

Processing and export strategies of small coffee producers in Oaxaca

Estrategias de transformación y exportación de pequeños productores de café de Oaxaca

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Abstract

Given the need to scale up small producers in the coffee value network, the case of the National Union of Oaxacan Agricultural Workers (UNTAO) SPR, from RL, is presented as a link in the chain to incorporate small coffee producers. Oaxaca in the specialty coffee marketing segment in international markets. Through qualitative research and statistical analysis of coffee samples from three groups of producers from Oaxaca and one from Chiapas, the strategies of small organized producers to escalate to the specialty coffee export link are identified. It was found that the value added in the local industrialization contributes to the integration of small producers in the export of specialty coffees in the international market,

Resumen

Ante la necesidad de escalamiento de los pequeños productores en la red de valor de café, se presenta el caso de la Unión Nacional de Trabajadores Agrícolas Oaxaqueños (UNTAO) S.P.R., de R.L., como un eslabón de la cadena para incorporar a los pequeños productores de Oaxaca en el segmento de comercialización de café de especialidad en los mercados internacionales. A través de investigación cualitativa y análisis estadístico de muestras de café de tres grupos de productores de Oaxaca y uno de Chiapas, se identifican las estrategias de los pequeños productores organizados para escalar al eslabón de exportación de cafés de especialidad. Se encontró que el valor agregado en la industrialización local coadyuva a la integración de pequeños productores en la exportación de cafés de especialidad en el mercado internacional, siendo un actor estratégico en la apertura de nuevos nichos de mercados para los pequeños productores.

Strategies, Value chain, Agricultural, Export

Estrategias, Cadena de valor, Agropecuario, Exportar

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Introduction

Derived from the demand for more sustainable management of agricultural production chains and natural resources (Gomez, et.al., 2022), four segments can be classified in the global coffee marketing network: a) cherry coffee marketing, with the participation of farms, small producers and local and international companies that have wet processing facilities in producing regions (González, et. al. 2019); b) commercialization of parchment coffee, carried out locally with intermediaries (Morales, 2019), involving peasant organizations, producers, cooperatives, buyers for its transformation, collection centers, importers and roasters; c) commercialization of green or gold coffee, with the participation of collection centers and mills, importers and national and international roasters, cafeterias and/or coffee bars and; d) roasted and ground coffee where the final customer is the consumer of a cup, for preparation in a coffee pot, pot or some other method.

Green coffee is par excellence the commodity market for exporting coffee from producing countries to large consumers, despite the fact that other business models have emerged for the export of roasted and ground coffee and coffee by-products.

The high demand for green coffee beans (Quintero, et. al. 2013) due to the advantages of transportation, storage, conservation of attributes and distribution, have led to the formation of different market niches in the green coffee segment: conventional (commodities), with a price referenced by the New York (Arabic) and London (robusta) stock exchanges; coffees that have certification systems, voluntary marketing schemes and specialty coffee markets, where "consumers have a growing interest in having information regarding the origin of coffee" (Olmos, 2019, p.09).

According to reports on sustainability initiatives of the International Coffee Organization (ICO, 2022), among the main international certification programs are: 1) Organic product certification, based on the low use of chemicals that can affect the soil and the environment, for which the volume of production per producer decreases compared to a conventional scheme and this needs to be paid; 2) Fair trade certification, in which the working conditions of the producers are promoted, the work of minors is prohibited and the degradation of their ecosystems is avoided (ibid); 3) Rainforest Alliance Certification, which promotes a sustainable production system where "farmers can control costs, acquire greater efficiency and improve crop quality" (ibid); 4) Smithsonian Migratory Bird Center (SMBC) "bird-friendly" certification that promotes shade-grown coffee; and 5) Utz Certification, which has an "online track and trace system that tracks UTZ CERTIFIED coffee throughout the chain, from farmer to roaster" (ibid).

These sustainable systems mostly consider environmental, economic and social aspects, as well as economic transparency in each of the links in the value chain (Padilla, 2016); However, the process to achieve certification implies "the participation of other instances to achieve it, including a third-party certifying agency that guarantees compliance with the standards that have been defined, which entails a cost" (Delgado & Akaki, 2011, p.94). Sustainable or certified coffees "meet two criteria: environmental protection and social justice" (Giovannucci, 2001, Apud Perea, 2010).

