

Network value of agriculture and livestock production cooperatives in Mexico City: case study of the Agroab cooperative

Camacho-Bercherlt, Mirna¹; Rojas-Herrera, Juan J.¹; Santillán-Fernández, Alberto^{2*}

¹ Universidad Autónoma Chapingo. Departamento de Sociología Rural. Doctorado Interinstitucional en Economía Social Solidaria. Texcoco, Estado de México, México. C.P. 56230.

² Investigador por México SECIHTI y Colegio de Postgraduados campus Campeche. Sihochac, Champotón, Campeche, México. C. P. 24450.

* Correspondence: santillan.alberto@colpos.mx

ABSTRACT

Objective: To identify the marketing factors that have made it possible for the Agroab cooperative to remain in the preference of its consumers, by describing its value network.

Design/methodology/approach: To determine the success factors of the Agroab cooperative, the stakeholders and their interactions were documented using the value network methodology, identifying its suppliers, consumers, complementors and competitors.

Results: The Agroab cooperative has been in the market for 20 uninterrupted years, a period in which it has promoted the improvement of the living conditions of its members, creating value for its network of customers, complementors and suppliers. Likewise, it presents characteristics typical of fair trade, although it still needs to form marketing networks that are alternatives to conventional trade.

Limitations on study/implications: For future research, it is suggested to analyze the operation of the Agroab cooperative considering the different solidarity alternatives to the conventional market, describing its social company model and the cooperation networks it establishes in the production, transformation and marketing processes of products.

Findings/conclusions: Agroab is characterized by offering quality products at fair prices to its consumers through direct deals that eliminate intermediaries and contribute to the development of agribusiness.

Keywords: production cooperatives, marketing, Mexico City, social economy.

Citation: Camacho-Bercherlt, M., Rojas-Herrera, J.J., & Santillán-Fernández, A. (2025). Network value of agriculture and livestock production cooperatives in Mexico City: case study of the Agroab cooperative *Agro Productividad*. <https://doi.org/10.32854/12hp2334>

Academic Editor: Jorge Cadena Iñiguez

Associate Editor: Dra. Lucero del Mar Ruiz Posadas

Guest Editor: Daniel Alejandro Cadena Zamudio

Received: October 30, 2024.

Accepted: June 13, 2025.

Published on-line: September XX, 2025.

Agro Productividad, 18(7), July, 2025. pp: 27-35.

This work is licensed under a Creative Commons Attribution-Non-Commercial 4.0 International license.



INTRODUCTION

The current hegemonic capitalist system has provoked negative consequences for most of humanity (Houtart, 2014). Proof of this is the strong presence of adverse phenomena such as environmental deterioration, unemployment, labor exploitation, migration, poverty, economic crises and inequality. Consequently, it turns out to be an unsustainable economic model to preserve life on our planet (Ovejero-Bernal, 2008). To counteract these negative effects, an alternative is the so-called Social and Solidary Economy (SSE), which sustains a project for the construction of a just and human society, performing an increasing role in modern economies and societies by offering economic, social, political, environmental and cultural benefits for partners and communities, with the aim of contributing to the integral development of all, as well as contributing to local development (Toledo-Manzur, 2013).

One of the organizations that are part of SSE are agriculture and livestock production cooperatives, which conduct activities for the benefit of their partners and the people who make up their locality, alleviating marginalization and poverty through the generation of sources of employment, and promoting the trade of basic products with quality and

fair prices (Camacho-Bercherlt *et al.*, 2023). Hence, the importance of researching the marketing processes that these associations follow to achieve their economic and social objectives, given that they take on a double character in their operational functioning: as a company and as an association. However, within the understanding that the company is the means and not the ultimate or exclusive aim. Therefore, they are companies of people and not capital, based on the social property of the means of production and the company itself, which is of joint property (Rojas-Herrera, 2019).

