



SUSTAINABILITY AND SOCIAL GAINS FOR CRAFTSMAN AGRICULTURAL INDUSTRIES IN THE FEDERAL DISTRICT

SUSTENTABILIDADE E GANHOS SOCIAIS PARA AGROINDÚSTRIAS ARTESANAIS DO DISTRITO FEDERAL

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Abstract

This paper aims to analyze which sustainable practices, from the perspective of sustainable supply chain management, can provide gains and improvements in the social sustainability indicators of families involved in artisanal agro-industrial production in the Distrito Federal, Brazil. We conducted multiple case studies in supply chains of artisanal products of seven agroindustries selected using the "snowball" sampling technique. The data analysis was conducted through the Categorical Thematic Content Analysis technique proposed by Bardin (1977). The semi-structured interviews applied were based on the sustainable indicators of Labuschagne, Brent & Erck (2004). The main results indicate that some sustainable practices have been increasing social requirements for producers, such as job and income stability, health protection measures and the prevention of accidents and innovations. However, some practices still need to be developed, especially those related to information sharing, raising the bargaining power of producers, collaborations from a supplier/customer perspective, financial support, research and technological development, continuing professional training and access to public policies. This study contributes to researchers and practitioners to analyse the social sustainability related to the relationships in the supply chain and the institutional support surrounding small rural production.

Keywords: Agri-food agroindustry. Artisanal product. Social sustainability. Supply Chain.

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Resumo

O objetivo do artigo é analisar quais práticas sustentáveis, na perspectiva de uma gestão sustentável de cadeias de suprimentos, podem gerar ganhos e melhorias dos indicadores de sustentabilidade social das famílias envolvidas na produção agroindustrial artesanal no Distrito Federal. Foram realizados estudos de casos múltiplos, em cadeias de suprimentos de produtos artesanais para sete agroindústrias selecionadas por meio da técnica de amostragem “bola de neve”, os quais foram analisados pela técnica Análise de Conteúdo Categórica Temática de Bardin (1977). As entrevistas semiestruturadas aplicadas foram baseadas nos indicadores sustentáveis de Labuschagne, Brent & Erck (2005). Os principais resultados apontam que algumas práticas sustentáveis vêm ampliando requisitos sociais aos produtores, tais como estabilidade de trabalho e renda, medidas de proteção à saúde e a prevenção de acidentes e inovações. Entretanto, algumas práticas ainda requerem ser desenvolvidas, especialmente aquelas relacionadas ao compartilhamento de informações, elevação do poder de negociação dos produtores, colaborações na perspectiva fornecedor/cliente, apoios financeiros, pesquisas e desenvolvimento tecnológico, formação profissional continuada e acesso a políticas públicas. Este estudo pode contribuir para que pesquisadores e gestores possam analisar a sustentabilidade social considerando os relacionamentos na cadeia de suprimentos e os apoios institucionais circundantes a pequena produção rural.

Palavras-Chave: Sustentabilidade social. Cadeia de suprimentos. Agroindústria agroalimentar. Artesanal.

Introduction

The agro-industrialisation of agricultural production is revealed as an increasingly necessary process for the survival of those facing the growing globalization of markets. In this sense, the formation of agroindustries by small family farming producers shows an intention to face concentrated markets as a strategy for the development of family farming and action for public policy agendas (WESZ JUNIOR, 2010; D'EUSANIO; ZAMAGNI; PETTI, 2019; WANG et al., 2021).

Thus, the formal agro-industrialisation of small producers generates social benefits due to adding value to production, access to distribution channels and establishing relationships with buyers in the agro-food supply chain. In general, those relationships were poorly developed by the small production arising from family farming.

However, measuring social gains linked to a particular production is complex since these factors still need to be well elucidated and are full of subjectivity. Besides that, they occupy little space both in academic studies and the professional environment, dominated by questions and environmental issues, which have a more significant range of discussion, especially regarding

sustainability (NASCIMENTO; SILVA, 2020; SANTOS; GUARNIERI, 2020). In this sense, the social dimension is still the weakest pillar of sustainable development and is difficult to recognize (TELES et al., 2016; HANNIBAL; KAUPPI, 2019).