There is also the niche market for specialty green coffee without organic or sustainable production certificates, which promises to be a scheme with a differential without the need to assume transaction costs for small producers of production certificates; However, due to the proportion of consumption and the demand for specialty coffees worldwide compared to conventional coffee, there is still a long way to go before small producers manage to place all their coffee in the quality exportable coffee segment.

Specialty coffee refers to the recognition of its origin and its traceability from cultivation to packaging in grain pro bags for export.

Specialty coffee is "one that meets certain characteristics: the highest quality, a particular flavor and cultivation in specific geographic microclimates following rigorously established standards" (Castro et. al. 2004, p. 62). Specialty coffees follow a rigorous quality control process from their cultivation, production, harvesting, transformation, roasting, grinding and packaging.

The commercialization of specialty coffee refers to a coffee free of almonds with primary defects and a number of secondary ones, with an adequate percentage of humidity, with an accepted appearance in its presentation in gold coffee and with a cup score that exceeds 80 points according to criteria of the Specialty Coffee Association SCA (Specialty Coffee Association), with the best coffee attributes such as cleanliness, sweetness, acidity, body, flavor, residual flavor, balance and overall impression (Gamboa, Mosquera & Paz, 2015).

In marketing, the points to negotiate prices consider two criteria: conventional coffees aligned to the New York market prices and differentiated coffees above 84.5 cup points at the request of buyers. Specialty coffees may have some or no certification, depending on the purchase contracts.

Depending on the level of production, sellers can analyze business strategies to ensure better benefits, being able to market with or without certifications, based on quality and attributes.

In Mexico there are 12 producing states, but the ones with the highest volume are Chiapas, Veracruz and Oaxaca with more than 80% of the total production, "in the 2017 cycle, Chiapas harvested one million 317 thousand 11 60-kilo bags of green coffee, in Veracruz, one million 29 thousand 219 60-kilo bags of gold coffee were obtained, in Oaxaca 438 thousand 130 60-kilo bags of green coffee were produced" (CEDRESSA, 2018, p. 2) positioning the country as the eleventh producer worldwide.

The quality of Mexican coffee is recognized worldwide for its attributes, so much so that "51.95% of national production is destined for domestic consumption and the rest for exports" (Secretary of Agriculture, Livestock, Rural Development, Fisheries and Food, 2016, p.04) having the United States as the main consumer, for which common codes have been created for the export of green coffee, which aim at the incorporation of new marketing schemes in the export process, becoming an opportunity so that small producers can reach direct markets both nationally and internationally and thereby eliminate some intermediaries and economic and social gaps (Torres, 2022) between the actors in the chain.

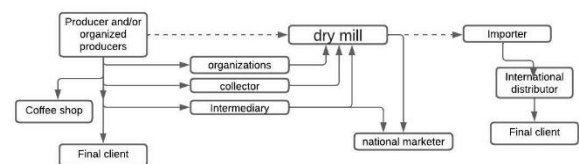


Figure 1 Coffee marketing scheme in Mexico. Fountain Source: Elaboration based on Gereffi, 1994, Velázquez, 2016, Humphrey and Sturgeon, 2005

In Oaxaca there are three main green coffee exporters that promote different strategies to provide continuity in the value chain until reaching the international market. Some of these are the commercialization of conventional coffee in volume, such are the cases of: Agroindustrias Unidas de México (AMSA), Café California, Triunfo Verde and Isman Orgánico. Likewise, there are industrializers and local collection centers with certificates for organic transformation and with export permits that are inserted in the niches of coffees with organic or specialty certifications, among them are: exporter National Union of Agricultural Workers (UNTAO) SPR de RL, Yeni Navan SPR de RL collection center, two Agroalimentos Caravela de México SA de CV collection centers and the Cafés Tomari SA de CV collection center

