

# VOLUNTARY SOCIO-ENVIRONMENTAL DISCLOSURE PRACTICES IN BRAZILIAN AGRICULTURAL COOPERATIVES

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Lorena Gabriella Novaes Santana<sup>1</sup>

Jose Alexandre dos Santos<sup>2</sup>

Marta Pagán Martínez<sup>3</sup>

Rosamaria Cox Moura Leite Padgett<sup>4</sup>

## ABSTRACT

A análise da relação entre comportamento de consumo e sexo tem sido frequente nos estudos em *m*The objective of this article is to describe the voluntary disclosure of socio-environmental practices in Brazilian agricultural cooperatives. In order to reach the outlined objective, we analysed the annual reports on the websites of a non-probabilistic sample of the largest Brazilian agricultural cooperatives, referring to the period of 2015. For data analysis, the averages by subcategory and three indices of disclosure rate were used: Disclosure Index (DI), Business Disclosure Index (SDI) and General Business Disclosure Index (IGDE), General Index of Social Disclosure (IGDs). In addition, a fifth disclosure index was developed: the General Index of Environmental Disclosure (IGDa). The results obtained allow us to affirm that there is more disclosure of social information than environmental information, especially in relation to employees, concerns with the community and education, and that there is still a long way to go regarding good socio-environmental voluntary disclosure of agricultural and livestock cooperatives.

**Keywords:** transparency, disclosure of information, open data, socio-environmental variables, agribusiness.

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1 Undergraduate student in Accounting Science, Federal University of Mato Grosso do Sul, UFMS, Brazil. Email: loresgabriella@gmail.com

2 Degree in Administration and Master's degree in Administration from Federal University of Mato Grosso do Sul, UFMS, Brazil. Email: prof.jose.alexandres@gmail.com

3 Degree in Humanities from the University of Castilla - La Mancha, UCLM, Master's Degree in Digital Humanities from UCLM, PhD in Techniques and Methods in Information and Documentation from the University of Murcia, UM, Spain and post-doctorate in Administration from the Federal University of Mato Grosso do Sul, UFMS, Brazil. Email: pagan.marta@gmail.com

4 Degree in Business Administration from the Federal University of Santa Catarina, UFSC, Brazil, Master's degree in Sustainable Local Development and Social Economy from the University of Huelva, UHU, Spain and a PhD in Business Economics from the University of Salamanca, USAL, Spain. Professor, Graduate Program in Administration, School of Administration and Business of the Federal University of Mato Grosso do Sul, UFMS, Brazil. Email: rosamaria.leite@ufms.br

# 1 INTRODUCTION

The primary purpose of accounting is to provide users with general information which assists them in making secure, reliable and relevant economic decisions in a timely manner (IUDÍCIBUS, 2010). Disclosure is not an accounting principle, however it is related to the purpose of accounting due to the disclosure of information in accounting reports (COMITÉ DE PRONUNCIAMENTOS CONTÁBEIS-CPC, 2016). In this way, disclosure can be understood as the release of quantitative or qualitative accounting information published by a company through formal or informal channels (GIBBINS, RICHARDSON and WATERHOUSE, 1990).

Bushman et al. (2004) related the concept of disclosure to corporate transparency, defining it as the dissemination of relevant and reliable information about operational and financial performance, investment opportunities, governance, values and risks. To these authors, corporate transparency is an instrument for disseminating company-specific information to external users.

The full disclosure of information is not seen in practice (LANG and LUNDHOLM, 2000) due to costs related to the generation and disclosure of information. Generally, depending on the cost/benefit associated with disclosure; a company can opt for total, partial or no disclosure at all (HOSSAIN, 2008). Following Verrecchia (2001), the absence of disclosure costs presuppose full disclosure. Similarly, Yamamoto and Salotti (2006) affirm that disclosure tends to decrease as disclosure costs increase. In fact, when a company discloses information voluntarily it expects that the benefits derived from disclose exceeds costs (VERRECCHIA, 2001). Thus, companies disclose information voluntarily in situations where the expected benefits surpass cost (DYE, 2001).

Cooperative organizations are governed by seven fundamental principles which depend heavily on a good transparency culture for their effective application. Among the seven principles, the following stand out: democratic management; education, training and information; interest in the community. For the effective application of these principles as well as guaranteeing solidity on the market, it is primordial that cooperative members and the community have full knowledge of activities carried out by the cooperative. Bialoskorski Neto (2007) affirms that the main function of a cooperative is to distribute its results to associates and draw up strategies for the distribution of economic results through better purchase and retail prices of final products.

