and/or quality)	01. Apr 2011
Coffee Arabica (Coffee)	Organic, washed	worldwide (SPO)	USD / 1 pound	FOB*	Organic differential: +0.30	see conventional coffee	01. Apr 2011
Coffee Arabica (Coffee)	Conventional, washed	worldwide (SPO)	USD / 1 pound	FOB*	1.40	0.20 (of which at least 0.05 for productivity and/or quality)	01. Apr 2011

Source: (Fairtrade International)



Figure 21: Coffee world prices for Fairtrade and New York Prices

NB Fairtrade price = Fairtrade minimum price^{*} of 125 cents/lb + 10 cents/lb Fairtrade premium^{**} When the New York price is 125 cents or above, the Fairtrade price = New York price + 10 cents "Minimum price was increased from 121 cents/lb on 1 June 2008 ^{**}Premium was increased from 5 cents/lb on 1 June 2007 The NY price is the daily closing price of the second position Coffee 'C' futures contract at ICE Futures US © Fairtrade Foundation

Source: (Fairtrade UK, 2011)



Figure 22: International Fairtrade network

Source: (Fairtrade Deutschland, 2011a)



Figure 23: Various categories of coffee growing methods

Source: (Moguel & Toledo, 1999)



Figure 24: Regular and frequent coffee consumption

Source: (AMECAFE (IPSOS), 2010)

Table 18: Importance of organic farming for selected crop compared
to conventional surface
(2004/2005 - 2007/2008)

		Superfic	Superficie (ha)		Superfici	Superficie (ha)	
No.	Cultivo	Convencional 2004 ¹	Orgánica 2004-2005²	convencional (%)	Convencional 2007	Orgánica 2007-2008	convencional (%)
1	Café	777,053.35	147,136.74	18.94	785,273.49	185,192.95	23.58
2	Hortalizas	498,265.35	24,724.86	4.96	620,304.62	35,414.32	5.71
3	Aguacate	101,876.32	2,652.09	2.60	104,507.36	31,572.43	30.00
4	Hierbas aromáticas	N.d.	30,119.00	N.d.	25,173.95	30,199.26	119.96
5	Cacao	81,964.11	17,313.86	21.12	77,995.00	14,795.68	18.97
6	Mango	176,781.06	2,132.42	1.21	181,525.00	12,464.70	6.86
7	Uva silvestre	N.d.	12,032.00	N.d.	N.d.	12,032.00	N.d.
8	Agave tequilero y mezcalero	149,615.63	5,943.30	3.97	160,284.98	11,586.20	7.22
9	Coco	14,712.30	8,400.00	57.10	140,000.00	9,031.00	6.45
10	Sábila	5,619.24	1,888.30	33.60	6,077.74	5,148.72	84.71
11	Maíz	8,122,108.65	3,534.72	0.04	7,807,340.16	4,599.21	0.06
12	Nopal silvestre	3,000,000.00	5,039.07	0.17	66,697.72	3,526.91	5.29
13	Cítricos	508,034.58	1,608.35	0.32	511,762.00	6,023.61	1.17
14	Ajonjolí	59,306.25	2,497.75	4.21	44,513.50	1,005.25	2.26
15	Piña	30,318.50	252.54	0.83	27,916.00	921.97	3.30
16	Pimienta	N.d.	N.d.	N.d.	3,779.00	898.00	23.76

Source: (CIIDRI/CONACYT, 2008)



Figure 25: Price development 2010-2012 on the NY stock exchange

Source: UCIRI, 2012





Source: (Bray, Sanchez, & Murphy, 2002 adapted from AICA Consultores, S.C. 1997)