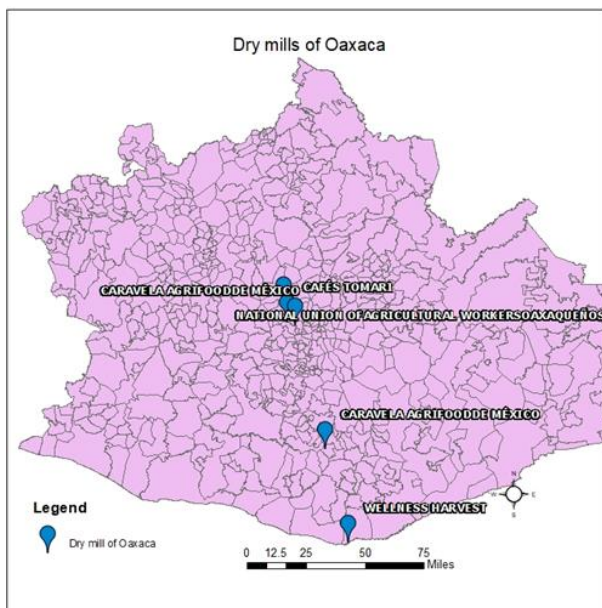


Figure 2 Coffee processors and exporters in the city of Oaxaca

Source: Prepared by the SADER Directory of Processors, Collection Centers and Coffee Industrializers (2022)

The case of UNTAO stands out because it is a local company, with origins in the organization processes of small producers in Oaxaca who have sought, through different forms of organization with the State (Farjat & Lozada, 2022) and the market, to insert themselves into the global coffee chain, so it is extremely important to know the strategies that small producers and small local companies dedicated to the transformation of coffee are using to add value and achieve sustainability in the first links of the chain (Bravo, 2019), which allows them to have a margin in the price negotiation against the different market segments.

Methodology and techniques for the generation of information

The methodological process was of a mixed qualitative-quantitative type, supported by the application of instruments (Hernández, Fernández & Baptista, 2010) such as the in-depth interview, participant observation and analysis of reception, processing, export and pricing records. The interaction networks (Castellanos et. al. 2001) of the UNTAO with other local organizations, with groups of organized producers and with independent producers, as well as the export strategies of specialty coffees are identified.

The in-depth interviews were applied to those responsible for strategic areas of the solidarity company: a) General Manager; b) Responsible for receiving coffee; c) Head of mortar train operations; d) Green coffee storage manager and e) Taster.

The results describe the marketing and export strategy according to the in-depth interviews carried out, the value network identified according to observation records of the processing that is followed in the dry benefit and transformation of parchment coffee to green coffee; to later make a comparison of the results of physical analysis in the performance factor and export percentage. Finally, the opportunities and limitations for export are identified considering the availability of coffee received and the fixing of the price of exportable green coffee.

Analysis unit

The National Union of Oaxacan Agricultural Workers (UNTAO) SPR de RL was legally founded on April 29, 2009; However, it has its history in cooperative societies of small coffee producers in the Sierra Sur, Costa and Mixteca region of Oaxaca that had organic certificates in coffee production (Contreras, personal communication, May 6, 2020), which after more than After three years of organizational work, they created the Union of Organizations and Processors of Organic Coffee of Oaxaca (UNOPCAFE) SPR de RL, acquiring in 2009 a warehouse and mortar train in the facilities of the Industrial Park and Maquiladora "Oaxaca 2000" in Magdalena Apasco, ETLA, with the main objective that small producers, through the union of cooperatives, become involved in the next link in the production chain, which is the dry mill with quality control and the commercialization of organic coffee until it reaches exportation, monitoring the destination of the coffee. grain; However, due to organizational issues, due to agreement, the high transaction costs and the lack of financing for the purchase of coffee and maintenance of the infrastructure and operating expenses, UNOPCAFE disintegrated in 2012 and the National Union of Agricultural Workers (UNTAO) SPR de RL with the support of a peasant organization for the financial rescue of the solidarity company; without losing the objective of linking small producers with differentiated coffee markets.

It was thus that until 2015 the institutional and operational framework of UNTAO was consolidated, where standards were defined for the realization of the dry mill, the commercialization of green coffee and for the expansion of services such as the export of lots and microlots, service of roasted, ground and packaged, according to the needs of the client portfolio.

In order to carry out the commercialization of specialty green coffee, they had to guarantee the quality of the dry mill, which consists of a process of coffee for eight moments in the industrialization: reception and physical analysis, pre-cleaning, threshing, cleaning, classification, classification by color, stored and bagged (Morales, 2022. P.60).