Voluntary disclosure theory, also known as judgment based disclosure (YAMAMOTO AND SALOTTI, 2006), attributes disclosure to an endogenous event in which managers and/or companies have economic benefits associated with the disclosure or non-disclosure of information voluntarily. Based on this theory and considering the demands of external users of financial statements (VERRECCHIA, 2001) coupled with the economic and social relevance of cooperatives, the research question was formulated: *how do Brazilian agricultural cooperatives disclose socio-environmental information?*

Guided by this question, the objective of this research is to describe the socio-environmental disclosure of Brazilian agricultural cooperatives.

The present study is justified due to the lack of studies on voluntary disclosure practices in agricultural cooperatives, the role of cooperatives in the development of agriculture within and outside the Brazilian context and the importance of voluntary disclosure of information by agribusiness cooperatives, which reduces asymmetry, information gap, and moral hazards (MURCIA and DOS SANTOS, 2009).

Thus, the main contribution of the research was the description of voluntary socio-environmental disclosure of Brazilian agricultural cooperatives, as well as the use of a comprehensive and representative metric that allows the level of voluntary disclosure of agricultural cooperatives to be measured, contributing to the Brazilian literature on the subject and future research.

## 2 LITERATURE REVIEW

In this literature review, voluntary disclosure, advantages of voluntary disclosure, a brief history of cooperatives and principles which govern them are presented.

### 2.1. Voluntary disclosure

Accounting, as a social science, has a methodology created specifically to capture, record, accumulate, summarize and interpret phenomena that affect the patrimonial, financial and economic situations of any entity, be it an individual, non-profit entity, a company or legal person of public law. It has a broad field of application and was initially developed due to the emergence of capitalism and the need to measure the increase or decrease of initial investments allocated to commercial or industrial exploitation (IUDICIBUS, 1998).

Hendriksen (1999) states that the objectives of accounting can include providing a basic set of information that equally satisfies all users, irrespective of its nature or the disclosure of information in completely different forms so as to address the needs of each individual user. According to Iudícibus (1980), the objective of accounting involves productivity and social aspects, in the form of disclosure of additional information concerning levels of employment of the entity, types of training, demonstration of added value. On the other hand, in the view of Lopes, Iudícibus and Martins (2005), one of the main goals of accounting is to contribute to the reduction of information asymmetry existing between internal and external users of an entity.

However, it is reasonable to affirm that disclosure is intrinsic to the qualitative characteristics of accounting information - comprehensibility, relevance, reliability and comparability (IASC, 2001), seeking to make it more useful and increasing the predictive evaluation capacity of users. (MEDEIROS and QUINTEIRO, 2005). Dantas, Zendersky and Niyama (2008) point out that in order to achieve transparency in disclosure, institutions must disclose qualitative and quantitative information that enable users to make their own inferences on activities developed and their risks, observing necessary timing, details and relevance, thus revealing the true situation of the entity and enhancing the capacity for predictive evaluation.

The disclosure of information by companies can be voluntary or compulsory. In compulsory disclosure, companies are required by law to disclose some information considered relevant to users, even if it does not benefit the company, thus its elaboration generates costs. Voluntary disclosure is the type where a company discloses information because it can be beneficial to internal and external users, such as existing and potential investors, therefore it outweighs costs of information production (YAMAMOTO AND SALOTTI, 2006).

Society exerts pressure on companies to disclose socio-environmental information, since dissemination of actions serves as an instrument of legitimation. The significant growth in the level of disclosure demonstrates that companies are concerned about how society perceives their actions (SAMPAIO et al, 2012). Companies are motivated to disclose positive social and environmental information, and expect this action to bring legitimacy to the organization or meet the longing of some stakeholders (RUFINO and MACHADO, 2015).

To obtain legitimacy of socio-environmental responsibility practices, it is necessary to publish good quality information in appropriate media channels (COSTA et al., 2013). It is important to emphasize that non-financial reports contribute to transparency with stakeholders, in this sense sustainability reports are essential for effective communication with interested parts (AMRAN, LEE, DEVI, 2014).

Although cooperatives show strong transparency concerns in their principles, they are faced with less disclosure requirements compared to public companies. In addition, the lack of incentives to disclose information, cost of publication, absence of laws and the lack of demand for information, can lead to reduced levels of social and environmental disclosure (LORZA, 2014).