Table 20: Exports of organic coffee by exporting ICO's Members

	January-December						
Country of origin	2005	2006	2007	2008	2009	2010	2011
By Origin							
Brazil	10 371	8 185	13 401	10 679	22 428	17 855	17 831
Colombia	8 701	194	21	160	656	372	428
Costa Rica	0	0	0	0	408	0	0
Cuba	0	0	600	0	900	300	0
Dominican Republic 1/	913	6 480	4 471	4 655	5 075	4 291	5 958
Ecuador	3 510	6 744	8 090	7 812	7 406	6 764	10 461
El Salvador	0	13 911	18 303	0	37 195	24 788	9 491
Ethiopia	0	0	0	0	101 275	169 718	139 450
Honduras	0	2 214	2 654	90 028	114 328	136 771	249 344
Indonesia	0	0	0	600	0	0	0
Mexico	1 955	55 348	75 969	105 410	116 898	139 139	132 925
Nicaragua	0	0	0	0	82 551	78 095	87 211
Papua New Guinea	0	0	6 2 4 3	41 756	26 038	32 413	26 087
Total	25 449	93 076	129 752	261 099	515 160	610 507	679 185
		By	y Destinatior	า			
Australia	267	1 055	2 508	6 105	11 957	21 821	17 693
Belgium	1 164	3 881	4 035	15 582	35 281	49 467	57 328
Bulgaria	0	0	0	0	0	0	2 415
Canada	1 172	4 895	3 651	5 895	21 420	30 384	36 175
Denmark	50	2 570	4 990	11 772	6 792	9 661	6 476
France	104	690	493	1 698	8 522	8 253	11 564
Germany	2 725	20 750	27 315	83 653	103 545	110 833	142 775
Italy	0	679	2 123	1 493	8 440	7 240	4 635
Japan	7 979	5 957	12 199	12 551	27 761	24 806	17 254
Mexico	0	0	0	1 587	6 958	3 976	10 197
Netherlands	692	933	644	1 357	4 629	8 960	8 576
New Zealand	0	0	100	1 614	7 109	7 851	8 800
Norway	0	0	988	0	2 314	2 266	3 253
South Africa, Rep.of	10	0	0	0	931	1 304	1 069
Spain	307	0	0	0	4 159	523	1 952
Sweden	1 800	5 388	9 671	17 028	39 311	40 127	44 854
United Kingdom	554	1 608	2 064	10 373	22 316	26 219	26 125
USA	8 111	43 691	53 176	88 894	189 208	245 826	273 790
Others	515	980	5 795	1 499	14 508	10 990	4 256
Total	25 449	93 076	129 752	261 099	515 160	610 507	679 185
1/ Not a Member of the ICA 200	1/ Not a Member of the ICA 2007 but still providing regular information						

(Calender years 2005 to 2011) (60-kg bags)

Source: (ICO, 2012)

Coffee		
Not specified	d	
Germany	ALDI GmbH & Co. KG, Kaffeerösterei Ketsch	(Trader)
Germany	ALDI GmbH & Co. KG, Kaffeerösterei Mülheim	(Trader)
Germany	Coffy Handels-Gesellschaft Bremen m.b.H.	(Trader)
Germany	Hamburg Coffee Company	(Trader)
Germany	Heimbs Kaffee GmbH & Co. KG	(Trader)
Germany	InterAmerican Coffee GmbH	(Trader)
Germany	IPI Instant Products International GmbH	(Trader)
Germany	Mahlwerkk - Die Kaffeerösterei	(Trader)
Germany	Privatrösterei VOLLMER Kaffee GmbH & Co.	(Trader)
	·	
Coffee		
Robusta		
Germany	Anton Hensler GmbH & Co. KG	(Trader)
Germany	Azul-Kaffee GmbH & Co. KG	(Trader)
Germany	Balmed GmbH	(Trader)
Germany	Bernhard Benecke Coffee GmbH & Co. KG	(Trader)
Germany	Bernhard Rothfos GmbH	(Trader)
Germany	Dr. Otto Suwelack Nachf. GmbH & Co. KG	(Trader)
Germany	El Puente Import und Vertrieb GmbH	(Trader)
Germany	El Puente Import und Vertrieb GmbH	(Trader)
Germany	Eugen Atté GmbH	(Trader)
Germany	F. W. Praum GmbH & Co. KG	(Trader)
Germany	FBC Trading GmbH	(Trader)
Germany	Gebr. Westhoff GmbH & Co. KG	(Trader)
Germany	GEPA - The Fair Trade Company	(Trader)
Germany	GEPA - The Fair Trade Company	(Trader)
Germany	Golluecke & Rothfos GmbH	(Trader)
Germany	J. J. Darboven Holding AG & Co. KG	(Trader)
Germany	Kaffee Braun GmbH	(Trader)
Germany	Kaffee Import Compagnie GmbH	(Trader)
Germany	Kaffee Import Compagnie GmbH	(Trader)
Germany	KAFFEE PURA GmbH	(Trader)
Germany	Kaffeerösterei H. von Pfingsten	(Trader)
Germany	Kaffeerösterei Hubert Tempelmann GmbH & Co. KG	(Trader)
Germany	Krüger GmbH & Co.KG	(Trader)
Germany	Langen Kaffee GmbH & Co. KG	(Trader)
Germany	List & Beisler GmbH	(Trader)
Germany	List & Beisler GmbH	(Trader)
Germany	Ludwig Weinrich GmbH & Co. KG	(Trader)
Germany	Niehoffs Kaffeerösterei GmbH	(Trader)
Germany	Niehoffs Kaffeerösterei GmbH	(Trader)
Germany	Rösterei Wissmüller GmbH & Co. KG	(Trader)
Germany	Röstfein Kaffee GmbH	(Trader)
Germany	Spezialitäten-Compagnie	(Trader)