In 2016, UNTAO established alliances and strategic relationships with importers, national and international distributors of specialty green coffee, internal and external relations with small groups of organized state producers, in order to know the coffees that were produced in each one of the regions of the state of Oaxaca, establishing relations of collaboration, coordination, integration or price negotiation.

Since 2017, UNTAO has positioned itself as a center for the reception and cupping of samples and a reception center for batches and micro-lots to carry out dry milling and export to organized groups and national and international companies, ensuring the traceability of the coffee from the plot to the export and prevailing good practices in the dry benefit of coffee. In the 2016-2017 harvest, two 17-ton containers of specialty coffee from the Sierra Sur, Cañada, Sierra Norte and Mixteca regions were exported, with more than 84 points in cup, with an average price of 2.3 USD/lb., compared to an average price of futures markets on the New York Stock Exchange of 1.4 USD/lb

Harvest	Maximum	Minimum	Difference	Average USD/100lb	Average price USD/lb FOB	%var.
2016-2017	176.00	113	63	140.14	1.4	-12.17
2017-2018	141.35	95.45	45.90	119.21	1.19	-23.45
2018-2019	125.50	83.65	39.15	101.15	1.01	-4.59
2019-2020	138.40	92.2	46.20	110.63	1.1	11.54
2020-2021	215.20	102.15	113.05	148.59	1.48	57.3
2021-2022	260.45	167.75	92.70	221.14	2.21	-8.14

Table 1 Historical future coffee data, harvest 2016-2017, 2017-2018, 2018-2019, 2019-2020 and 2020-2021

Source: Prepared with information retrieved from <https://mx.investing.com/currencies/usd-mxn-historical-data>. The month of September is taken as a comparative reference for the new harvest cycle

In the 2017-2018 harvest, there were good expectations for the coffee cycle; however, the stock market benchmarks fell to 1.19 USD/lb in the green at FOB (Table 1), even so the portfolio was expanded to import clients and distributors with social responsibility approaches, who shared the way of thinking with the company to achieve the sustainability of production and improve the quality of life of the producer, directly linking the producers and ensuring the traceability of the product. A sale price of 2.5 USD/lb was achieved, compared to 1.19 USD/lb in the futures market, which entailed a payment of between 60 to 70 pesos per kg of parchment coffee.

For the 2018-2019 harvest, the stock market benchmarks fell even further to a minimum of 83.65 USD/lb (Table 1), but UNTAO maintained its average harvest price, allowing the expansion of linkage and purchasing relationships with organized producers. from the municipalities of San Juan Ozolotepec, San Agustín Loxicha, San Marcial Ozolotepec and Santo Domingo Tejomulco, obtaining contracts at an average price of 2.7 USD/lb.

In the 2019-2020 harvest, UNTAO managed to negotiate the conservation of its prices; However, due to the pandemic, the volume of product placement in the world market decreased due to the closure of borders and the confinement of the main consumers of Mexican specialty coffees.

For the 2020-2021 harvest, the effects of the pandemic, confinement and increased home office continued, which contributed to the reactivation of the world coffee market, for which UNTAO managed a price between 2.5 and 3 USD/lb.

For the 2021-2022 harvest, transaction costs increased, especially shipping costs from the port of Veracruz to destination international ports, by up to 700% (Safelik, 2021), turning into a container crisis and therefore an increase in price. The futures market increased to 2.21 USD/lb (Table 1) and UNTAO increased its sales transactions up to 3.9 USD/lb, translating the payment to the producer of between 90 to 105 pesos per kg of parchment coffee.

In the global integration process (Gereffi, 1994), UNTAO functionally joins the dry mill and export link and ensures strategic alliances that do not devalue export prices and payments to producers; but rather that they are agreed under cup quality standards and with the alliances it is ensured that in the future the price paid to the producers is maintained and is not devalued so drastically due to the fall of the New York stock market, but rather that the price agree for cup quality and reduce the risks of high speculation and price volatility in futures markets.

With this, the declared purpose of UNTAO is "to contribute to the development of coffee producers in the rural communities of the entity, integrating into the production, processing and marketing processes, with an active, responsible, honest and transparent participation, promoting a sustainable development of the coffee-producing communities of Oaxaca" (Contreras, personal communication, 2020).

