153i

ANALYSIS OF SUSTAINABILITY INDICATORS TRIPLE BOTTOM LINE: THE STUDY BEEKEEPING COOPERATIVE - CASA APIS

Análise de indicadores de sustentabilidade triple bottom line: o estudo Cooperativa Apícola - CASA APIS

Ilmária Alves Coelho Silva Federal University of Pernambuco Brazil

Raimundo Nonato Rodrigues Federal University of Pernambuco Brazil

I) Cooperativas y otras Entidades de la Economía Social:

Keywords: Sustainability, Beekeeping Cooperative, Triple Bottom Line.

Analysis of sustainability indicators triple bottom line: the study Beekeeping Cooperative - CASA APIS

Abstract

The objective of this research is to analyse the indicators of economic, social, environmental sustainability present in the Beekeeping Cooperatives Center of the Brazilian Semi-Arid - CASA APIS. Through a methodology of content analysis, the financial statements and administrative documents were analysed.

The results showed that in the economical dimension it was able to have positive results, with ROE of 0.55 in 2018. In the social dimension, there was training for Fair trade certification. In the environmental dimension, it occurred the reforestation project of the caatinga plants in order to increase the bee pasture.

Keywords: Sustainability, Beekeeping Cooperative, Triple Bottom Line.

1. Introduction

The business sustainability has become a prerogative to the long-term success and growth. That is why there is an increasing interest of several organizations in publishing information about their social, environmental and economical practices. This interest has been caused by many factors such as the pressure for the efficient use of natural and scarce raw material, the consumers ´awareness of the cooperative social responsibility and the company´s reputation towards the society (Baumgartner & Rauter, 2017; Brockett & Rezaee, 2012).

The practice of actions that promote the sustainability by the organizations has been discussed since the Conference in Stockholm in 1972, but it was the Report of Brundtland in 1987 that has brought the sustainability concept reporting that today´s actions can not restrict the environmental, social and economic resources for future generations. So that business sustainability contributes to the profitability and competitive advantage as help in the maintenance of the society and planet´s welfare (Brockett & Rezaee, 2012).

Through the dialogue with the stakeholders and the participatory management the Cooperatives protect the interests of their members (Pezzini, 2006; Abdul, Madah, Othman, Abdul, & Hj, 2018). But for a cooperative system to reach its objectives it is necessary to observe several requirements of good governance and management focusing on the environmental, social and economic dimensions.

The accounting as a tool of accountability plays an important role of support to the execution of the associative activities like the cooperatives. Thus the use of accounting in the measurement, control, register and spread of information of the economic-financial performance of the cooperatives brings benefits to the cooperative members ´management and decision as well to the process of fundraising with the funders since these will have elements that can base the concession of loans and predict the capacity of resources creation of these entities (Gray, 1992).

Beyond the economic-financial data, the accounting can help in the construction of social environmental ethical information (Correa & Larrinaga, 2015). So that it becomes a tool that can contribute with elements to all sustainability dimensions reducing the divergence of information and lending credibility to the organization with the funder.

This way it is demanded from the accounting to not limit to the traditional functions so that it provides information to the elaboration of reports of sustainability (Joshi & Li, 2016). From the citizen to the companies, everyone is responsible for the sustainable development and it is expected that the activities are done with the purpose of preserving the resources for future generations.

Exercising the activities with the purpose of sustainable development, the companies obtain organizational legitimacy. Which is when the organization gets the approval of the society to keep its activity, combines its production or service offer with the social and environmental aspirations of the Society where it is inserted(Deegan, 2002; Dowling & Pfeffer, 1975; Milne & Patten, 2002). Therefore, being sustainable the companies get the legitimacy before the society.

One of the initiatives of measurement of the business sustainability, which has been developed in the latest years, is the report of sustainability model of Global Reporting Initiative (GRI). As a tool of communication of the social, environmental and economic performance of the companies, the GRI provides indicators and parameters that demonstrate the sustainable development of the companies (Benites & Polo, 2013).

To Abdul et al. (2018), the development of strategies that provide sustainable performance is a thing to be sought by all the institutions even the ones that do not have a

profitable purpose. Among the types of organizations that do not have the profit as purpose, there are the cooperatives that are created mainly with the goal to generate economic progress for the members (Ceyhan, Canan, Yıldırım, & Türkten, 2017).