Cooperatives have a dual objective: they must function as companies that compete in the market and at the same time guarantee equity, social inclusion and diversity in productive activities, integrating cooperative principles: voluntary and open adherence, democratic control of members, economic participation of members, autonomy and independence, education, training and information, cooperation between cooperatives, interest for the community (Magallón and Calderón, 2016).

However, the immense majority of agriculture and livestock production cooperatives are immersed in the conventional market, competing with private capitalist companies, so they must implement strategies that allow breaking the entry barriers for their products, placing them in the market, winning the preference of consumers, and therefore, ensuring a part of the conventional market to obtain the necessary benefits to reinvest and satisfy the needs of their members (Magallón and Calderón, 2016).

Among the studies that describe the participation of agriculture and livestock production cooperatives in the market, the ones that stand out internationally are those developed by Rojas-Herrera (2013) and Pérez-Sanz *et al.* (2019); in Mexico, Garduño de Jesús *et al.* (2021); and specifically in Mexico City (CDMX), Reygadas *et al.* (2015), Díaz and Rivera (2019), Luvían-Reyes *et al.* (2019), and Luvían-Reyes and Rosas-Baños (2021). All these studies agree that the marketing strategies of cooperatives: 1) Conduct their practices with ethics of service in compliance with their cooperative principles; 2) Adapt to local conditions, and based on these, they carry out strategic alliances that directly benefit producers and inhabitants of the community; 3) Contribute to local development by revitalizing the economy through the generation of self-employment and employment for people from the population; and 4) Attempt to conduct agroecological production to offer the market healthy products with organic quality that differentiates them from conventional products of the capitalist market.

Because the studies about agriculture and livestock production cooperatives are scarce, and even more so the studies that analyze marketing processes, this study had the objective of identifying the marketing factors that have made it possible for the Agroab cooperative to remain in the preference of its consumers, through the description of its value chain.

The Agroab cooperative was selected as study case because of its trajectory of more than 20 years in the market for fruit-based pulps, with a social and economic impact in its territory, promoting the economic progress of the stakeholders with which it relates through the generation of respectable jobs and supporting people who are devoted to agriculture; therefore, it represents an example highlighting agriculture and livestock cooperativism in Ciudad de México (CDMX).

MATERIALS AND METHODS

Study area

The Agroab cooperative is located in CDMX, between coordinates 19° 11' 28" latitude North and 99° 57' 07" longitude West. CDMX is found in the Valley of Mexico and divided administratively into 16 areas, among which the boroughs of Tlalpan, Milpa Alta, Tláhuac and Xochimilco are devoted to crop production. In these zones, there is production of corn, fruit trees, vegetables and animals for family consumption and local sales, but there is also production, at larger scale, of nopal, amaranth, vegetables, herbs, and ornamental plants destined for urban and regional markets (SIAP, 2024). Agroab is located in the town of San Pablo Oxtotepec in the borough of Milpa Alta, with a low degree of marginalization. However, the percentage of poverty in this borough in 2020 was 54.7%, that is, the highest in the entire CDMX, according to data from the National Council for Evaluation of Social Development Policy (*Consejo Nacional de Evaluación de la Política de Desarrollo Social*, CONEVAL, 2020).

History and consolidation of Agroab

Through semi-structured interviews and surveys applied to the legal representative (1) and members (5) of the Agroab cooperative, aspects about their production processes, marketing and growth expectations were documented. Due to the qualitative nature of the research, no statistical analysis was developed; the study was limited to describing the operations of Agroab, prioritizing aspects of cooperativism (mutual help, shared responsibility, democracy, equality, and solidarity).

Agroab value network

To describe the value network of the Agroab cooperative, the methodology proposed by Nalebuff and Brandenburger (1997) was followed, which allows the incorporation of the joint participation of various stakeholders (customers, suppliers, complementors, and competitors), with economic and non-economic connections that contribute to the value creation for their members and territory. Thus, the *customers* are classified as individuals or companies that purchase the product offered by the focus organization of the value network or producers; the suppliers as those stakeholders and institutions that provide what is necessary for the production of the good or service; the *complementors* as organizations and institutions that allow the client to value the product obtained; and *competitors* as those stakeholders with whom the producer disputes the market for the sale of their product or service (Muñoz and Santoyo, 2020).