UNTAO currently provides services according to the storage, processing, selection, and export needs of 20 social organizations and organized producer groups, strengthening the transformation processes of approximately 3,000 small producers in the Sierra Sur, Costa, Mixteca, and Sierra Juárez regions. and Cañada (Figure 3).

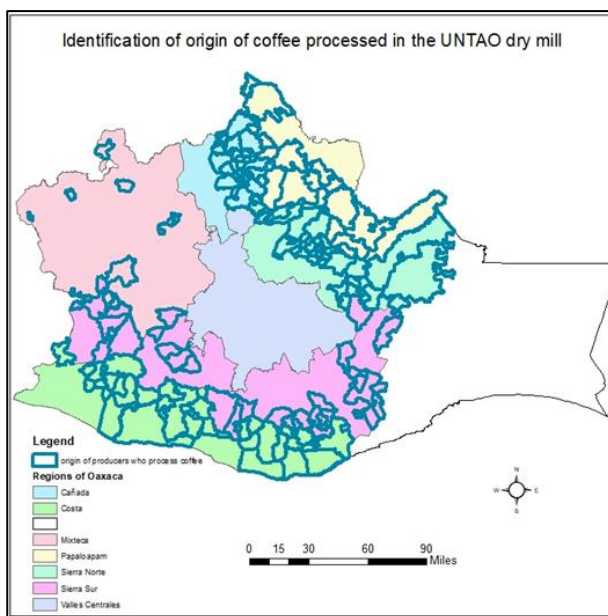


Figure 3 Identification of origin of coffee processed in the UNTAO dry mill

Source: Elaboration with information from UNTAO

Results

Marketing strategies to enter the global coffee market

In the case of the industrializer UNTAO, four major strategies were identified to enter the global coffee market:

The first refers to the quality analysis of samples by lot and microlot, where physical and sensory measurement are essential for the identification of defects and for the detection of organoleptic qualities in the cup of specialty coffees "including aroma, acidity, the bitterness, the body, the flavor and the overall impression of the drink. The quality of the coffee is measured by its intensity and balance." (Door, 1999, p.97).

In the physical measurement, the yield and export factor is obtained, for which subsamples of 300 grams are taken and the humidity measurement is carried out with a digital meter (hydrometer) in order to recognize if the humidity percentage is accepted when found in a range between 10% and 12%.

To carry out the yield factor analysis (amount in kilograms required to obtain a 70-kilogram bag of exportable green coffee), the general yield formula is used:

$$\text{Overall performance} = \frac{AL}{Ppm} \times 70 \quad (1)$$

AL = clean almond

Ppm = Parchment sample weight (300 g).

$$\text{Performance factor} = \frac{(Ppm \times 70)}{AS} = Fr\% \quad (2)$$

In the export percentage, a relationship is established between the weight of the healthy almond and the weight of the parchment coffee sample, multiplying the result by 100.

$$\% \text{ export} = \frac{As}{Ppm} \times 100 \quad (3)$$

Ppm = Weight of parchment sample (300 g).

The acceptable range of yield of exportable coffee must be above 68%, since it is indicated that for every 100 kg. of parchment coffee, 68 or more kg are obtained. of green coffee

The protocol carried out at UNTAO to detect a coffee free of defects and with properties and attributes of good flavor, aroma, color (Castro et. to the. Op. Cit.), it is taken into account that the analysis is carried out in a laboratory that ensures "that environmental conditions do not affect the results or compromise the required quality of the measurements made" (Funéz, 2010, p. 05) and are followed procedures for sample control and storage.

In the analysis of three coffee batches (Sierra Norte de Oaxaca batch, Chiapas batch, Sierra Sur - Candelaria Loxicha batch, Sierra Sur San Pedro el Alto batch) the results of yield and export percentage were strategic to negotiate. the price of coffee

The Sierra Sur/San Pedro el Alto batch was washed with a total volume of 5747.2 kg, with acceptable parchment moisture <12.5%, with a good yellow color, free of foreign matter, which in its transformation to green brown It had a yield factor (fr) of 90.3, which indicates that 90.3 kg of parchment coffee is needed to obtain an exportable bag of 69 kg, an export percentage of 77% of the lot and a cup quality of 84.5 points. The microlot of Sierra Sur/Candelaria Loxicha, was a honeyed process with a volume of 429 kg with a humidity of 14.4%, yellow color, sweet and sour smell and trunk, with a fr of 95.4 for which 95.4 kg of parchment coffee are needed to obtain a 69 kg bag and therefore a lower export factor than the lot of Sierra Sur/San Pedro el Alto, but with a cup quality of 85.5 points.