## 2.2. Cooperatives

Cooperatives are supported by cooperation and to cooperate is to act collectively with others, working together towards the same goal (GAWLAK and RAZKE, 2010). Cooperative practices contribute to education and help develop a more flexible, participatory, humane and supportive mentality. In order to achieve their objectives, cooperatives are sustained by values of self-help, self-responsibility, democracy, equality, equity and solidarity. (INTERNATIONAL CO-OPERATIVE ALLIANCE, 2013).

Cooperatives are present in all sectors of the economy and are fundamental for job creation. According to FAO 2012, more than 100 million direct and indirect jobs worldwide have been created including resource mobilization and generation of investments, all which contribute to the socio-economic development of the people. In this way, it is important to emphasize that a cooperative is an “autonomous and voluntary association focused on meeting common economic and social needs and aspirations, through joint ownership and democratic management” (ILO, 2012).

Cooperatives are governed by seven fundamental principles, presented in Table 1:

Principles	Definition
<b>Voluntary and free Membership</b>	Cooperatives are open to all persons able to use their services and assume responsibilities as members, without the discrimination of gender, color, politics, religion or social class.
<b>Democratic management</b>	The cooperative is controlled by its members, who are invited to share in all decisions. Each member is entitled to one vote, regardless of his or her capital in the enterprise.
<b>Economic participation of members</b>	Each member contributes to the constitution of the capital of its cooperatives, controlling it democratically;
<b>Autonomy and independence</b>	Cooperatives are autonomous, self-help organizations, independently controlled by their members.
<b>Education, training and information</b>	Cooperatives promote the education and training of their associates so that they can contribute, more and more, to the growth of the enterprise.
<b>Intercooperation</b>	Cooperatives should help each other, working - whenever possible - together. The logic is to unite forces, a thought contrary to competition experienced by traditional companies.
<b>Interest in the community</b>	Cooperatives work for the sustainable development of their communities and must make all their decisions in a socially responsible manner.

Source: Authors based on OCB (2013).

In this way, it should be mentioned that transparency is directly related to credibility, trust, social responsibility, ethics, besides, it raises democratic quality, increasing the participation of the collective in the cooperative. In addition, there is an important relation between the cooperative principles and socio-environmental disclosure, especially voluntary and free membership, democratic management, education, training and information, and interest in the community (SCHULTZ *et al.*, 2013).

Therefore, cooperatives are expected, by virtue of principles, to carry out actions of social and environmental responsibility and voluntarily disclose information, especially to be legitimate in the community where they belong.

### 3 METHODOLOGY

To reach the objective proposed in this study, a theoretical-empirical research with a descriptive character was developed. The research is considered descriptive since it is intended to describe the socio-environmental disclosure of Brazilian agricultural cooperatives, through the quantitative analysis of collected data.

#### 3.1. Sample selection and data collection

The non-probabilistic selection of the sample was conducted based on the ranking “400 largest agribusiness companies” of the year 2016 published by the Exame magazine, in which it classifies the 400 largest companies (among them cooperatives, public companies, etc.). Sixty-two (62) cooperatives in the ranking were selected. Subsequently, via the websites of the selected cooperatives, social balance sheets, sustainability reports, management report and/or annual reports available were investigated, since online dissemination of reports is more common nowadays than magazines or newspapers.

During the data collection process, it was found that one cooperative did not have a website, 30 have websites, but do not disclose any type of socioeconomic information in their reports, 08 cooperatives publish reports but in a different search period and 23 cooperatives publish reports, from which information about the year 2015 was extracted. These 23 cooperatives being the sample of the research.

#### 3.2. Measure of voluntary disclosure

The procedures adopted in this research are based on the voluntary disclosure metric developed by Murcia (2009). Murcia (2009) investigated factors that explain the level of voluntary disclosure of public companies in Brazil through the evaluation of the 100 largest nonfinancial public companies, where the results show that most of the largest companies in the electric sector, that have American Depositary Receipts (ADRs) at Levels II and III on the New York Stock Exchange (NYSE) and who adhere to the differentiated levels of corporate governance on the São Paulo Stock Exchange (Bovespa), have, on average, a higher level of voluntary disclosure.

It should be noted that although the study of Murcia (2009) was developed mainly for public companies, the methodology utilized in measuring voluntary disclosure will be applied in this research, being cooperatives the research object. Here, the difference lies in the minimum disclosure requirement of cooperatives, which is lower than that of public companies, i.e. some of the accounting statements mandatory for public companies, are voluntary for cooperatives, such as the Value Added Statement. With this, two groups of information were selected - social and environmental - 11 categories and 48 subcategories.

The group consisting of social information is presented in Table 2 composed of three categories and 14 subcategories.