An example of this type of enterprise is the Central of Beekeeping Cooperatives of the Brazilian Semi-arid (CASA APIS), that through its complex of cooperatives has done work of production and exportation of organic honey. Which has contributed to the growth of the representativeness of Piauí State in the export market of honey. According to the ranking announced by the website of the Ministry of Industry, International Trade and Services (MDIC), in 2017, Piauí State reached the position of the third biggest exporter of honey in the country.

In the light of what was exposed, it is proposed to analyse the indicators of sustainability of the Beekeeping Cooperative – CASA APIS according to Triple Bottom Line (TBL).

2. Theorical reference

2.1 Sustainable performance

The measurement of the sustainability performance of the companies is relevant to the internal control, organizational culture as well as to the reputation in the market (Silva & Guenther, 2018). The measurement of the sustainability performance is often considered part of the environmental accounting (Joshi & Li, 2016).

A system of sustainability performance has as a purpose to measure, communicate and reduce considerably the quantity of negative environmental and social impacts and contribute to a sustainable change of the markets and the society. The sustainable performance can be measured by the three dimensions: economical, environmental and social (Schaltegger & Burritt, 2014).

2.1.1 Economic dimension

The economic performance is the cornerstone of the business sustainability (Brockett & Rezaee, 2012). The organizations survive and produce a sustainable performance when they continue being profitable and produce a lasting performance that create value to the shareholder.

The economic dimension is considered by Carroll (1991) the main element because for the company to invest in the other dimensions as social and environmental it is necessary to exist profit. As Carroll (1991), Sachs (2008) says the economical dimension is important to boost the development. The profitability is also necessary for the investors to continue keeping the money applied in the company.

2.1.2 Social dimension

The social dimension brings that all the entities must behave with responsibility, taking into consideration the society where it is inserted (Brockett & Rezaee, 2012). The social responsibility is referred to all stakeholders, be the creditors, suppliers, members, government, environment and society. Carroll (1991) mentions that among the actions of social character is the (financial or human) engagement of the company with the activities of welfare for the community.

Among the several elements that compose the social dimension is the Ethics. With this item, the organizations show they respect the values of the society, employees, clients and shareholders (Carroll, 1991). Many times the ethical requirements demanded by the society are more strict than the ones demanded by the law (Carroll, 1991), but as the companies need approval of the Community for the maintenance of their activities, they are willing to meet the society´s requests.

2.1.3 Environment dimension

Among other reasons, the environmental concerns occur because it is the nature that provides the raw material and it is where it is deposited what it is not used in the productive process (Sachs, 2008).

The Environmental Managerial Accounting can contribute to the preservation of the environment giving information to the company managers. With the information of the Environment Accounting it is possible to elaborate projects that combine the business strategies with the environmental issues (Latan, Jabbour, Jabbour, Wamba, & Shahbaz, 2018). Having the data generated by the Environmental Accounting, companies get a superior environmental performance compared to the companies that do not have such information (Latan et al, 2018). This environmental performance can turn into a competitive advantage for the institutions.

2.2 Stakeholders´ theory

"Stakeholder" is any group or individual that can affect or be affected by the activities and goals of the organization (Freeman, 1984). The stakeholders´ theory is one of the most important theories that support the corporate sustainability, once it takes into account the interest, rights and necessities of different interested parts of a company as an efficient way to influence a socially responsible behavior between organizations (Dawkins & Lewis, 2003; Maignan & Ferrell, 2004).

For a company to be considered sustainable, it is necessary that it has a strategical management aimed at sustainability in which the reduction of negative impacts of the business activities happen and actions that promote benefits to the society and environment. (Baumgartner & Rauter, 2017).

Each stakeholder has different interests in the company and the conciliation of these ones is the first step to get the corporate sustainable performance (Baumgartner & Rauter, 2017). This necessity balance can be reached with actions distributed to each sustainability dimension.

A good relation of the cooperative with its suppliers and clients is essential to the continuity and success of its activities. For instance, the producers and services demand of the companies is influenced by the stakeholders´ perception about the organizations (Barreto Junior, Freire, Crisóstomo, & Pereira, 2013).

2.3 Global Reporting Initiative (GRI)

Global Reporting Initiative (GRI) that was created in 1997 by the United Nations Environment Programme (UNEP) is an non-governmental organization that helps companies and government all over the world understand and communicate the impacts in critical issues of sustainability such as climate changes, human rights, governance and social welfare

The Standards of Reports of Sustainability published by GRI are the first and most adopted global standards of reports of sustainability (GRI, 2019). Research of KPMG (2017) states that 93% out of the 250 biggest corporations in the world disclose their performance in sustainability according to the GRI standards.