Therefore, verifying questions related to sustainability, especially in the social dimension, in artisanal production systems in which small producers are inserted, can bring gains in applied knowledge since the social precepts have an impact on environmental and ecological aspects (NASCIMENTO; SILVA, 2020, SANTOS; GUARNIERI, 2020). From the perspective of sustainable supply chain management, the expansion of social requirements in less favoured production groups - SSCM constitutes a viable way for improvements among the less favoured in jail (CARTER; ROGERS, 2008; GÖLGECI; KUIVALAINEN, 2020).

Considering that the process does not end with the organization and includes the various actors present, sustainability in supply chain management can favour the most resistant links in social issues. It contributes to preserving their living conditions and providing social development via collaborative relationships (PAGELL; WU, 2009; CHEN et al., 2019; SANTOS; GUARNIERI, 2020).

To measure the current social requirements, the indicators must be evaluated based on criteria that make it sustainable to contemplate the dimension broadly. This evaluation needs to occur both for the evaluation of the internal environment that permeates the work activities in an Intra organizational way, as well as for what refers to relationships in the supply chain, in the community environment, and macro social aspects (LOURENÇO; CARVALHO, 2013; GOVINDAN; SHAW; MAJUMDAR, 2020).

From indicators, paths can be traced to increase performance towards sustainability, competitive advantages and practical practices can be leveraged among all members (AWAYSHEH; KLASSEN, 2010; CARTER; JENNINGS, 2002; AGERON; GUNASEKARAN; SPALANZANI, 2012; WOLF, 2014). Among the practices that benefit the supply chain members, information sharing, trust, vertical and horizontal collective actions, and internal policies are decisive for sustainable management, which are guidelines that promote improvement in indicators and are presented for the pursuit of social sustainability.

For this reason, seeking practices that promote the development of small suppliers based on partnerships with other producers, customers or support institutions contributes to developing the target audience. Moreover, it can be considered a strategy for developing small production,

generating benefits for the accessibility to the desired market, performance improvement, benefit sharing and rise of social standards (SILVA; LOURENZANI, 2011; WANG et al., 2021).

This article aims to analyze which food practices, from the perspective of sustainable supply chain management, contribute to improvements in the social sustainability indicators of families producing artisanal agro-industrial products in the Federal District. For this purpose, we conducted an exploratory, descriptive and qualitative study of multiple cases to deepen relevant and current social issues of artisanal agro-industrial production in the Federal District. Finally, the data were analysed using Content Analysis by Bardin (1977).

Sustainable supply chain management and attractive practices for social sustainability

The research areas that shaped sustainable management in a supply chain have their bases in environmental and supply chain management. They develop from organizational practices and applied research (DIAS et al., 2012).

From a systemic perspective inherent to sustainable management, Carter & Rogers (2008) defined sustainable supply chain management as a strategic, transparent and joint integration of an organization's social, environmental and biological objectives to achieve systemic coordination of key inter-organizational inter-organizational business processes. This concept helps improve the long-term economic performance of the company and its supply chains.

Considering the perspective on sustainable management, Green *et al.* (1998) report that an SSCM provides biological gains since incorporated intangible values can translate into greater profitability in organizations that adopt healthy practices. In this way, to obtain gains, one starts with more complex management since sustainably managing a chain is an intriguing challenge. To obtain profits, the organization must minimize environmental impacts and provide inclusion and at-risk communities, which requires specificities beyond the traditional economic process (HALL; MATOS; LANGFORD, 2008).

Elkington (2001) emphasizes as a principle of sustainability that only the balance between financial, social and environmental issues conceptualizes sustainable development for organizational practices, which must be based on the three dimensions of development, that is, People, Planet and Profit.

With the scope of envisioning the dimensions that contemplate the development as a whole, Elkington (1997) establishes the essential pillars for sustainability in organizations and their relationships in conducting business as economic, environmental and social dimensions. Thus, the economic dimension is evident in how an organization's management and conduct of business interfere with the surrounding economic system to generate increasing values and embrace future generations. The environmental dimension refers to adopting practices, especially in using natural resources, which will guarantee the perpetuation of future generations to not deplete natural reserves and guarantee an adequate income rate to sustain them. In the social dimension, conducting business is expected to preserve and value human capital and the work environment and promote the development of less favored communities (ELKINGTON, 1997).

The economic issue and later the actions aimed at the environmental dimension were configured for a long time as the main pillars of corporate sustainability in organizations, in which the social dimension is ignored with low visibility in business (HOLLIDAY et al., 2002; D'EUSANIO; ZAMAGNI; PETTI, 2019; GÖLGEÇI; KUIVALAINEN, 2020; WANG et al., 2021).