**Table 2. Metrics for the collection of social information on voluntary disclosure.**

Category	Subcategory
<b>Socio-financial Information</b>	Statement of Added Value
	Mentions added or distributed value
	Investments of social character
	Expenditures on social projects
<b>Products/Services</b>	Company's products / services comply with safety standards
	Mentions complaint about products and /or services
<b>Collaborators (non-administrators)</b>	Number of employees
	Remuneration of employees
	Employee benefits
	Employee satisfaction
	Information on minorities in the labor force
	Education and training of employees
	Workplace safety
	Relationship with unions or organs

Source: Authors based on Murcia (2009).

Table 3 presents the environmental information group and is divided into eight categories and 34 subcategories.

**Table 3. Metrics for the collection of environmental information on voluntary disclosure.**

Category	Subcategory
<b>Environmental Policies</b>	Statement of policies, practices, current actions
	Establishment of environmental goals and objectives
	Compliance with environmental legislation
	Partnerships, councils, environmental forums
	Awards and participation in environmental indices
<b>Environmental Management and Audit</b>	Environmental management
	ISOs 9000
	Environmental Audit
<b>Impacts of Products and Processes on the Environment</b>	Waste and residues
	Packing process (packaging)
	Recycling
	Development of ecological products
	Efficient use and / or reuse of water
	Impact on the environment (leaks, spills, used earth etc.)
<b>Energy</b>	Repairs environmental damage
	Conservation and / or more efficient use of energy in operations
	Use of waste materials in energy production
<b>Environmental Financial Information</b>	Development or exploitation of new energy sources
	Environmental Investments
	Environmental costs and / or expenses
	Intangible environmental assets
	Environmental liabilities
<b>Environmental Education and Research</b>	Environmental Accounting practices
	Environmental insurance
<b>Carbon Credit Market</b>	Environmental education (internally and / or community)
	Research related to the environment
	Clean Development Mechanism Projects (CDM)
	Carbon Credits
<b>Other Environmental Information</b>	Emission of greenhouse gases (GHG)
	Certified emission reduction (CERs)
	Mentions sustainability or sustainable development
	Forest management and / or reforestation
	Biodiversity conservation
	Environmental relationship with stakeholders

Source: Authors based on Murcia (2009)

### 3.3. Data analysis

Due to the different disclosure models presented in the reports, it was unviable to select a single model, therefore a binary evaluation method was utilized, where a score of 1 was given when a cooperative discloses certain data, and a score of 0 when there is no disclosure of information. In this way, the existence or non-existence of certain information is verified (KHANNA; PALPEU AND SRINIVASAN, 2004). The data were analyzed using mean disclosure by subcategories coupled with three arithmetic indices: Disclosure Index (DI), Disclosure Index of companies (DIC) and General Disclosure Index of companies (GDIC) developed by Schultz et al. (2002).

Disclosure Index (DI) demonstrates the number of companies that disclose at least one subcategory of the category evaluated, which represents adherence to some form of voluntary disclosure. The highest value of the index is 1 (if all the companies present information) and the minimum value is 0 (if all companies did not present any information). Formula (1) was utilized:

$$DI = C \div T$$

where, DI is Disclosure Index, E is the number of companies that disclosed at least one subcategory of the main categories evaluated and T is the total number of companies in the category.

Disclosure Index of the companies (DIC) represents the level of disclosure of the companies (C) that form the DI index. The highest value of DIC index is 1 (all companies C disclosed information that meets all the subcategories of the category) and the lowest value is  $R > 0$  (all the companies C provided information that only addresses a subcategory of the category). DIC is represented by Formula (2):

$$DIC = DC \div (SC \times C)$$

where, DC is the amount of disclosure in the category, SC is the number of subcategories and C is the number of companies that disclosed at least one of the subcategories. This index cannot be compared between different categories.

General Disclosure Index of companies (GDIC) corresponds to the amount of disclosure in relation to the total number of companies presented in the same category. The maximum value of this index is 1 (all the observed companies presented information that meets all the subcategories of the category) and the minimum value is 0 (no subcategory is met by the disclosure). The Formula (3) for the index is presented below:

$$GDIC = DC \div (SC \times T)$$

where, DC is the amount of disclosure from the category, SC is the number of subcategories of the category and T is the total number of companies observed in the category.

In addition, the methodology was expanded by comparing general index of social disclosure and general index of environmental disclosure to verify differences in the voluntary disclosure of social and environmental information. General Index of Social Disclosure (GISD) is calculated by Formula (4):

$$GISD = SD \div (SCS \times T)$$

where, GISD is the General Index of Social Disclosure, SD is the total amount of disclosure of the social variable groups, SCS is the total number of subcategories of the social group and T is the total amount of companies.

