Empirical implications on creating and appropriating value in Brazil's cocoa chain with Geographical Indication

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There are enduring inequalities on distributing and appropriating value in agri-food chains, which are linked with organizational, economic and social complexities. We discussed value creation approach and resource-based view (RBV) theory as a conceptual overview to comprehend how do cocoa-chocolate chain create and appropriate value from the perspective of regional resources and geographical indications (GIs). The method is a qualitative research carried out and organized as a single case study about the cocoa-chocolate chain, located in the south of Bahia, Brazil. Our findings pointed out four categories for analysis, one main category about sustainability and three secondary categories associated innovative resources, sustainable practices and relational value. In addition, we highlight the GI as intangible regional resource may be linked with value creation and appropriation dynamics. Keywords: Value creation; Sustainability; Regional resources and capabilities

INTRODUCTION

Agri-food chains often feature large industries that shape entry barriers, influence the division of labor system, control intangible resources and distribute wealth among supply chain actors (Abdulsamad et al., 2015). This modus operandis reflects in serious implications for cocoa producing communities, which live with critical social, environmental and economic issues, such as: persistent poverty among producer families in different communities around the globe, deficiencies in governance in these regions, lack of innovations in the field, increasing rates of deforestation, child labor, among others (Costa & Soares, 2016; Perez et al., 2020; Chiapetti et al., 2020).

In the last two decades, there was a growing pressure on companies, from NGOs, governments and consumers about sustainability, reinforce the importance of the sustainable development goals (SDGs) that represent how sustainability can involve the various organizational stakeholders, which also includes society in this discussion. In a supply chain, this pressure for sustainability affects all activities, with economic, environmental and social implications that derive from their products and processes.

This study adopted as an empirical field an agri-food chain, which was recognized in the face of a competitive global surroundings, with products that are positioned opposite to the commodity market, in order to act in a niche market through mechanisms of differentiation and reputation relates to natural and/or cultural features of a particular territory. Furthermore, it suggests a close relationship between actors, territory and regional products, in which relationships are based on a set of capabilities that can create value in global dynamics, based in a delimited regional performance, thus being an important strategic mechanism (Vandecandelaere et al., 2009; Lafargue et al., 2009; Bramley et al., 2009; Obloj & Capron, 2011; Lafargue et al. al., 2021).

These supply chain are based on a logic of local and limited production, restricted to the natural and human resources ac-

cessible in the region, recognized and made official by distinctive seals, such as the Geographical Indication (GI) sign, a mechanism used to ensure quality and reputation of the products associated with their origin, attesting to the relationship between the natural and cultural assets of the region and their products and services, thus, it is understood as a distinctive sign used to protect products that have a specific geographical origin, quality and reputation (World Intellectual Property Organization, 2019).

Therefore, the research question is: How can agri-food supply chains of origin create and appropriate sustainable value?

LITERATURE REVIEW

The premise of this study considers regional structures as important sources to create value through regional resources and capabilities shared simultaneously by stakeholders that can be presented as tangible or intangible assets, linked to natural, human, cultural, institutional and organizational factors inserted in a given geographic limitation. There is a strategic potential in differentiating and strengthening the segment of origin, possibly being the first regional activity oriented towards value creation, by extrapolating the unitary sense of the company and expanding to an multistakeholders analysis in the supply chain (Burkert et al., 2017; Chicksand & Rehme, 2018).

A number of particular characteristics affect the organizations in the supply chains (or local network structures), which can be heterogeneous conditions, partially explored markets and development of technologies that can sustain competitive advantages. This conditions may be sufficient to define how these resources and capabilities can contribute to this discussion that has not yet been fully disseminated in the literature of sustainable supply chain, possibly due to the challenges that imply studies from the perspective of multiple stakeholders, with different interests (Barney et al., 2021; Lafargue et al., 2021).

The value approach can expand efforts in understanding the value derived from direct relationships between buyers and suppliers, mainly in markets has become increasingly complex, demanding collaborations, however, these multistakeholder structures is recent in this approach and have a potential to create value for different interests (Reypens et al., 2016; Eggert et al., 2019; Barney, 2021).

METHOD

The case study was about a producing region that has its reputation recognized through the geographical indication sign, in addition, it is also known as a territory of identity, which reinforces the importance of this region in strengthening community belonging place in its productive activity. It is noteworthy that the region has experienced in recent decades a transformation in its regional activities, mainly with the growth of the movement of origin, or quality, in the face of persistent socio-economic bottlenecks caused by the market structure of commodity cocoa. Thus, a series of possibilities can derive from this new structure for the small producers of cocoa and chocolate with a strong relationship with issues involving sustainability.