Region/Municipality	Sierra Sur/Candelaria Loxicha	Sierra Sur / San Pedro el Alto	Chiapas	Sierra Norte
Process type:	Honey	Washed	Washed	Washed
Kg parchment coffee:	429kg	5747.2kg	2822.8kg	7592.3 kg
Parchment moisture:	14.4%	12.20%	12.50%	12.80%
Smell:	bittersweet, trunk, Wood	dry greenish	Dried	Dried
Color:	good yellowish	good yellow	Yellow with brown and white	yellow with white
Free of:	Free of stick, stone, foreign matter.	Free of foreign matter.	Excess cherry peel.	Clean with cherry peel

Clean almond:	235g	251.2	249.6	251.6
healthy almond	220g	232.4	188.2g	223.8
Green brown moisture:	12.1g%	10.80%	10.50%	12.80%
Sieve 14 or below:	11g	13.4g	40.8g	twenty
Defects:	4g	4.6g	26g	8
Fr:	95.4	90.3	111.58	93.8
% export:	73%	77%	63%	74%
Expected sacks:	4.5 bags	64 bags	25.2 bags	81.4
primary defects	Zero defects.	Zero defects.	Zero defects.	Zero defects.
secondary defects	Two minor flaws.	(3 split or bitten was 16 grains). A partial sour 3 grains. Hence 0 averanados 1 grain and hence 0 shell 2 grains).	3 secondary defects (3 cut 17 grains and zero partial sournes 2 grains and zero shells 2 grains)	6 secondary defects: (4 cut, 23 grains, 2 partial blacks 8 grains, zero shells three grains)
cup quality	85.5	84.5	84	84

Table 2 Comparison of different coffees from Oaxaca and Chiapas
Source: Own elaboration with subsamples of four origins

The lot of Sierra Norte was a washed process of 7592.3 kg, with parchment humidity of 12.80%, white yellow color, with six secondary defects and 94.8 kg are needed for a 59 kg bag. The export percentage was 74% and the cup quality 84 points.

On the other hand, the Chiapas coffee lot was 2822.8 kg, with a humidity of 12.5, with a humidity of 12.5%, yellow with brown and white color, with excess cherry peel and three secondary defects. The fr of 111 that indicates that more than 20 kg of parchment coffee is required for an exportable sack compared to coffee from San Pedro el Alto.

Regarding secondary defects, coffee from Sierra Sur - Candelaria Loxicha has the lowest number of secondary defects followed by coffee from Sierra Sur - San Pedro el Alto.

The coffee that comes from the Sierra Sur Costa region, is a coffee that with good management in the crop and in the wet and dry benefit, presents scores higher than 84.5 points in cup, so being well organized and having a good benefit humid, it is very feasible for producers to join up to the third link of commercialization via export and negotiate prices of specialty coffees with differentials of more than 10% with respect to conventional coffees.

Another strategy to scale up small producers in the value chain is the presentation of export services, with the following services available at UNTAO: a) Volume export of a coffee container with a capacity of 250 bags by sea; b) Exportation of small quantities or fewer bags by land; and c) Export in a consolidated process where small producers are incorporated into other containers (but subject to waiting times) from coffee organizations or requests from importers.

The third strategy is the creation of a mix of coffee profiles and coffee zones, which is supported by the results of coffee sample cuppings.

And as a fourth strategy, good practices in coffee processing (dry benefit), storage and export logistics of green coffee are ensured.