The structure of the GRI reports is very comprehensive and includes guidelines for measurement and dissemination of information about the economic, environmental and social performance, dimensions that compound the triple bottom line (Quilice, Cezarino, Alves, Liboni, & Caldana, 2018; Elkington, 1998). The report of sustainability prepared according to the GRI standards aims to measure, account and publish to the internal and external stakeholders the impacts of the actions developed by the organizations (GRI, 2014).

In 2016, GRI launched a new version of its norms: The Global Standards of reports of sustainability developed by Global Sustainability Standards Board (GSSB). The great differential of the GRI Standards (Table 1) relating to GRI – G4 is in the modular structure which they are organized allowing the modules to be updated in an individual way (GRI, 2019).

Table 1: GRI Standards

Standards/ Series /description		
Universal Standards	Series 100	Serie 100 includes three universal standards: GRI 101: Foundation GRI 102: General Disclosure GRI 103: Management approach
Standards of specific topics	Series 200 (Economic topics) Series 300 (Environment topics) Series 400 (Social topics)	The series 200, 300 and 400 include several standards of specific topics. For example: Economic impacts, use of water or employment.

Source: Adapted GRI *Standards* (2016)

The GRI Standards in Series 100 debates the universal standards as principles, requirements for the preparation of a report of sustainability, describes how the GRI norms can be used. The Series 200 stablishes requirements about economic performance like economic value generated and distributed; financial implications, other risks opportunities due to climate changes; proportion of expenses with local suppliers among others.

In Series 300 it is discussed about the management of raw material, products and packing recycling, explanation of the process of water and energy use, preservation of the biodiversity, positive and negative impacts on the affected species, greenhouse gases emission, compliance with the environmental legislation.

Series 400 brings the social topics like employment, new employees´ hiring and turnover for age group, gender; health and operational security; training and education; diversity and equality of opportunities. The GRI Standards can be adopted by the organizations of any size, sector or geographical localization that want to inform about their impacts related to the social and environmental themes.

2.4 Co-operatives

The non-governmental organization International Co-operative Alliance (ICA) represent and attends to cooperatives all over the world, composed of 310 organizations from 109 countries. Brazil is represented in the ACI by the Organization of the Brazilian Cooperatives (OCB). The cooperatives have the potential to contribute to the sustainable development of the places where they are stablished, providing income raise and at the same time they preserve the environment (Abdul et al, 2018).

The cooperatives can collaborate for the sustainable development because create opportunities for several socioeconomic benefits such as poverty reduction, job creation and reduction of social inequality (Abdul *et al*, 2018).

Sustainability mechanisms in cooperatives are evidence through the values and principles that guide this type of business. Stablished a long time ago by ACI dated back to nineteenth century in most cases, the precede the concept of sustainable development and overlap (Mayo, 2011). The principles of the cooperatives can be observed in Table 2.

Table 2. Principles of the Cooperativism

1	Voluntary and open adherence;
2	Democratic control of the members;
3	Economic participation of the members;
4	Autonomy and independence;
5	Education, training and information;
6	Cooperation between cooperatives; and
7	Concern about the community.

Source: International Co-operative Alliance (2019)

The cooperatives play an important role providing their members with education and improvement for work. Once this requirement is fulfilled, the other ones such as poverty reduction and job opportunity can be reached (NAÇÕES UNIDAS, 2013).

This way, the growth of the cooperatives and consequent necessity of managerial improvement of the activities make the measures that evaluate the impact of their operations and long-term strategy about the environment, community, society and economy become indispensable (Abdul et al. 2018).

The cooperativism can be found in different economic sectors, having a bigger presence in the agriculture (Marcis, Bortoluzzi, de Lima, & da Costa, 2018) . In Brazil, one of the examples of cooperative in the mentioned sector is Central of Cooperatives in Brazilian Semi-arid (CASA APIS).

2.5 CASA APIS

The Central of Beekeeping Cooperatives in Brazilian Semi-arid, situated in Picos in the state of Piauí was created in 2005 by the Program of Job and Income Creation and Fight Poverty in the Northeast (PROMEL). Through this enterprise, families that were in social vulnerability situation received training for the rational management of the bees so there was the empowerment of these communities that got a new income source (SOUZA, 2014).