Data collection was qualitative, this study explored in depth the complexities that involve the sustainable agri-food supply chain. This approach generates a greater wealth of

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detail and recognizes the importance of nuances in the analysis. A study of this nature involves a series of empirical materials, in addition, it locates the researcher in the world under analysis and is constituted by an interpretive approach to reality, examining concepts in terms of meanings and interpretations in complex and specific contexts of analysis (Yin, 1981; Denzin & Lincoln, 2000; Ketokivi & Choi, 2014).

The research structure was a single case study, which allows for more in-depth results of the data (within case), through theory-generating case research, which highlights the situational characteristic of the analyzed context, focusing on the observation and analysis of the data (Eisenhardt, 1989; Ketokivi & Choi, 2014). The instrument used was the semi-structured interview, initially applied with specialists, then was carried out with different stakeholders included in this agri-food chains, such as: producers, private organizations, public and sectoral institutions, cooperatives, universities and government. In total, there were 30 interviews with regional informants that culminated in 29.1 hours of recorded audio. In addition, 317 pages of complementary documents and 7 hours of audiovisual documents made available through the sector meetings on the internet.

In this study, content analysis was used to interpret the data with scientific rigor. This technique provides significant results with highly reliability and replicability. Thus, the interviews were transcribed, renamed, coded and categorized, which made it possible to capture important information from this analysis, as well as using secondary data (documentary and multimedia) for integrated analysis (Eisenhardt, 1989; Yin, 2014). According to Sekaran and Bougle (2016), the content analysis technique is used to systematize symbolic content that can be recorded in different ways, that is, the analysis material can have different sources, being too indicated for situations in which there is a large amount of data, recommending the open categorization and, later, a axial coding, which allows inferences to be made about the messages within the data set, observing the existence and pattern of concepts and ideas in the analysed material .

RESULTS

In the agri-food supply chain of cocoa-chocolate in the south of Bahia - Brazil, the results pointed out to a main category (sustainability) and three secondary categories (innovation, sustainable practices and inter-organizational relationships) that help to explain the main strategic resources and capabilities shared between organizations in this network to create value, this direction has been adopted by the market of origin through a series of activities and the development of a narrative that builds a bridge between the binomial of quality and productivity. These resources and capabilities have been used to contribute to positive cultural transformation in economic, reputational, relational, innovative and inclusive gains for the most vulnerable stakeholders such as small producers, who are often outside the sophisticated circuit of fine cocoa.

The sign of geographical indication in the cocoa-chocolate network in the South of Bahia adds legal, economic, commercial, cultural, symbolic, sustainable dimensions, in addition to bringing a regional discussion about the value added by using the sign and their cocoa or chocolate, but however, the longterm benefits of the seal are often overlooked. Several stakeholders collaborated for the recognition of the southern region of Bahia, whether universities, NGOs, public and private sector, represented by several regional organizations. Despite there are still several challenges for stakeholders to absorb their share of the value created from the GI. In addition, being highlight the importance to add to protocols that already exist or are developed locally so that, in fact, organizations can take capture value.

Some evidence points to this mechanism (GI) as an intangible territorial asset, which integrates capabilities based on assets at a regulatory level (law that protects the distinctive seal in the country - law 9.279/1996) and positional (about the region's reputation), as well as capabilities at a functional (with production modes based on the cabruca agroforestry system developed in the region) and cultural level (with regional monuments, narratives and know-how) that can be associated with regional competitive advantage, this reinforces the importance of the distinctive sign of geographical indication for the consolidation of this region has developed, based on a quality market that adds value to the products, but also to the social, economic and environmental context of the region. In addition, it characterizes and reinforces this GI's intangible resource as potential resource for regional activities, whether in the short, medium or long term.

The empirical results reinforce the regional effort to strengthen the market of origin with sustainable practices, supported by the engagement of multiples stakeholders and a sustainable narrative in this alternative market. These efforts have transformed the region into a national quality market benchmark, with pioneering laboratory activities for sensory quality classification in the sector. In addition, it assumes a social, environmental and economic of filling the bottlenecks that large industry has not yet filled. This movement can been associated with the geographical indication and the possibilities to reinforce the regional personality, with added immediate economic value to the producer, local protocols, ensured and audited transparency and traceability, strengthening intangible aspects in the region.

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