In addition, measuring social gains linked to a given production is complex to assess. These factors still need to be better understood, as they occupy little space in academic studies and professional environments. The sustainability discussion is dominated by environmental and economic issues, which have greater scope for discussion (NASCIMENTO; SILVA, 2020). In this sense, the social dimension is still the weakest pillar of sustainable development and is difficult to recognize (TELES *et al.*, 2016; HANNIBAL; KAUPPI, 2019).

Ensuring issues related to sustainability, especially in the social dimension, in artisanal production systems for small producers can bring gains in applied knowledge since social precepts are more impactful in the face of environmental and health aspects related to this public (NASCIMENTO; SILVA, 2020).

In this context, to expand social requirements in less contemporary production groups, the sustainable management of the Supply Chain - GSCS (Sustainable Supply Chain Management - SSCM) is a viable way to improve less favoured links in the chain (CARTER; ROGERS, 2008; GÖLGEÇI; KUIVALAINEN, 2020). In this way, insert sustainability in supply chain management, considering that the process does not end in the organization and includes the various actors present, favouring the

most resistant links in social issues, preserving their living conditions and providing development (PAGELL; WU, 2009; CHEN et al., 2019).

To synthesize social sustainability indicators, Labuschagne, Brent & Erck (2004) proposed measuring this dimension in four pillars of studies produced: (i) Sustainability Indicators produced at the Wuppertal Institute in 1988 (SPANGENBERG; BONNIOT, 1998); (ii) United Nations Commission on Sustainable Development (2001); (iii) Sustainability Reports (Global Reporting Initiative, 2002); and, (iv) Sustainability Metrics from the Institute of Chemical Engineers (ICHEME, 2002). Based on the pillars that guided the study by Labuschagne, Brent & Erck (2004), a structure of categorization of social indicators was generated that continued throughout a supply chain, which were subdivided into four categorization macrospheres: (i) resources inner humans; (ii) external population; (iii) stakeholder participation; and (iv) macrosocial performance.

Thus, internal human resources are consistent with managing employees allocated internally in organization's in a sustainable supply chain, focusing on workers and other entities in labour relations. In the dimension of the external population, the objective is to evaluate the impacts of the operations of a particular organization or a supply chain in the communities that may be affected or influenced by a particular economic activity. The stakeholder participation dimension is measured by the organization's availability and predisposition to provide information, providing transparency to the supply chain and bargaining power regarding decision-making and ability to influence organizations. Finally, macro social performance is linked to aspects of the organization that can influence those external to the supply chain at a regional or national level (LABUSCHAGNE; BRENT; ERCK, 2004).

Therefore, to add attractive values to production, it should be noted that artisanal production brings together qualities that favour the incorporation of attractive practices in relationships since they add social values to the way of producing (MIOR, 2008; CHEN *et al.*, 2019).

As a link in the chain, the supplier must be the target of collaborative actions to achieve supply chain management in which the organization with greater power acts in development (LAMBERT; COOPER; PAGH, 1998; LAMBERT; EMMELHAINZ; GARDNER, 1996; GUARNIERI, 2014). Practices that are part of groups that share information, trust, collective actions and policies can form groups that favour sustainable management in the supply chain.

In supply chain management, practices that make sharing information increasingly efficient and transparent are critical to improving performance. Fawcett et al. (2007) propose indicators that verify actions between the supply chain members to evaluate the practice: frequency of communication; regularity of information; sharing; opinion sharing; and interaction.

Levels of trust between members that relate to a supply chain are one of the pillars for proper management (MENTZER, 2001), so the establishment of the perception of this practice within organizations generates two aspects that can be verified levels of trust in inter-organizational relationships: affective trust, which manifests itself in relationships guided by sociocultural principles and based on the belief in the actions of the other party, like, premise to honesty; and cognitive trust, based on the representations presented in the transaction, such as compliance with agreements, contracts, history of performance and acceptance (McALLISTER, 1995).

Collaborative processes, on the other hand, occur in long-term partnerships and when stakeholders find themselves in a reliable environment to share their assets, such as materials, work, infrastructure, facilities and equipment, and support resources, such as technology, processes of business, politics/legislation and finance (DANIA; XING; AMER, 2016). Thus, in the sphere of institutions that assist in the CS of craft products, considering support consumption practices, Graziano (2001) advises that the search for practices that lead to the sustainability of small production indicates that they are shaped for the insertion of small production in consolidated markets.