Nowadays CASA APIS is composed of three singular cooperatives: Mixed Cooperative of Small Agriculturists (COMPAI), Cooperative of the Beekeepers and Rural Producers from

Territory Serra da Capivara (COOPASC) and Cooperative of Beekeepers from Piauí (MELCOOP). The production chain of honey comprehends 26 municipalities in the state of Piauí with 663 beekeepers (CASA APIS, 2019).

Even having the activity developed in the region of Brazilian semi-arid, that in the period from June to November, suffers from drought and does not have any perennial river that makes agriculture possible. The cooperative complex of CASA APIS has increased the production and exportation of honey due to the use of technological devices in the production and processing (CASA APIS, 2019).

The organizational structure of Central of cooperatives is an enterprise based on the solidary cooperativism that presents a structure of participatory management built by the following organs: General Assembly, Advisory Council, Executive Board and Fiscal Council. The maximum deliberative organ is General Assembly with power to define goals, guidelines, make decisions aiming the development and interests defense of the Cooperative (Brasil,1971).

2.6 Beekeeping

The beekeeping offers a big potential of development and it is comparatively less demanding in terms of investment, work and time (Agera, 2011). Besides, the beekeeping is defended for improving human welfare, alleviating poverty through the familiar income raise. It is a source of food and nutrition security, raw material for many industries, medicine, income raise of the government through duties and taxes (Agera, 2011).

The role of the bees in the agriculture, maintenance of biodiversity, means of sustainable subsistence and food security has been widely shown. Even though many times the potential of beekeeping is not explored in forestry activities and programs of development.

The bees are important pollinators and many ecosystems depend on their pollination for their existence and to increase their genetic diversity. A decline in the bee colonies can threat the survival of the species of plants that depend on the pollination they make (Agera, 2011).

Thus, it is notable that the expansion of beekeeping has innumerable benefits: it keeps the producers in the field, creating income and occupation; it is a very low-cost activity besides being a profitable business (Gonçalves; Binotto; Cintra, 2014).

3. Methodology

To attend to the goal of analysing the sustainability indicators of Central Beekeeping Cooperative – CASA APIS, according to the triple bottom line, the research has as base a study of case, qualitative methodology using the content analysis (Yin, 2010; Bardin, 2011).

Considering the classification criteria proposed by Vergara (2010) about the means, it is a descriptive research. With respect to the means, it is at the same time a documental research and study of case.

The stages of the content analysis follow described in Table 3:

Table 3: Description of the content analysis

Stage	Description	Operationalization
1) Pre-analysis	a) Choice of the documents b) Formulation of the categories c) Elaboration of analysis units that base the final interpretation.	a) Selected documents b) In the vertical 3 categories were elaborated: social, environmental and economic.
2) Exploration of the Material	Decomposition of the material: categories and analysis units	Repetition of the Reading of the documents and disposition of the material (data) in the analysis categories and analysis units.
3) Treatment of the results	Synthesis: articulation of the adopted theorical basis and the obtained data.	The results were triangulated with the theoretical framework.

Source: Adapted from Gaspar et al. (2018), with basis on Bardin (2016)

Considering the classification criteria proposed by Vergara (2010) about the means, it is a descriptive research. With respect to the means, it is at the same time a documental research and study of case.

Through a first phone contact and right after through e-mail, a meeting with the Administrative Assistant and with the Director General of CASA APIS was scheduled that happened on February 28th, 2019. Doing semi-structured interview and data collection.

In this meeting it was received the invitation to take part in a entourage that would visit some communities that are part of MELCOOP Cooperative, one of the singular cooperatives that compose Central CASA APIS. The visit happened on March 3rd, 2019, comprehending the communities Vereda Grande, Cantinho in the municipality of Queimada Nova – PI and the Beekeeping Association in the city of Acauã – PI, which male possible the practice of participant observation and apply a questionnaire with 12 beekeepers.

Besides these visits, the Ordinary General Meeting (AGO) of CASA APIS was attended on March 3rd, 2019, in Picos – PI. Moment when the accountability of the year 2018 occurred. With the voting of approval or not of the Financial Statements. And it was applied a questionnaire with 18 beekeepers, 6 were directors of Central Cooperative.