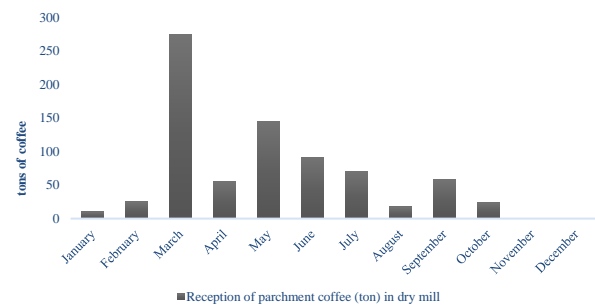
Oaxaca coffee export experiences

Small organized producers and some independent producers from Sierra Sur/San Pedro el Alto, Sierra Sur/Candelaria Loxicha and Sierra Norte have been able to export their coffee to the international market, especially to the United States, Canada, Germany and Australia, for which which was a necessary condition to have met at least 84 points in the cup, according to the contracts agreed with importers and roasters.

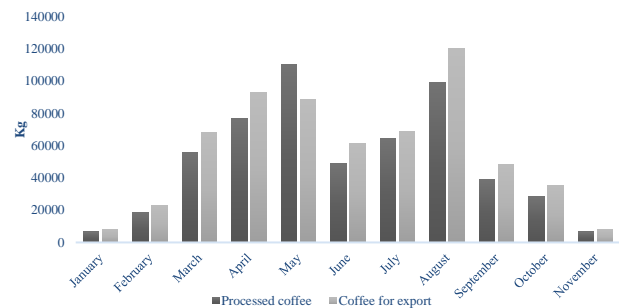
In general, the maximum link up to which small producers in Oaxaca venture is until commercialization for export. The producers come to follow their coffee to the port of Veracruz and the destination countries, but later, they no longer know places of consumption of their product.

In the 2019-2020 production cycle, UNTAO received 970 tons of parchment coffee for physical analysis, with the period from March to July being the period with the highest receipt of entries, of which 65% went through the threshing and selection process in the mortar train, which is equivalent to 630 tons of parchment coffee.

To obtain green coffee with standards above 84 points in the cup, hard work was done in the processing of dry benefit from March to September, 88% obtained for export or commercialization, so there was a 12% loss of husk and damaged grains.



Graphic 1 Reception of parchment coffee (ton) in dry mill
Source: UNTAO databases



Graphic 2 Processed coffee for export per month (2020) in UNTAO
Source: UNTAO databases

The UNTAO prices compared to the prices on the New York Stock Exchange in the 2018-2019 and 2019-2020 cycles, in their conversion to pesos were historically as follows:

Year	Average USD/lb	Average dollar exchange rate	pounds in 1 kg	FOB price X KG \$	UNTAO price FOB X KG \$
2016-2017	1.33	18.90	2.2046	55.54	s/d
2017-2018	1.12	19.24	2.2046	47.54	s/d
2018-2019	1.03	19.35	2.2046	44.25	2.65
2019-2020	1.12	21.58	2.2046	53.37	2.65-3.0
2020-2021	s/d	s/d	s/d	s/d	2.65-3.5

Note. Price per kg of green coffee, in bags and placed in port

Table 3 NY stock prices
Source: Own elaboration with databases from UNTAO (2022) and Specialty coffee (2018, 2019 and 2020)

According to data from the New York Stock Exchange, FOB contracts, prices were between \$44 and \$55 pesos from 2018 to 2020, which is a low and unprofitable price due to the costs involved in producing, processing, and exporting the grain. ; while the UNTAO achieved prices with ranges between 115 pesos/kg and 125 pesos/kg, which is why many producers in Oaxaca have chosen to organize themselves and look for options to improve the quality of the coffee and the standards in price negotiations.

One of these options is the market segment with certifications such as organic certification, Fairtrade certification, Rainforest certification or UTZ, which establish differentials based on the price quoted on the New York Stock Exchange and the other market segment is coffee. of specialty, evaluated in microlots.