Methodological procedures

Exploratory research is carried out in an investigation field with little accumulated and systematized knowledge (VERGARA, 1998). Considering the proposed objective, the technical procedure was the study of multiple cases, as it provides an approximation of the investigation phenomenon and a better understanding of the research (YIN, 2001).

According to Yin (2001), the case study favours a complex analysis of research phenomena as it increases more robust evidence. Thus, the research units refer to the artisanal agroindustries of the Distrito Federal, seeking to extract the standard elements concerning the relationships between these members of the supply chain. To outline a current analysis of the social sustainability of the producing families and extract the practices we relate in the supply chain from the supplier/customer

perspective. In the institutional supports present, we used semi-structured interviews. These interviews were applied with families of artisanal agro-industrial producers and customers who purchase artisanal products, besides managers of public or private institutions that promote and support artisanal production in the Distrito Federal. We also used the technique of triangulation of study participants to make the results analysis robust. Yin (2001) reports that triangulation creates a chain of evidence and is an essential strategy.

To select the artisanal agroindustries, the sample of this research, we considered the registration situation in the Directorate of Inspection of Products of Animal and Vegetal Origin (DIPOVA). By accessibility, 7 (seven) produced agreed to participate in the research. The sample was defined, as mentioned before, by snowball technique and theoretical saturation, as the information collected was known enough during the visits. Buyer customers were selected based on the first contact with the 7 (seven) artisanal agroindustries visited, chosen through the Snowball technique, which indicated those establishments that have a continuous and regular relationship with the producer and are available for the interviews.

Bernard (2005) describes that the snowball technique is a collaborative method in which it is proposed to study could be difficult to access, which is characterized by few members dispersed in extensive geographic areas or groups with low interest in the survey proposed by the researcher. In addition, 5 (five) customers were selected, two retail establishments and three restaurants. The entities that support artisanal agro-industrial production were selected based on the indication of support provided by the artisanal agro-industrial producer visited in the sample; they were Sebrae/DF, Emater/Distrito Federal and DIPOVA, institutions related as supporters of artisanal agro-industrialisation by the producers.

In the case of Emater/Distrito Federal, a Rural Extensionist from the Coordination of the Good Practices Food Program was interviewed at Seagri/Distrito Federal, an Agricultural Development and Inspection Analyst from the Inspection Management and at Sebrae/Distrito Federal, a Consultant in rural businesses from Sebrae Federal District. As the study focuses on collaborative practices in the supply chain of artisanal products, the practices of several members must be followed since they operate as a single entity, generating mutual benefits and responsibilities. Thus, 7 (seven) agroindustries subject to procedural investigation sell craft products: sausages and smoked products; sweets and liquors; tofu; candy bars; dehydrated vegetables; handicrafts; and the heart of palm. Since

agroindustries are characterized by edible products of animal, vegetable or microorganism origin; annual gross income of up to BRL 120,000 per establishment; predominantly family labour, limiting hiring to 50% of the total number of people involved; and transport, production and sale of products that maintain traditional, cultural or regional characteristics on a small scale.

In addition, regarding the social issues involving artisanal agro-industrial production, the semi-structured interview scripts were prepared based on a priori analytical categories, theoretically based on the social sustainability indicators proposed by Labuschagne, Brent & Erck (2004), with a view to the relationship of the processes of these indicators concerning the sustainability practices of organizations. The procedure complies with that proposed by Campos (2004), who proposes that using this category is recommended to the researcher when he demonstrates pre-defined interests.

Lourenço and Carvalho (2013) reinforce that these indicators are one of the few that, in the social dimension, consider stakeholders external to the organization and issues related to macro social performance. In this way, it is feasible to evaluate the operations of the artisanal agroindustry as the focal company and the condition of the supplier and its customers.

Bardin's (1977) thematic categorical content analysis was used for data interpretation, analysis and discussion. The content analysis protocol contains three steps: (1) pre-analysis; (2) exploration of the material; and (3) treatment of results, inference and interpretation. The first stage was to identify materials to base this research on the subject of study, then the formulation of objectives (a priori categorization) and the elaboration of indicators, which in this case, property to the semi-structured interview script. Then, with the collection of primary data in the Supply Chain of artisanal production (producers, customers and support institutions), the second stage was continued, which includes (a) context units (agricultural, artisanal industry, buyer clients and institutions of support) and (b) Posterior categorization, and formulation of representative propositions of each category of analysis). Finally, the last stage carried out the transcription of the interviews, interpretation and analysis of the collected data, from which the following were obtained: (1) social sustainability indicators, represented by: (i) the social condition of artisanal producers; (ii) work conditions in the activity; (iii) social conditions of the location; (iv) supplier bargaining power; and, (v) macro impacts of the activity; and, (2) attractive supply chain practices.