The measurement of the performance of social enterprises, such as cooperatives, can be measured according to the GRI model, which applies to all types of companies, as well as to the authors' indicators proposals Abdul et al. (2018) and Marcis et al. (2018).

Table 4- Measurement of Performance

Dimensions	Proposed indicators	Authors
Economic	ROE; ROA; ROI	(Marcis et al., 2018) (Abdul et al., 2018)
Social	Training programs update the abilities Percentage of individuals in the organ of governance and employed by gender category and age group.	GRI Standards (2016) (Marcis et al., 2018) (Abdul et al., 2018)
Environmental	Impact of the activity, product in the biodiversity Certifications	

Source: survey data

Through these indicators it is possible to measure how much the actions developed by CASA APIS are being sustainable in each of the dimensions of the Triple bottom line. For this, a consultation was carried out in the accounting reports, and information provided by management.

4. Results

Based on the analysis of the accounting reports, documents and information obtained by the questionnaires, following the parameters GRI STANDARDS and indicators proposed by the authors mentioned in the methodology, it was possible to fill table 5, which shows sustainable practices developed by CASA APIS.

Table 5- GRI Standards

GRI Series 200- Economic Topics			Obtained Indicators
GRI 201	Economic Performance	I- Created economic value: Revenue II- Distributed economic value: Operational costs, operational salaries. III- Withheld economic value: (Created economic value – the distributed value)	In 2018 CASA APIS was able to get positive financial results which the cooperatives call “leftovers”.
Series 300- Environmental Topics			

GRI 304	Biodiversity	Impact of the activity, product in the biodiversity	Preservation and reforestation of the native flora
GRI 307	Environmental Compliance (use GRI 103)	Certifications	SIF, IBD, FAIR TRADE, NON-GMO
Series 400- Social Topics			
GRI 404	Training and education	Training programs to update the abilities	In 2018, 284 the beekeepers received training for Fair Trade certification.
GRI 405	Diversity and equality of opportunities (Together with GRI 103)	Percentage of individuals in the organ of governance and employed for gender category and age group.	In 2018, 15,4% women 84,6% men

Source: Adapted GRI Standards (2016)

In economic indicators ROE, ROA, in 2018 CASA APIS reached ROE of 0.55, and ROA of 0.24. As to the environmental topics CASA APIS has done the work of reforestation of plants from caatinga, process called beekeeping pasture densification. Having as goal to increase the honey production, this initiative brings benefits for the environment. The Certification of the Federal Inspection Service (SIF), the Organic Certification of the Association Biodynamic Institute Certification (IBD) assure the quality process and adds value to the product for exportation.

Fair trade Certification provided by the German company FLO-CERT gives to CASA APIS guarantee of Fair Trade and also qualifies the developed activities in a sustainable way.

5 Final considerations

CASA APIS develops actions that prioritize the qualification of its members, be through internal promoted courses or partnerships. As to the economic-financial issues, in the last two years the Central Cooperative CASA APIS was able to earn enough revenue to afford all the expenses and having positive balance for reinvestment and redistribution among the members, who in Ordinary General Meeting (AGO), accepted to use the Net profit (leftovers) of 2018 to cover the losses in previous years which were very dry in the region of semi-arid and affected the honey production.

As measures to overcome the limitations of the period of drought in the backwoods, CASA APIS helps its members practice the migratory beekeeping. To keep the unit that

processes and packs the honey for exportation and internal market and hire more than 20 employees, it is necessary to change the place of the hives, leaving for specific places in the states of Piauí, Maranhão and Ceará where seasonal flowering occur.

This way, it is noticed that the beekeeping developed by CASA APIS can reach the sustainability indicators of the GRI Standards and also the ones of the Goals of the sustainable development. The beekeeping contributes not only to the environmental sustainability and to the beekeeping production through pollination but also to human health.

Thus, Casa APIS has tried to show that besides the quality of its products, the production chain respects the limits of the nature, contributing to the welfare of the society and its members. This work tried to contribute to the literature about cooperatives, GRI Standards, proposing a correlation of the cooperative sector with the norms of sustainability report.

REFERENCES

Abdul, N. A., Madah, M. M., Othman, R., Abdul, S. R., & Hj, N. I. (2018). Designing indicators for cooperative sustainability: the Malaysian perspective. *Social Responsibility Journal*, *14*(1), 226–248. https://doi.org/10.1108/SRJ-01-2017-0015

Agera, S. (2011). ROLE OF BEEKEEPING IN THE CONSERVATION OF FORESTS. *Global Journal of Agricultural Sciences*, *10*(1), 27–32. Retrieved from https://www.ajol.info/index.php/gjass/article/view/79068/69377

Bardin, L.(2011). Análise de conteúdo. Edições 70. São Paulo.