Germany	Tchibo GmbH	(Trader)			
Germany	VIVA Coffee GmbH				
Germany	W. Machwitz GmbH				
Germany	Wertform GmbH	(Trader)			
Germany	Würzburger Partnerkaffee e.V.	(Trader)			
Germany	Ökotopia GmbH	(Trader)			
Coffee		I			
Arabica					
Germany	Anton Hensler GmbH & Co. KG	(Trader)			
Germany	Azul-Kaffee GmbH & Co. KG	(Trader)			
Germany	Bernhard Benecke Coffee GmbH & Co. KG	(Trader)			
Germany	Bernhard Rothfos GmbH	(Trader)			
Germany	BlankRoast GmbH	(Trader)			
Germany	Bodeta Süßwaren GmbH	(Trader)			
Germany	Coffein Compagnie Dr. Erich Scheele GmbH & Co. KG	(Trader)			
Germany	Dr. Otto Suwelack Nachf. GmbH & Co. KG	(Trader)			
Germany	El Puente Import und Vertrieb GmbH	(Trader)			
Germany	Ethiocoffee - Witsadik Wittemeier GbR	(Trader)			
Germany	Eugen Atté GmbH	(Trader)			
Germany	FBC Trading GmbH	(Trader)			
Germany	Gebr. Westhoff GmbH & Co. KG	(Trader)			
Germany	GEPA - The Fair Trade Company	(Trader)			
Germany	GEPA - The Fair Trade Company	(Trader)			
Germany	Golluecke & Rothfos GmbH	(Trader)			
Germany	J. J. Darboven Holding AG & Co. KG	(Trader)			
Germany	Kaffee Braun GmbH	(Trader)			
Germany	Kaffee Import Compagnie GmbH	(Trader)			
Germany	Kaffee Import Compagnie GmbH	(Trader)			
Germany	KAFFEE PURA GmbH	(Trader)			
Germany	Kaffeerösterei H. von Pfingsten	(Irader)			
Germany	Kaffeerosterei Hubert Tempelmann GmbH & Co. KG	(Trader)			
Germany	Langen Kaffee GmbH & Co. KG	(Trader)			
Germany	List & Beisler GmbH	(Trader)			
Germany		(Trader)			
Germany	Ludwig Weinrich GmbH & Co. KG	(Trader)			
Germany	Minges Kallee GmbH & Co.KG	(Trader)			
Germany	Niehoffa Kaffaarästarai OmbH	(Trader)			
Germany	Nienolis Kalleerosterei GmbH	(Trader)			
Germany	Original Food GmbH	(Trader)			
Germany	Privatrosterei Guntner Schröer	(Trader)			
Germany	Kenani Kattee				
Germany	Rosterei Wissmüller GmbH & Co. KG (Tra				
Germany		(Trader)			
Germany	Spezialitaten-Compagnie (Trade				
Germany	I Chibo GmbH (Tra				
Germany	Tres Cabezas Berlin GDK	(Trader)			