Table 1 describes the comparisons of the a priori categorizations used to formulate the research instruments based on the theoretical framework containing the researched authors and the

thematic categories for analyzing the results, constituting the content analysis by the a priori and a posteriori categories.

Table 1 - A priori analytical categories and a priori and a posteriori analytical categories.

categories a priori	A priori and a posteriori analytical category	Authors
Social Sustainability Indicators	Social condition of craft producers	Labuschagne, Brent & Erck (2004).
Internal Human Resources	Working conditions in the activity	
External Population	Social conditions of the locality	
Stakeholder Participation	Supplier bargaining power	
Macrosocial Performance	Macroimpacts of the activity	
Supplier/customer of Sustainable Practices	Practices oversee the supply chain of artisanal products that lead to social sustainability.	
information sharing	Information sharing from a supplier/customer perspective	
Trust	Trust	
Class Actions	Collective actions (horizontal cooperation between producers; vertical supplier/customer cooperation; vertical supplier/customer collaboration).	
Internal Policies	Internal policies for small suppliers	
Direct practices to support artisanal production	Direct practices to artisanal production that lead to social sustainability.	
Technical, managerial and financial support	Technical, managerial and financial support.	
education in the countryside	Training and capacity building.	
Technological research and development	Technological research and development.	
Public policy	Public policy.	

The next section presents and discusses the results.

Results and discussion

To verify the state of the social sustainability indicators that permeate the producing families, the following propositions were listed to quantify the social conditions in each family currently inserted in artisanal agro-industrial production and proposals according to Labuschagne, Brent & Erck (2004). The propositions selected to represent the category indicators were: CS1 Job stability and favourable income; CS2 Satisfactory work activities; CS3 Adequate occupational health and safety; CS4 Resource development; CS5 Adequate productive capital; CS6 Adequate human capital; CS7 Adequate community capital; CS8 Provision of information in the supply chain; CS9 Good influence on the client's decision; and CS10 Generation of macro-impacts. To measure the presence of the indicator in the artisanal agroindustry that composed the sample, the note was made from the positive manifestation of those brought from the interview.

Table 2 presents the count of propositions that characterize this category, allowing us to draw a situational picture of the producers regarding the social conditions of each producer family in the sample.

Table 2 – Social status of craft producers.

Producer (Agribusiness)	CS1	CS2	CS3	CS4	CS5	CS6	CS7	CS8	CS9	CS10	Total
Producer A	0	1	0	1	1	1	1	0	0	1	6
Producer B	1	1	1	1	0	1	0	0	0	1	6
Producer C	1	1	1	1	1	1	1	0	1	1	9
Producer D	1	1	1	1	1	1	1	1	0	1	9
Producer E	1	1	1	1	1	1	1	1	1	1	10
Producer F	1	1	1	1	1	1	1	0	0	1	8
Producer G	1	1	1	1	1	1	1	0	0	1	8
Total	6	7	6	7	6	7	6	two	two	7	56

Among the propositions presented that characterize the social conditions of artisanal producers, CS2, CS4, CS6 and CS10 were the indicators that were incident in all artisanal units surveyed. Then, propositions CS1, CS3, CS5 and CS7 were observed in 6 (six) artisanal agro-industrial units in the sample. Finally, CS8 and CS9 of the artisanal producer as a supplier were the most minor detected indicators, only twice.

In general, the data allow us to infer that the social conditions that permeate the artisanal producing families in terms of work are high, given that all the indicators linked to the internal

elements of the artisanal work activity were detected with a good incidence in the craft units (CS1, CS2, CS3, CS4), except for one producer. In this way, the adjusted practices concerning the workforce of the producing families meet the budgets of Labuschagne & Brent (2005) emphasized that good internal work is a relevant variable to achieve social sustainability. However, when looking at the social conditions facing the positioning in the supply chain as a supplier, CS8 (2) and CS9 (2) were the least identified, indicating a low social performance as participants in traditional markets as a supplier in supply chains.