Barreto Junior, E. A. M., Freire, F. de S., Crisóstomo, V. L., & Pereira, E. M. (2013). Uma métrica para reconhecer a identidade corporativa de empresas brasileiras. *REBRAE - Revista Brasileira de Estrategia*, *6*(518), 107. https://doi.org/10.7213/rebrae.06.002.AO01

Baumgartner, R. J., & Rauter, R. (2017). Strategic perspectives of corporate sustainability management to develop a sustainable organization. *Journal of Cleaner Production*, *140*, 81–92. https://doi.org/10.1016/J.JCLEPRO.2016.04.146

Bebbington, J., & Unerman, J. (2018). Achieving the United Nations Sustainable Development Goals. *Accounting, Auditing & Accountability Journal*, *31*(1), 2–24. https://doi.org/10.1108/AAAJ-05-2017-2929

Benites, L. L. L., & Polo, E. F. (2013). A sustentabilidade como ferramenta estratégica empresarial: governança corporativa e aplicação do Triple Bottom Line na Masisa. *Revista de Administração Da UFSM*, *6*(0), 195–210. https://doi.org/10.5902/198346598879

Brasil. Lei nº 5.764, de 16 de dezembro de 1971. Diário Oficial da União. Poder Executivo, Brasília, DF, 16 dez. 1971.

Brockett, A., Rezaee, Z. (2012). Corporate sustainability: Integrating performance and reporting. Hoboken, NJ: John Wiley and Sons.

Busco, C., Giovannoni, E., Granà, F., & Izzo, M. F. (2018). Making sustainability meaningful: aspirations, discourses and reporting practices. *Accounting, Auditing & Accountability Journal*, *31*(8), 2218–2246. https://doi.org/10.1108/AAAJ-04-2017-2917

CASA APIS (2019). Empreendimento solidário: uma construção de parcerias (presentation Power Point).

Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, *34*(4), 39–48. https://doi.org/10.1016/0007-6813(91)90005-G

Ceyhan, V., Canan, S., Yıldırım, Ç., & Türkten, H. (2017). Economic Structure and Services Efficiency of Turkish Beekeepers' Association. *European Journal of Sustainable Development*, *6*(4), 53–64. Retrieved from http://ojs.ecsdev.org/index.php/ejsd/article/view/547/544

Correa, C., & Larrinaga, C. (2015). Engagement research in social and environmental accounting. *Sustainability Accounting, Management and Policy Journal*, *6*(1), 5–28. https://doi.org/10.1108/SAMPJ-09-2014-0058

Dawkins, J., & Lewis, S. (n.d.). CSR in Stakeholder Expectations: And Their Implication for Company Strategy. *Journal of Business Ethics*. Springer. https://doi.org/10.2307/25075027

Deegan, C. (2002). Introduction: The legitimising effect of social and environmental disclosures – a theoretical foundation. *Accounting, Auditing & Accountability Journal*, *15*(3), 282–311. https://doi.org/10.1108/09513570210435852

Dowling, J., & Pfeffer, J. (1975). Organizational Legitimacy: Social Values and Organizational Behavior. *The Pacific Sociological Review*, *18*(1), 122–136. https://doi.org/10.2307/1388226

Elkington, J. (1998a). ACCOUNTING FOR THE TRIPLE BOTTOM LINE. *Measuring Business Excellence*, *2*(3), 18–22. https://doi.org/10.1108/eb025539

Eriksson, P., & Kovalainen, A. (n.d.). *Qualitative methods in business research*. Retrieved from https://books.google.com.br/books/about/Qualitative_Methods_in_Business_Research.html?id=jJw4rgEACAAJ&redir_esc=y

Freeman, R. E. (1984). *Strategic management : a stakeholder approach*. Pitman.