The connections and empathy that Agroab has developed with the stakeholders that it considers as customers, suppliers, complementors, and competitors were gathered through semi-structured interviews and surveys applied to their members (6). The location of each of the stakeholders was developed through the spatial analysis software ArcMap (ESRI, 2015), with the aim of documenting the geographical influence of each stakeholder on the Agroab cooperative.

RESULTS AND DISCUSSION

History and consolidation of Agroab

The Agroab cooperative emerged in the year 2003, because of the need of creating a productive initiative for self-employment. For its constitution, it received support from the Ministry of Labor and Employment Promotion. The founding members had previous experience, and it was basically founded as a family cooperative, applying the principle of democratic control of the members (giving every partner voice and vote in decision making and in planning and organization processes of the cooperative). Their legal representative has undergraduate studies in Food Chemistry, which has allowed them to professionalize some of their processes; according to Fernández *et al.* (2010), professionalization is a defining component for a cooperative to be able to remain competitive in the market.

Agroab is devoted to the transformation of various fruits to obtain products such as pulps, concentrates for alcoholic beverages, and juice concentrates. In addition, they produce precooked organic potato chips, and they grow corn that they use as base ingredient in their various elaboration processes of other products. Agroab sells their raw materials wholesale (40 t), for the elaboration of new products, which is why their productive process is in function of the technical specifications requested by their customers. The price of products from Agroab are the result of several considerations such as production costs and surplus, frequency and amount purchased by the customer, always attempting to fix a fair price for the customer and, at the same time, to generate fair payment for the members. They are always based on the principle of economic participation of the members, for whom this represents 100% of their income because they are devoted exclusively to the activities of the cooperative.

Agroab members consider that they have remained in the market because they have consolidated an organizational structure where each member has specific functions; they apply manuals and internal regulations for work; they have plans for quality control and maintenance; and they comply with all the certifications, norms and requirements for its functioning. However, the most important thing is that they have been able to solve the internal conflicts between members, reconciling interests of each member for the collective wellbeing. In addition, every year they set growth goals of no more than 10% and they diversify the products offered.

Regarding the principles of cooperativism, Agroab complies with: the creation of opportunities for producers in economic disadvantage; fair commercial practices; payment of fair prices; saying no to child and forced labor; commitment with non-discrimination; gender equality and economic empowerment of women; guaranteeing good labor conditions; and developing capacities. However, there is a key aspect in the philosophy of cooperativism that Agroab is not addressing, and it is the fact of inserting itself into fair trade which would allow to gradually distance itself from the capitalist conventional market, and to prioritize caring for life and the environment (Diaz and Rivera, 2019).

Agroab value network

Agroab partners recognize as customers, suppliers, complementors, and competitors the stakeholders presented in Figure 1. In the case of customers and suppliers, they have



Figure 1. Value network of the Agroab cooperative obtained through direct interviews to partners and by reviewing their records.

developed a system for personal attention, which has allowed them to reinforce the bonds of commitment and loyalty. According to Muñoz and Santoyo (2020), when bonds of trust are strengthened in a value network, they tend to improve the competitiveness of the network by generating value for their members and territory.

The spatial location of the stakeholders involved in the Agroab value network allowed understanding the agreements of collaboration that they have with their customers and suppliers in a national context, while for the case of their complementors and competitors, they are in the same region as the cooperative (Figure 2). The diversity of customers and suppliers outside their region of influence minimizes the risk of remaining without sales or supplies in the face of environmental and social unforeseen circumstances, which strengthens the operations of the cooperative (Luvián-Reyes and Rosas-Baños, 2021).