Intending to visualize a comparative performance against the propositions detected in the sample, Figure 1 demonstrates the social behaviour from the perspective of the incident social indicators and the evaluation of the families of artisanal agro-industrial products regarding the social sustainability of each unit.

Figure 1 - Social performance of the surveyed sample.

Figure 1 - Social performance of the surveyed sample.

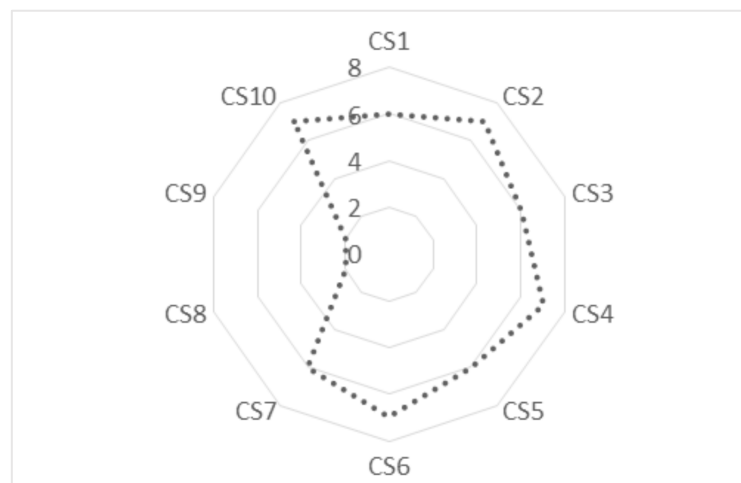
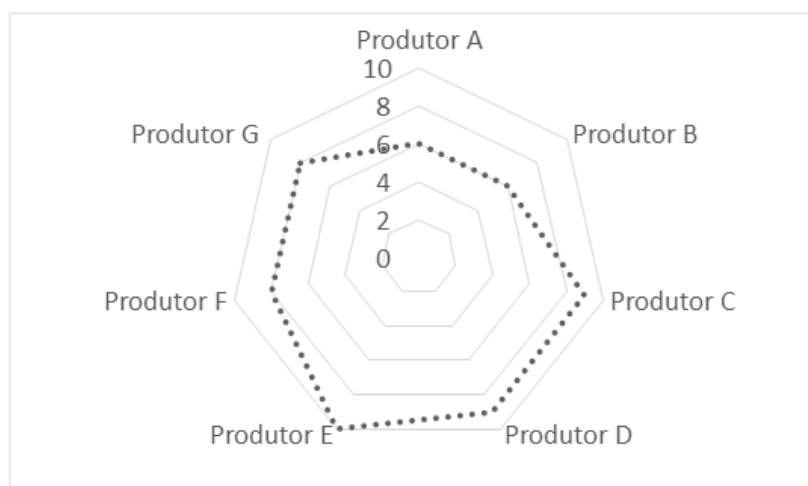


Figure 1 demonstrates the general performance regarding the current social indicators present in the sample concerning artisanal agro-industrialisation in the Federal District, in which, on the left, the total performance refers to each representative proposition and, on the left, on the right, the individual performance of each producer. The graphical representation follows the proposal of Ornstein (1989), which indicates that the Radar graphical representation favours the comparison of performance between variables.

Furthermore, visualizing the sample's social performance, lower indicators are perceived close to CS8 and CS9 (left), as the dotted line distances itself from the edge of the polygon (Figure 1). Figure 2 presents the producer's social performance.

Figure 2 - Social performance per producer



As for the social performance of the producers in Figure 2, it can be seen that the families generally have good social conditions (dotted line next to the polygon), except for Producers A and B, who still lack indicators that make them reach the best position in this regard.

It was possible to verify the practices present in the supply chains of artisanal products and others with the potential to be developed with a view to social improvements for the producing families. In this way, the results collected from the interviews were obtained as tasty practices from the supplier/customer perspective and with institutional support that impact social improvements to the producing families.

From the point of view of the participants, it was possible to verify the position obtained concerning each group interviewed and its influence on the research. The practice pointed out as the rationalized transport logistical flow in deliveries can reflect in the optimization of productive occupation with improvements in working hours; in the view of most customers, it is considered unfeasible due to the low representation of the artisanal product in the establishment, which makes it difficult to draw up plans and logistical operations due to the low representation of artisanal products in the establishment. On the other hand, the practice of collaborative actions of integrated planning, if integrated, leads to improvements in the organization of the work of producers.