Germany	VIVA Coffee GmbH			
Germany	any W. Machwitz GmbH			
Germany	Wertform GmbH			
Germany	Würzburger Partnerkaffee e.V.			
Germany	Ökotopia GmbH			
Coffee				
Germany	Progua e.V.	(Trader)		
Germany	Schirmer Kaffee GmbH	(Trader)		
Germany	ny Schmitz-Mertens & Co. KG			
Germany	Seeberger KG	(Trader)		

Source (FLO-Cert GmbH, 2012)

Table 22: List of FLO-certified organizations in Mexico

Coffee		
Arabica		
Mexico	Agroindustrias Unidas de México S.A. de C.V.	(Trader)
Mexico	Agroproductores de Café Escuintla SPR de RI	(Producer)
Mexico	Cafe Gourmet Sierra Azul S.C.	(Producer)
Mexico	Café Tostado de Exportación S.A. de C.V.	(Trader)
Mexico	Cafe y Desarrollo SA de CV	(Trader)
Mexico	Cafe y Desarrollo SA de CV	(Trader)
Mexico	Campesinos Ecológicos de la Sierra Madre de Chiapas S.C.	(Producer)
Mexico	Comercializadora Agropecuaria del Estado de Oaxaca CAEO	(Trader)
Mexico	Comercializadora Mas Cafe S.A. de C.V.	(Trader)
Mexico	Comercializadora Profesional Mexicana S.A. de C.V.	(Trader)
Mexico	Comon Yaj Nop Tic, SSS	(Producer)
Mexico	Comun. Indígenas de la Reg. Simojovel de Allende S.S.S-CIRSA	(Producer)
Mexico	Comun. Indígenas de la Reg. Simojovel de Allende S.S.S-CIRSA	(Producer)
Mexico	Cooperativa de Producción Tzeltal - Tzotzil S. C. L	(Producer)
Mexico	Coord. Estatal de Prod. de café de Oaxaca - CEPCO	(Producer)
Mexico	Descafeinadores Mexicanos SA de CV	(Trader)
Mexico	Exportadora de Café California S.A. de C.V.	(Trader)
Mexico	Exportadora de Café California S.A. de C.V.	(Trader)
Mexico	Federación Indigena Ecologica de Chiapas - FIECH	(Producer)
Mexico	Federación Indigena Ecologica de Chiapas - FIECH	(Trader)
Mexico	Finca Triunfo Verde Sociedad Civil	(Producer)
Mexico	Grupo de asesores de Produccion organica y sustentables S.C.	(Producer)
Mexico	Indígenas de la Sierra Madre de Motozintla - ISMAM	(Producer)
Mexico	Indigenas y Campesinos Ecologicos de Angel Albino Corzo	(Producer)
Mexico	JAMTELETIC S.S.S.	(Producer)
Mexico	KULAKTIK SSS	(Producer)
Mexico	Mixteca Alta del Pacífico S.C.L.	(Producer)
Mexico	Organización de Productores de café de Angel Albino Corzo	(Producer)
Mexico	Organización Regional de Productores Agroecológicos	(Producer)
Mexico	Productores de Cafe de Motozintla S. de S.S	(Producer)