Year	Average USD/lb	Average UNTA O USB/lb	Average dollar exchange rate	pounds in 1 kg	FOB price X KG \$
2017-2018	2.80	s/d	19.24	2.2046	118.76621
2018-2019	2.65	2.65	19.35	2.2046	113.04638
2019-2020	2.60	2.65-3.0	21.58	2.2046	123.6957

Note. Price per kg of green coffee, bagged and placed in port. * Average prices obtained from the 2020 Specialty Coffee Transaction Guide

Table 4 Special coffee prices
Source: Prepared with data from Specialty coffee (2020) and UNTAO (2021)

One of the circumstances in favor of producers is that the high potential of Oaxacan coffee is well known nationally and internationally, as producers from different regions and municipalities of the entity are awarded prizes and distinctions for excellence and quality. of the coffee. The most important factors to achieve a good score in the cup are the agroecological conditions, the good handling of the coffee in the production stage, in the transformation of wet and dry processing, as well as in the attributes achieved in the tasting of samples, especially clean cup and good acidity.

For Oaxacan coffee buyers, a quality coffee is one that has a yield for export greater than 70% of parchment coffee; a humidity percentage between 11% and 12%, zero primary defects and less than five secondary defects. While, to be considered a specialty coffee, it is necessary to go through the cupping process and obtain a score above 84.5 points, in addition to meeting the above requirements.

Another important aspect is that more than 90% of coffee producers are small-scale, even due to the drop in production they only reach a level of self-sufficiency. According to the interviews carried out with a sample of producer clients who request the services of UNTAO, they have harvested surfaces from 0.5 hectares to 5 hectares, so they have to collect coffee from their region, differentiating between small producers so as not to lose traceability, but also to reduce transport costs and dry benefit.

In addition, the drop in green coffee prices and the socioeconomic conditions of their places of origin limit their interaction with other actors that participate in the chain to add value to coffee products and by-products, which has led them to organize in small groups of producers at the municipal level, to affiliate with state coffee organizations and to depend up to 25% on intermediation at the community level.

According to data from the General Manager of the UNTAO dry coffee mill, of the total production in the state, approximately 80% of the production goes through the chain of classification and threshing by special machines to be marketed depending on the needs. market; the rest is sold in the national or local market under the presentation of roasted or ground coffee.

Conclusions

Faced with a cycle of disadvantaged situations (Farjat & Lozada, 2022) in marketing and due to the onslaught of market forces and aromatic prices, small coffee producers in Oaxaca continue to fight and organize to create strategies to climb the value chain and achieve sustainability and social well-being (ONU, 1987).

Producers "are the first link in a wealth generation chain of which, however, they keep only a fraction" (Villanueva, 2022, p.3). More than 80% of coffee producers sell their coffee in parchment(González, et. al., 2019) in Oaxaca in one or two sales with intermediaries, depending on the price offers and the immediate need for resources to pay food and production debts.

Parchment coffee commonly reaches large transnational companies, importers, distributors to be transformed and marketed in the large ground and roasted business, as well as for sale in cups in national and international self-service stores, where most of the profit remain in the last links of the chain.

Therefore, through local organizational experiences in the different coffee-producing regions of the State of Oaxaca (Sierra Norte, Sierra Sur, Costa, Mixteca, Istmo and Cañada), actions have been promoted to reach at least the link of Green marketing in the export market.

The fundamental role of the local coffee transformation industry in linking small producers with international buyers was identified, contributing to the elimination of intermediaries in the global value chain, organizing micro-lots originating by municipality or organization of specialty coffees.

Among the strategies identified to achieve the scaling up of small producers in Oaxaca, the importance stands out for small producers to know the yield factor of parchment coffee in its transformation to green coffee and the quality of their coffee, in order to have more elements in the price negotiation.

The second strategy consists of venturing into the specialty coffee segment for the differentials that can be obtained with respect to conventional coffees.

The third strategy consists of generating alliances to export small volumes and be able to reach the doors of the international roaster.

The fourth strategy is to recognize the importance of added value in the transformation of parchment coffee to green coffee, good practices in the creation of new profiles and storage in green coffee export logistics.

The production and commercialization of coffee "requires options that give it greater added value to generate employment or income" (López, et.al, 2022, p. 101), the problem in the export of Oaxacan coffee lies in the fact that not all producers do not get involved, nor do they know the process to add value from the industrialization stage, which excludes them from knowing what the quality of their coffee is, as well as having the possibility of negotiating the price with customers for direct consumption or after sales, beyond the defects that can be seen with the naked eye and the prices that are handled and updated on the New York Stock Exchange. In addition to this, at the state level there is no information on the efficiency of the global value chain and the distribution of benefits among the different actors.

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