In addition, the territorial proximity of Agroab with the stakeholders that strengthen it (complementors) and weaken it (competitors), increases the value of its products, according with Ireta-Paredes *et al.* (2018), since the estimation that users make of these products to satisfy their needs and wishes tends to be positive in face of the possibility of purchasing alternative products from the same region.

Agroab has managed to create an undisputed market space that frees them from the constant practice of competition, and in turn allows the territorial development, by generating employment and increasing the income and wellbeing of people in its region of influence, cataloged as a zone with high marginalization (CONEVAL, 2020), thus fulfilling the basic principle of the cooperatives: interest for the community (Díaz and Rivera, 2019).

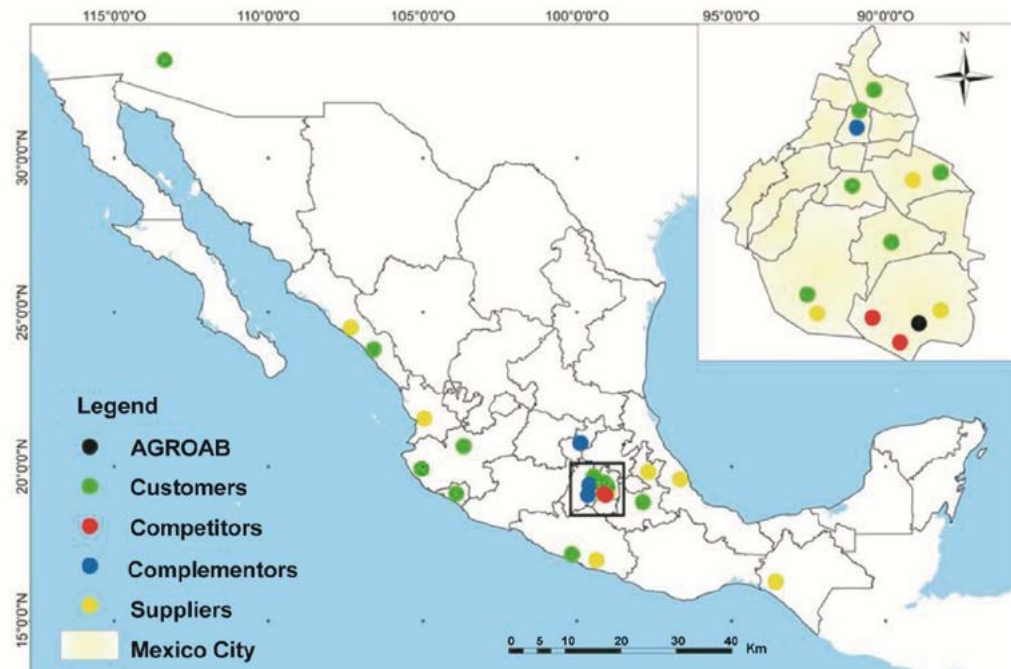


Figure 2. Spatial location of the stakeholders that make up the value network of the Agroab cooperative.

Customers

In the case of the sale of organic potato chips, Agroab's client is Campo Vivo Productos Orgánicos from Tlalpan (CDMX), an organization that is part of fair trade and ruled under principles of cooperativism. For the sale of products derived from fruit pulp, the following were identified as customers: Grupo Frutichela (Tlalpan, CDMX), company specialized in the elaboration of flavoring for micheladas, as well as sauces for chicken wings, shrimp and hamburgers; El Dorado (Iztapalapa, CDMX), which supplies hotels and restaurants from the Pacific coast in Mexico (Acapulco, Manzanillo, Puerto Vallarta, Mazatlán); Engloba Food Solutions (Zapopan, Jalisco), which sells fruit concentrates; Sirloin Stockade, which has a restaurant chain in CDMX, Estado de México and Puebla; and Jarabes Tucán (Acolman, Estado de México), which sells syrups and fruit concentrates. In addition, Agroab has managed to consolidate sales abroad (Los Ángeles, California, USA), with one or two shipments in the warm season of fruit products such as nance, guava and passion fruit, to produce an Italian-type beverage.