With the power of negotiation and the provision of information in transactions with buying establishments, the artisanal agro-industrialisation proven to have low social performance since few instruments of negotiation with buyers were detected, mainly due to the inadequate provision of information that favoured a production planning with the suitable horizon. This note is in line with that proposed by Carter & Jennings (2002), in which they highlight that responsible behaviours of organizations with greater power towards their suppliers influence the performance of the entire supply chain.

Practices that supervise from the supplier/customer perspective little examined in the sample and that were suggested for implementation, considered relevant by the interviews, were the introduction of information sharing in CS between the customer and the supplier, integrated collaborative planning actions in which the demand for purchases follows a minimum standard of quantity, price and delivery frequency and adoption of streamlined and collaborative logistical transport flows by the customer. The proposed practices aligned with the collaborative behaviour proposed by Moharana et al. (2012). Collaboration refers to the interaction and integration of processes that occur in unified decisions and activities.

Thus, these practices affect, mainly, the social aspect of favoring a better organization of work in the producing families so that they can organize the division of labour on the property, between agricultural and domestic tasks, and those inherent to the agro-industrial activity, such as the purchase of inputs, production and receipt. However, these efforts sought a more significant development in the face of the supply chain of artisanal products. They were followed by concrete collective actions for their implementation since, according to the prescriptions listed by Olson (2001), these actions must previously unite the efforts of individuals for expected results and objectives.

Concerning practices originating from support institutions, technical assistance and rural extension play a relevant role in the social aspects and the sustainability of families in artisanal agro-industrial production, given that the enthusiastic empirical results that this possibly impacts the stability of work and income of producers, in the preservation of occupational health and safety, in the development of capacities of family members and the strengthening of decision-making influence with the client. This practice corroborates Buainain *et al.* (2003) when emphasizing the encouragement of this support, which guides that family farming and small rural production require

a set of specialized technical support for its insertion in the face of modern business management since it is a sector of society with a high economic level and social. In this way, this support practice is constituted with high encouragement with direct positive impacts to achieve the social sustainability of artisanal production.

Pullman, Maloni and Carter (2009) report that improvements in environmental performance can lead to better quality performance, consequently, cost improvement. And that pressure from stakeholders and the GSCS worked for an organization's sustainability performance (AGERON; GUNASEKARAN; SPALANZANI, 2012; WOLF, 2014).

Thus, the sustainability indicators of the supply chain can benefit all its members in a decisive way for sustainable management, information sharing, relationships of trust and social sustainability.

The empirical results allow us to infer that the consumption practices present today in artisanal agro-industrialisation have increased, mainly, stability of work and income for producers reconciled with applied work activities, insertion of aspects related to the attention of measures to protect occupational health and safety at work, development of unique resources that culminate in innovations and generation of macro-impacts that expand the availability of commercialized food insurance, thus generating relevant social gains for the social reproduction of the families involved.

As the leading protected practices that have contributed to these issues currently, the most relevant ones identified were: collective reception spaces, technical assistance and rural extension; the exchange of experiences between producers; managerial support using management tools; booths for product displays; participatory training in good manufacturing practices, management and qualification; the provision of demonstration spaces for handcrafted products in the buyer's environment (emporiums, display shelves, etc.); face-to-face and frequent meetings with the client; the fulfilment of agreements and ethical behaviour with the preservation of preservation in commercial relations; the dissemination of artisanal agro-industrial products; and prospecting for adjustments that culminate in the development of new products and processes aimed at the final consumer.

Other social indicators were accepted as incipient and needed further development in families that entered artisanal agro-industrialisation, especially those appreciated from the supplier/customer perspective, such as the provision of information in the CS and the negotiation

power of the artisanal producer in the position of the supplier, relevant social issues to achieve social sustainability and constitute a GSCS. The results indicate that the low incidence of these indicators may be related to the low representation of handicraft products in the list of suppliers of purchasing establishments and the low differentiation of handcrafted products compared to other competing products. To insert these questions, the accepted practices were accepted in this research were: the development of information management within the scope of the CS of handcrafted products, in particular, in purchases with periodicity and anticipation of compliance; encouraging the establishment of internal policies that bring together acquisitions from small suppliers; a constitution of a collective organization representative of artisanal agro-industrial producers; collaborative actions of joint marketing; and rationalization of transport logistics between the supplier and the customer.