Mexico	REDCAFES AC.	(Producer)		
Mexico	REDCAFES AC.	(Producer)		
Mexico	Sociedad Coop. de Productores de 21 DE SEPTIEMBRE S.C.L	(Producer)		
Mexico	Sociedad Cooperativa Agropecuaria Reg. Tosepan Titataniske	(Producer)		
Mexico	SOCIEDAD COOPERATIVA PALUCHEN DE R.L. DE C.V.	(Producer)		
Mexico	Sociedad Cooperativa Tzotzilotic Tzobolitic	(Producer)		
Mexico	SPOSEL S.S.S.	(Producer)		
Mexico	Tiemelonla Nich klum Sociedad de Solidaridad Social	(Producer)		
Mexico	Torrefactora de Café Organico El Tibor SC de RL	(Producer)		
Mexico	UAPEIS TZIJIB BABI	(Producer)		
Mexico	Union de Cafetaleros Orgánicos de Angel Albino Corzo S.S.S	(Producer)		
Mexico	Unión de Comunidades Indígenas de la Región del Istmo- UCIRI	(Producer)		
Mexico	Unión de Ejidos de la Selva, S.C.	(Producer)		
Mexico	Unión de Ejidos San Fernando	(Producer)		
Mexico	Unión de Ejidos y Comunidades Cafeticultores Beneficio Maj	(Producer)		
Mexico	Unión de Ejidos y Comunidades Cafeticultores Beneficio Maj	(Trader)		
Mexico	Unión de Ejidos y Comunidades Cafeticultores Beneficio Maj	(Trader)		
Mexico	Unión de Productores de Café Orgánico Juan Sabines Gutiérrez	(Producer)		
Mexico	Unión de Productores Flor del Cafetal S.C. de R.L. de C.V.	(Producer)		
Mexico	Unión de Productores Maya Vinic S.C. de R.I.	(Producer)		
Mexico	Union Ramal Santa Cruz SPR	(Producer)		
Mexico	Unión Reg. de Pequeños Productores de Café Huatusco SSS	(Producer)		
Mexico	UREAFA S.DE S.S.	(Producer)		
Mexico	Yeni Navan Sociedad de Producción Rural de R.L.	(Producer)		
Coffee				
Not spec	ified			
Mexico	Cafes de Especialidad de Chiapas S.A.P.I de C.V.	(Trader)		
Mexico	Cafes Especiales de Mexico S.C.	(Producer)		
Mexico	Union de Productores de Cafe Reservas de Bosque Bello S.P.R			
Coffee				
Robusta		1		
Mexico	Productores de Guatimoc S de SS	(Producer)		

Source: (FLO-Cert GmbH, 2012)

7.2 Appendix II: Alternative Organizations/Producer Cooperatives

Success story and experiences that best-practice organizations mentioned in the study, have made trough the participation in alternative (organic and Fairtrade) coffee systems:

GEPA – The Fair Trade Company

(Alternative Trade Organization)

GEPA stands for "Gesellschaft zur Förderung der Partnerschaft mit der Dritten Welt mbH", literally meaning the Society for the Promotion of Partnership with the Third World. It is Europe's largest Alternative Trade Organization, whose headquarter is located in Wuppertal, Germany. It is known in the German market as a socially responsible trade company that buys food, handicrafts and textiles at fair prices and conditions from about 190 cooperatives and marketing organizations in the global South (Africa, Asia and Latin America). All of the GEPA products work under the Fair Trade model and about 75 % of their food products are also organically certified according to the EU regulation or the Naturland seal (GEPA, 2011). About 45,10 % of its turnover in 2010/2011 (58,4 million EUR) was made by coffee, which is imported from about 39 coffee partner in 11 countries in form of green coffee (GEPA, n.d.a). About 85 % of coffee traded is high-guality Arabica coffee. Their coffee segment consists of about 40 different coffees from pure country coffee, to blends and compositions, as well as Espresso. The services they offer with regard to coffee are: product advice, minimum prices, development premium above TransFair standard, organic premium, advance payment and long-term trading relationships.

Main source: http://www.gepa.de

Union of Indigenous Communities of the Istmus Region (UCIRI)

(Producer cooperative in Oaxaca)

UCIRI stands for "Union de Comunidades Indígenas de la Región del Istmo" and is a coffee cooperative in Oaxaca that was created more than 20 years ago. It was a cofounder of the Fairtrade (Max Havelaar/Transfair) seal that quickly promoted also organic coffee production and commercialization. While in the first 15 years of operation, coffee sales were rather directed towards the international market, it now focuses more and more on the national market. The organization has a democratic system and manages to keep 5 different ethnic groups of 56 (zapotecan and mixtecan) communities of the central and northern Isthmus together. It collaborated in the creation of various organizations, like CNOC⁷⁹, Fair Trade Mexico (Comercio Justo México, A. C) and CERTIMEX, the Mexican certifying agency. There are regular internal and external inspections that are made every year. Therefore, the organization has an internal control system. Internal inspectors are often family members (sons) of producers, who are trained regarding organic certification.