However, to consolidate this client portfolio, the Agroab members visited the companies that they estimated could purchase their products, to understand their needs and develop the products with the technical specifications of each customer with whom they signed exclusivity contracts and a confidentiality letter, to back both parties. According to Sánchez-Álvarez (2018), when a cooperative can develop specialized products for their customers, it is difficult for customers to replace it, because the quality of their products can be compromised and therefore their sales volumes.

Likewise, it is important to highlight that Agroab has been able to put into practice the principle of cooperation between cooperatives, forming local marketing networks that help

all the participants, as has been the case of the relationship sustained with the cooperatives Nopal Mexica and Pizca Campesina. Thus, from some ingredients that Agroab purchases wholesale, it usually sells Nopal Mexica the amount it needs, favoring it with a lower cost in the acquisition of inputs; and when Pizca Campesina has tomato surplus that it cannot place in the market, it takes it to Agroab to make purée and thus it can avoid losing part of its production.

Also, for 10 years they were suppliers of the CDMX government for community dining rooms, where they were able to sell a ton of their products daily, so the institutional sale was very important for the development of this cooperative, action that reinforces the proposal by Sánchez-Álvarez (2018), in the sense that public policies should be directed towards promotion, for the government to be the buyer of products from the SSE organizations, an action that can undoubtedly contribute in their advancement and sustainability.

Suppliers

The main supplier for Agroab is a Public Limited Company (PLC) that owns farms in many states of the country and storehouses in the central supply market of Iztapalapa (CDMX). This Limited Company purchases seasonal fruit from Chiapas, Veracruz, Guerrero, Sinaloa, Nayarit and Puebla, and the surplus or amounts that it cannot sell fresh due to size or color are sold to Agroab for their transformation. In this relationship, both parties benefit: the cooperative gets products at a low price, which helps it maintain fair prices for its customers, and for the PLC it represents extra income by selling the byproducts, exceeding fruit that they cannot sell fresh.

Another supplier is the Pizca Campesina cooperative, from which they buy organic potato in the borough of Tlalpan (CDMX); it bases its activities in the fulfillment of the cooperative principles and in the practice of organic agriculture. Some sporadic suppliers of Agroab are in the borough of Milpa Alta and they tend to be producers of seasonal fruits such as nance, guava and passion fruit.

The Agroab cooperative maintains a relationship of commitment and loyalty with its suppliers, purchasing everything that the producers offer to have a stable and safe relationship with them. Although the concept of listening to the customer has become common, the same thing does not happen when it comes to the suppliers; however, the cooperative does listen to them and works coordinately with them, since it considers that relationships with the suppliers are as important as relationships with the customers.

Complementors

The fundamental role of a complementor is to get customers to value products more. In this sense, the Agroab members recognize as main complementor the Ministry of Labor and Employment Promotion (*Secretaría de Trabajo y Fomento del Empleo, STyFE*), since it has benefitted the cooperative three times through its Social Program for Social Economy in Ciudad de México. In the year 2003, it was backed through the Subprogram for the Creation of Cooperative Societies for its constitution and the delivery of a training course, paying attendees the minimum wage; in 2006, it received support from the Subprogram for the Strengthening of Cooperative Societies to improve its facilities; and in 2012, it

participated in the Program for Cooperative Promotion, Strengthening and Integration (*Programa de Promoción, Fortalecimiento e Integración Cooperativa*, PPFIC), with the objective of receiving economic support to purchase equipment and machinery.

However, despite having received backing from the government, Agroab has maintained its autonomy, and its decisions continue to be made collectively and democratically, without external interference from political or government agencies, which shows its degree of adherence to the cooperative principle of autonomy and independence. In this sense, government participation is fundamental for cooperatives to be able to remain in capitalist markets, fostering specialized market niches, where quite often training is more important than facilitating infrastructure (Díaz and Rivera, 2019).