Other practices that were absent or poorly developed and that were identified as recognizably healthy and that could generate improvements in social aspects, if integrated, were: the inclusion of access to rural credit or subsidized microcredit; the participation of producers in institutional market programs; access to public policies dealing with community issues; and ongoing participatory training for production and management.

Final considerations

The artisanal agro industrialization of the Federal District has allowed social factors to be expanded from the establishment of formal relationships with buyers and through the institutional support offered, initially made possible by the legalization of artisanal production and distribution in the Federal District, adding, mainly, social gains linked to the good work and agro-industrial occupation for the social reproduction of the families involved. In addition, a prominent factor pointed out in the results is the finding of the role of women in the management of artisanal agro-industrial activities. In contrast, in agricultural enterprises there is the low visibility of this gender in productive activities. However, it should be noted that in-depth analyses related to gender issues were not carried out since the objective of the work was to obtain only an overview of the social sustainability indicators.

Other social indicators were found to be incipient from the interviews with members of the supply chains and need further development in the families that adhered to artisanal agro-

industrialisation, especially those fed from the supplier/customer perspective, such as the provision of information in the SC and the power of negotiation of the artisanal producer while in the position of the supplier, relevant social issues to achieve the social sustainability of artisanal production.

For this, confident practices were identified and had been gaining in social gains for families, highlighting: collective reception spaces; technical assistance and rural extension; the exchange of experiences between producers; participatory training in good manufacturing practices, management and qualification; compliance with agreements; and ethical behaviour with the preservation of trust in commercial relationships permeated by mutual trust. These practices, when collaboratively implemented in the supply chain that agroindustry's are part of, can have a more lasting effect and generate benefits for all members of the chain. Among the benefits the socio-productive inclusion of family members in retailers' supply chains can be pointed out, which can contribute to the generation of income and employment.

Other practices, on the other hand, are absent or little expected and point to ways to achieve social sustainability, to highlight: the development of an information chain within the scope of the CS of handcrafted products, in particular, in purchases with periodicity and good anticipation; and, collaborative actions from the perspective of the supplier and the customer.

Given the above, the artisanal agro-industrial production in the Federal District has good potential for a GSCS, as it involves relevant environmental issues, particularly social ones. As for the environmental requirements of artisanal agro-industrial production, it is worth emphasizing that artisanal agroindustry is considered a low-impact undertaking and exempt from environmental licensing, which is also considered an element for the environmental sustainability of this activity. In addition, the economic dimension of the rural micro-enterprise, by providing fair remuneration for the work and the needs of the producer, shows itself to be a more strongly social aspect than an economic one. Therefore, it must be considered that the economic dimension could be achieved by the strengthened social aspects obtained in this regard, especially those related to income and employment for families of family productions inserted in artisanal production, according to the results of this research.

As restricted to this research, the following observations can be pointed out: the proposed categorizations for the analysis of content not made using software used the protocol of Bardin (1977) for the analysis of traditional content. Therefore, the guidelines for the contents and

processes of the core meanings of the speeches of the treaties were processed manually and with the aid of electronic spreadsheets submitted to the researcher's subjectivity. It should be noted that when used in content analysis, software helps automate these tasks but does not eliminate subjectivity in creating categories and other analyses. The representative propositions scored in each agro-industrial unit of the investigation were carried out by simple counting without using a statistical method for comparison. The research focused on social sustainability among the dimensions of sustainability proposed by Elkington (2001), not delving into environmental and biological elements related to artisanal agro-industrial production. Issues related to improving social indicators, possible solutions and barriers and barriers were not the focus of the interviews carried out in this research.

All the limitations mentioned constitute opportunities for future studies that can be explored later. Therefore, it is recommended to identify other social sustainability indicators that allow the assessment of social conditions of segments of interest, such as the gender indicator and also diversity. It is also possible that future studies will use quantitative procedures to evaluate the adoption of social indicators and practices in supply chain management, agri-food chains, or related sectors, in addition to using robust quantitative methods for their analysis, such as factor analysis, and characteristics, among others. Others.

Finally, this study helps collectors and managers develop systemic perspectives of social sustainability, considering relationships in the supply chain and external support for small rural production. Researchers can use this study to try to replicate it in other regions and rely on research gaps and limitations pointed out to define the scope of future studies. Managers can use the results for targeted changes and management improvements regarding social indicators in agri-food supply chains, including artisanal production by family farmers.

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