Gonçalves, R. M. L.; Borges, C. R.; Moreira, N. P.; Menezes, R. S. S.; Matos, D. A. (2014). Livre admissão e risco de crédito em uma coo- perativa do alto paranaíba 1. *RACE: Revista de Administração, Contabilidade e Economia*, *13*(1), 277–304. Retrieved from http://www.spell.org.br/documentos/ver/37547/livre-admissao-e-risco-de-credito-em-uma-cooperativa-do-alto-paranaiba

Gonçalves, L. P., Binotto, E., & Cintra, R. F. (2014). Análise da Apicultura no Estado de Mato Grosso do Sul: Um Enfoque na Mudança Organizacional. *Revista de Administração IMED*, *4*(2), 245–256. https://doi.org/10.18256/2237-7956/raimed.v4n2p245-256

Gray, R. (1992). Accounting and environmentalism: An exploration of the challenge of gently accounting for accountability, transparency and sustainability. *Accounting, Organizations*

and Society, *17*(5), 399–425. https://doi.org/10.1016/0361-3682(92)90038-T

GRI. The GRI Standards 2016. Disponível em: < https://www.globalreporting.org/standards>.

GRI. GRI's History (2019). Disponível em: < https://www.globalreporting.org/information/about-gri/Pages/default.aspx>. Acesso em 22/04/2019.

Joshi, S., & Li, Y. (2016). What Is Corporate Sustainability and How Do Firms Practice It? A Management Accounting Research Perspective. *Journal of Management Accounting Research*, *28*(2), 1–11. https://doi.org/10.2308/jmar-10496

KPMG. The KPMG Survey of Corporate Responsibility Reporting 2017. Disponível em: <https://home.kpmg/xx/en/home/insights/2017/10/the-kpmg-survey-of-corporate-responsibility-reporting-2017.html>. Acesso em 22/04/2019.

Latan, H., Jabbour, C. J. C., Jabbour, A. B. L. de S., Wamba, S. F., & Shahbaz, M. (2018). Effects of environmental strategy, environmental uncertainty and top management's commitment on corporate environmental performance: The role of environmental management accounting. *Journal of Cleaner Production*, *180*, 297–306. https://doi.org/10.1016/J.JCLEPRO.2018.01.106

Maignan, I., & Ferrell, O. C. (2004). Corporate Social Responsibility and Marketing: An Integrative Framework. *Journal of the Academy of Marketing Science*, *32*(1), 3–19. https://doi.org/10.1177/0092070303258971

Marcis, J., Bortoluzzi, S. C., de Lima, E. P., & da Costa, S. E. G. (2018). Sustainability performance evaluation of agricultural cooperatives' operations: a systemic review of the literature. *Environment, Development and Sustainability*, 1–16. https://doi.org/10.1007/s10668-018-0095-1

Mayo, E. (2011). Co-operative performance. *Sustainability Accounting, Management and Policy Journal*, *2*(1), 158–164. https://doi.org/10.1108/20408021111162182

Milne, M. J., & Patten, D. M. (2002). Securing organizational legitimacy: An experimental decision case examining the impact of environmental disclosures. *Accounting, Auditing & Accountability Journal*, *15*(3), 372–405. https://doi.org/10.1108/09513570210435889

Quilice, T. F., Cezarino, L. O., Alves, M. F. R., Liboni, L. B., & Caldana, A. C. F. (2018). Positive and negative aspects of GRI reporting as perceived by Brazilian organizations. *Environmental Quality Management*, *27*(3), 19–30. https://doi.org/10.1002/tqem.21543

Schaltegger, S., & Burritt, R. (2014). Measuring and managing sustainability performance of supply chains. *Supply Chain Management: An International Journal*, *19*(3), 232–241. https://doi.org/10.1108/SCM-02-2014-0061

Silva, S., & Guenther, E. (2018). Setting the research agenda for measuring sustainability performance – systematic application of the world café method. *Sustainability Accounting, Management and Policy Journal*, *9*(4), 455–469. https://doi.org/10.1108/SAMPJ-06-2017-0060

Sousa, M. M. R (2014). A Certificação do comércio justo sob a ótica do desenvolvimento sustentável: o caso da Casa Apis. 2014. 152 f. Dissertação (Mestrado em Logística e Pesquisa Operacional) – Pró-Reitoria de Pesquisa e Pós-Graduação, Universidade Federal do Ceará, Fortaleza, Brasil.

Vergara, S. C. (2010). Projetos e Relatórios de Pesquisa em Administração.12. ed. *Atlas,* São Paulo.

Yin. R. K. (2005). Estudo de caso: planejamento e métodos. 3 ed. *Bookman*. Porto Alegre.