Agroab also considers as complementors three of its commercial partners, two of them located in Atizapán (Estado de México) and the other in Querétaro, because they sell Agroab's products and tend to be involved in reviewing formulas, costs, prices, presentation and image of the products. In addition, these partners help Agroab to get raw materials at a lower price.

Competitors

Since its beginnings, Agroab has competed with companies that produce fruit-based syrups, so its strategy was to seek new customers and offer products based on their needs. The only competitors that they recognize are: Tucán Concentrados y Jarabes, and Pulpas de Fruta San Pedro Atocpan, located in Milpa Alta (CDMX); these sell fruit concentrates in small proportions to Walmart, Bodega Aurrera, Superama, City Market, Fresko and Mercado Libre.

Agroab recognizes the fact that having consolidated customers with specific products greatly reduced its competition. This strategy has been described by Kim *et al.* (2016) as blue oceans, which are associated with unknown spaces in the market, uncontaminated by the competition (the demand is created and not disputed), where there is an abundance of opportunities for growth.

CONCLUSIONS

Analysis of the value network of Agroab allowed detecting the factors that have helped it to remain in the market for fruit-based pulps for two decades: it personally attends to all the stakeholders of its value network, and it fosters coo-petition with its competitors, that is, the practice of cooperating and competing, without destroying or crushing. Therefore, it has managed to create an undisputed market space that frees them from the constant practice of competition. In addition, personal treatment of suppliers and customers has also allowed it to address the specific needs of those stakeholders, achieving a safe commercial relationship with them, which is strengthened by contract signing, to promote mutual respect and cooperation.

ACKNOWLEDGEMENTS

The authors wish to thank the Agroab cooperative for their willingness and support given to this study, especially their legal representative, Joaquín Alarcón Mendieta. Also, the Consejo Nacional de Humanidades,

Ciencias y Tecnologías (CONAHCyT) for the professorship granted to the correspondence author: *Reconversión productiva sustentable para el desarrollo de los productores rurales de Campeche* (Project 364).