⁷⁹ Confederación Nacional de Organizaciones Cafetaleras/National Federation of Coffee Organizations

As Martinez Villanueva, a technical consultant at UCIRI, pointed out "the organic premium goes to producers according to how they work their fields. This impulses the self-control and the commitment of producers to the organization" (M. Villanueva, telephone (Skype) communication, May 23, 2012). This is why UCIRI could improve quality, adopt organic production and sell its products successfully in the international and national organic/Fairtrade market (Boersma F. V., 2005, pp. 154-155).

Moreover, the organization invested irrespective from the participation in organic and the Fairtrade market, in other producer needs that are not directly related with coffee production and commercialization. They promote a more dignified life of producers, not only in terms of having economically a better stability, but in terms of better health, education, housing, infrastructure, etc. For instance, they built community basic grocery and necessities stores, a school, medical clinics, enhanced the public transport service, improved housing of producer families and in general created employment in other areas than coffee production (J. Celis, personal communication, May 2, 2012). Additionally, the cooperative implemented various programs to support producers in terms of credits (micro-financing for recuperation of production and/or for starting alternative income generating activities, for example, by creating other small businesses (e.g. shops, livestock breeding, etc.). It has its own legal credit and financial institution that grants credits where producers can have their own bank account (M. Villanueva, telephone (Skype) communication, May 23, 2012).

UCIRI is frequently consulted as a best-practice case by other cooperatives in order to learn from the experiences they made and cooperative representatives often participate in various national and international organizations with the objective to promote organic agriculture and a fair trade (Boersma F. V., 2002, p. 20).

Main source: http://uciri.org

Union of cooperatives TOSEPAN

(Coffee cooperative in Puebla)

TOSEPAN is a small-producer organization that was created about 35 years ago. Today, it is conformed by 270 local cooperatives in 22 municipalities and is formed by 18000 small producers from two different indigenous groups (Nahuas and Totonacas) (TOSEPAN, 2012). As emphasized by Jurado Celis "the organization has internal inspectors that make all the control system, which facilitates the inspection of external inspections". Moreover, according to her working experience as an organic inspector with the cooperative, she stated that "producers have an important appropriation process since producers are well informed about commercialization". In addition, they also invested in several other diversified activities not related to coffee production, e.g. they built an own kindergarten, clinics, bakery shops, developed an alternative tourism project, created programs of savings (for kids, elderly and retired people and other purposes) as well as a credit program (for women, for commercial start-ups, for the improvement of housing, etc.) (SEDESOL, 2009). Remarkably, is that the organization created "alternative sources of employment and empowered women and rural people through attracting attention to their

situation". Noteworthy is also that "the leader is a woman that is respected by the mostly male and indigenous producers (J. Celis, personal communication, May 5, 2012).

Main source: http://www.uniontosepan.org/

J'Amteletic – Society of Social Solidarity

(Small coffee producer cooperative in Chiapas)

The Society of Social Solidarity "J'Amteletic" is a small-producer cooperative with about 110 producing families of 9 communities and 3 municipalities in the southern state of Chiapas. It was created in strong cooperation with the Kolping GmbH, an educational diocesan association, and the coffee roasting company Langen Kaffee, both based in Germany.

Most of the producers are indigenous people from the Tzotzil group. They produce certified organic coffee and commercialize it through the Fairtrade channel with buyers from the Kolping Group in Germany. In Mexico they even have their own coffee brand named after the co-founder: "Café Kolping", which is sold in Germany under the name "Tatico" - which means "thanks to god" in the indigenous language. "Antonio Nunez Gomez, Crisanto Gomez Hernandez and Bartolo Perez Gomez, the president, secretary and coordinator of commercialization of J'Amteletic affirm that "thanks to 15 years of organized efforts and the institutional support they got from the state government in the last 3 years, they could built a storage and roasting facility, which allows them to commercialize their coffee already processed and to add value on the local level" (quoted in Victorio, 2010). The cooperative is well-organized and over the years it reached to be well-positioned in terms of quality and organic management in the German market (J. Celis, personal communication, May, 5[,] 2012). Actually, the coffee of the cooperative is even sold in some conventional grocery stores, coffee shops/cafeterias and via online shop in Germany (Kolping GmbH, n.d.). However, the long-term objective of the cooperative is to increase production through renovating coffee plants and to expand sales in the national market (quoted in Victorio, 2010).