REFERENCES

- Camacho-Bercherlt, M., Rojas-Herrera, J. J., & Santillán-Fernández, A. (2023). Análisis bibliométrico de la producción científica sobre cooperativas agropecuarias en países hispanoparlantes. *Cooperativismo & Desarrollo*, 31(126), 1-24. <https://doi.org/10.16925/2382-4220.2023.02.01>
- CONEVAL. (2020). Consejo Nacional de Evaluación de la Política de Desarrollo Social: Pobreza a nivel municipio 2010-2020. Disponible en: <https://www.coneval.org.mx/Medicion/Paginas/Pobreza-municipio-2010-2020.aspx>
- Díaz, L. D., & Rivera, I. (2019). Desafíos en el Emprendimiento en Cooperativas de la Ciudad de México. *Projectics / Proyéctica / Projectique*, 2(2), 63-77. <https://doi.org/10.3917/proj.023.0063>
- ESRI. (2015). Environmental Systems Research Institute: ArcGIS (Versión 10.3) Software de procesamiento digital de imágenes satelitales. Redlands, CA, USA. Disponible en: <http://www.esri.com/software/arcgis/arcgis-for-desktop>
- Fernández, G., Narváez, M., & Senior, A. (2010). Organizaciones cooperativas en el contexto del desarrollo local: una aproximación para su estudio. *Revista venezolana de gerencia*, 15(49), 87-102.
- Garduño de Jesús, E. G., Moctezuma-Pérez, S., Espinoza-Ortega, A., & Juan-Pérez, J. I. (2021). Comercialización de cultivos y productos agroecológicos como aporte al sostenimiento de las unidades domésticas. El caso del grupo “Mujeres Cosechando”, México. *Sociedad y ambiente*, 24, 1-23. <https://doi.org/10.31840/sya.vi24.2237>
- Houtart, F. (2014). De los bienes comunes al bien común de la humanidad. *El ágora USB*, 14(1), 258-293.
- Ireta-Paredes, A. R., Pérez-Hernández, P., Bautista-Ortega, J., & Rosas-Herrera, E. L. (2018). Análisis de la red de valor calabaza chihua (*Cucurbita argyrosperma* Huber) en Campeche, México. *Agrociencia*, 52(1), 151-167.
- Kim, C., Mauborgne, R., & David Sánchez, J. (2016). Los cuatro pilares del liderazgo en la Estrategia del Océano Azul. *Revista Gestión & Desarrollo*, 11(1), 205-209. <https://doi.org/10.21500/01235834.2129>
- Luviani-Reyes, G., & Rosas-Baños, M. (2021). La estabilidad en pequeñas cooperativas de la Ciudad de México. Un análisis desde la modernidad sólida y la Economía Social y Solidaria. *CIRIEC-España, Revista de Economía Pública, Social y Cooperativa*, 102, 229-258. <https://doi.org/10.7203/CIRIEC-E.102.18394>
- Luviani-Reyes, G., Rosas-Baños, M., & Ramírez-Vanoye, E. Y. (2019). Pequeñas cooperativas de producción exitosas de la Ciudad de México: perspectivas y estrategias de los socios en la modernidad capitalista. *Otra Economía*, 12(22), 42-65.
- Magallón, D. M. T., & Calderón, O.G. (2016). Problemática organizacional de las cooperativas en el México actual. Dilemas emergentes y alternativas futuras el caso de una cooperativa de mujeres. *Revista Análisis Organizacional*, 1(6), 95-122.
- Muñoz, M., & Santoyo, V.H. (2020). La red de valor: Herramienta de análisis para la toma de decisiones de política pública y estrategia agroempresarial. México: Universidad Autónoma Chapingo, CIESTAAM.
- Nalebuff, B., & Brandenburger, M. (1997). *Coo-petencia*. Grupo Editorial Norma. Bogotá, Colombia
- Ovejero-Bernal, A. (2008). Desigualdad, subdesarrollo y pobreza en la actual globalización ultraliberal. *Eikasía Revista De Filosofía*, (18), 107-177. <https://doi.org/10.57027/eikasía.18.50>
- Pérez-Sanz, F. J., Gargallo-Castel, A. F., & Esteban-Salvador, M. L. (2019). Prácticas de RSE en cooperativas. Experiencias y resultados mediante el estudio de casos. *CIRIEC-España, Revista De economía Pública, Social Y Cooperativa*, (97), 137-178. <https://doi.org/10.7203/CIRIEC-E.97.11043>
- Reygadas, L., Pozzio, M. R., & Medina, A. (2015). Cooperativas realmente existentes: cuatro décadas de trabajo y reciprocidad en un barrio popular de la Ciudad de México. *Otra Economía*, 9(17), 110-122.
- Rojas-Herrera, J. J. (2013). Panorama general del cooperativismo agropecuario en México. *Estudios agrarios*, 19, 121-137.
- Rojas-Herrera, J. J. (2019). Aproximación sociológica al significado de los términos: economía popular, economía social y economía solidaria en México. *Áreas. Revista Internacional de Ciencias Sociales*, (39), 61-73. <https://doi.org/10.6018/areas.408441>
- Sánchez-Álvarez, C. (2018). Comercio justo y economía social y solidaria: historia y evolución de sus instituciones de fomento. *Equidad y Desarrollo*, 30, 149-172. <http://dx.doi.org/10.19052/ed.4216>
- SIAP. (2024). Sistema de Información Agroalimentaria y Pesquera: cierre de la producción agrícola. Disponible en: <https://nube.siap.gob.mx/cierreagricola/>
- Toledo-Manzur, V. M. (2013). El paradigma biocultural: crisis ecológica, modernidad y culturas tradicionales. *Sociedad y Ambiente*, 1(1), 50-60. <https://doi.org/10.31840/sya.v0i1.2>