Name	Function/	Organisation	Date	Media	Coffee Type
— — — — — — — — — —	Organisation	Туре			Management
Franz Niehoff	Consultant (Previously (1977- 2010 managing director, Niehoffs- Kaffeerösterei GmbH	Coffee roaster (Germany)	31.07.2012	Mail communication	Organic Fairtrade
Luis Martinez Villanueva	Technical consultant for certification and comercialization UCIRI (Unión de Comunidades Indígenas de la Región del Istmo)	Coffee cooperative	23.05.2012	Telephone (Skype) communication	Organic Fairtrade Naturland
Saúl González Robles	Responsible for social projects, CEPCO (Coordinadora Estatal de Pequeños Productores de Café de Oaxaca)	Coffee growers Association of Oaxaca	03.05.2012	Personal communication	Certified Organic, Shade-Grown, Fairtrade, Specialty, Gourmet Mexican Coffee, Naturland
Juan Jaime Hernandez Balderas	Responsible for organic comercialization, CEPCO/CAEO (Comercializadora Agropecuaria del Estado de Oaxaca S.A. de C.V.)	Agricultural Marketing Agency of the State of Oaxaca			
Silvia Nuria Jurado Celis	Organic inspector; CERTIMEX Worked with UCIRI between 2002-2005	Certification agency	02.05.2012	Personal communication	Organic
Taurino Reyes Santiago	Executive Director, CERTIMEX (Certificadora Mexicana de Productos y Procesos Ecológicos)	Certification agency	01.05.2012	Personal communication	Organic certification according to: EU, USDA (NOP), JAS, Small Producers Café Bird Friendly (SMBC), Naturland, Biosuisse
Homero Blas Bustamente	President, Somexpro (Sociedad Mexicana de	Network organization for organic production	01.05.2012	Personal communication	Organic products

7.3 Appendix III: List of interviewed persons

	Producción Orgánica A.C.) Consultant, Coffee producer Department Head Liaison Officer (Government of Oaxaca)	and organic movement in Mexico			
Producers					
Rodolfo Carlos Ruizsilva	Coffee producer, Finca Vista hermosa	Coffee grower	07.05.2012	Personal communication	Certified organic coffee
Filadelfo Ramirez Ordaz	Coffee producer, Café Pluma Diamante	Coffee grower	28.04.2012	Personal communication	Pluma coffee *Natural ⁸⁰
Ing. Fredy Villegas A.	Coffee producer, Cafetal "Cruz Grande"	Coffee grower	29.04.2012	Personal communication	Highland coffee (conventional)
Semiramis Casas	Coffee producer, Bule Coffee products	Coffee products	29.04.2012	Personal communication	Highland coffee *Organic *Originates from the area Coffee biscuits
Alberto Perez Ramos	Coffee producer, Passion Café Pluma	Coffee grower	29.04.2012	Personal communication	Highland coffee *Natural
Amado Rodriguez	President, CUCOS (Cafetaleros Unidos de la Costa)	Coffee cooperative	29.04.2012	Personal communication	Conventional coffee Certified organic coffee
Producer 1	Coffee producer (board member) (anonym)	Coffee cooperative	10.05.2012	Personal communication	Organic coffee (in transition year 1)
Producer 2	Coffee producer (board member) (anonym)	Coffee cooperative	10.05.2012	Personal communication	Organic coffee (in transition year 2)
Producer 3	Coffee producer (board member) (anonym)	Coffee cooperative	11.05.2012	Personal communication	Organic coffee (in transition year 1)
Producer 4	Coffee producer (anonym)	Coffee cooperative	11.05.2012	Personal communication	Organic coffee (in transition year 2)
Inspector	Inspector and consultant (anonym)	Certifying agency	11.05.2012	Personal communication	Organic coffee certification
Öliver Hunkler	Inspector, IMO Control México	Certification agency	04.04.2011	Skype communication	Utz Certified Demeter Naturland 4C Bird-friendly Rainforest Alliance

⁸⁰ Natural means organically managed coffee plantation but without organic certification

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