General index of environmental disclosure (GIED) is calculated by Formula (5):

$$GIED = ED \div (SCE \times T)$$

where, GIED is the General Index of Environmental Disclosure, ED is the total amount of information disclosed on the group environmental variables, SCE is the total number of environmental subcategories and T is the total number of companies.

### 3.4. Research Limitations

The analysis of the cooperative reports involves the researcher's judgment. The metric used to evaluate the collected data does not assign weights, thus equal importance is given to all information disclosed. Another restriction is not analyzing Balance Sheets and Explanatory Notes, penalizing companies for disclosing certain subcategories such as intangible environmental assets, environmental liabilities, accounting practices of environmental items and environmental insurance only in the financial statements. In addition, it should be emphasized that the research sample was intentionally selected, therefore, not probabilistic and the period studied is restricted to one year, so the results of the research are restricted to the studied cooperatives.

## 4 RESULTS

Table 1 presents mean disclosure by subcategories, so that the reader has a more detailed vision of information disclosed by cooperatives. As can be observed, social information and project expenditures stand out in relation to social disclosure, and it is evident that most companies report information on the number of employees, benefits and investments in relation to education and training of employees, another concern is related to disclosure of safety actions, probably due regulations surrounding employee safety.

Regarding environmental disclosure, compliance with environmental legislation and processes of environmental education is emphasized, in addition to stating concern for sustainability in reports.

Table 1. Mean disclosure of the subcategories.

Category	Subcategory (variable)	Obs	Mean	Std. Dev.	Min	Max
<b>Socio-Financial Information</b>	Statement of Added Value	23	0,435	0,507	0	1
	Mentions added or distributed value	23	0,435	0,507	0	1
	<b>Investments of a social character</b>	<b>23</b>	<b>0,870</b>	<b>0,344</b>	<b>0</b>	<b>1</b>
	<b>Expenditures on social projects</b>	<b>23</b>	<b>0,783</b>	<b>0,422</b>	<b>0</b>	<b>1</b>
<b>Products / Services</b>	Company's products / services comply with safety standards	23	0,478	0,511	0	1
	Mentions complaint about products and / or services	23	0,130	0,344	0	1



<b>Collaborators (non-admin- istrators)</b>	<b>Number of employees</b>	<b>23</b>	<b>0,826</b>	<b>0,388</b>	<b>0</b>	<b>1</b>
	Remuneration of employees	23	0,522	0,511	0	1
	<b>Employee Benefits</b>	<b>23</b>	<b>0,652</b>	<b>0,487</b>	<b>0</b>	<b>1</b>
	Employee satisfaction	23	0,087	0,288	0	1
	Information on minorities in the workforce	23	0,522	0,511	0	1
	<b>Education and training of employees</b>	<b>23</b>	<b>0,913</b>	<b>0,288</b>	<b>0</b>	<b>1</b>
	<b>Workplace safety</b>	<b>23</b>	<b>0,696</b>	<b>0,470</b>	<b>0</b>	<b>1</b>
<b>Environmen- tal Policies</b>	Relationship with unions or organs	23	0,391	0,499	0	1
	Statement of policies, practices, current actions	23	0,565	0,507	0	1
	Establishment of environmental goals and objectives	23	0,130	0,344	0	1
	<b>Compliance with environmental legislation</b>	<b>23</b>	<b>0,739</b>	<b>0,449</b>	<b>0</b>	<b>1</b>
	Partnerships, councils, environmental forums	23	0,348	0,487	0	1
	Awards and participation in environmental indices	23	0,130	0,344	0	1
<b>Management and environ- mental audit</b>	Environmental management	23	0,261	0,449	0	1
	ISOs 9000	23	0,217	0,422	0	1
	Environmental Audit	23	0,000	0,000	0	0
<b>Impacts of Products and Processes on the Environ- ment</b>	Waste and residues	23	0,348	0,487	0	1
	Packing process (packaging)	23	0,348	0,487	0	1
	Recycling	23	0,435	0,507	0	1
	Development of ecological products	23	0,261	0,449	0	1
	Efficient use and / or reuse of water	23	0,391	0,499	0	1
	Impact on the environment (leaks, spills, used earth etc.)	23	0,130	0,344	0	1
	Repair of environmental damage	23	0,304	0,470	0	1
<b>Energy</b>	Conservation and/or more efficient use of energy in operations	23	0,565	0,507	0	1
	Use of waste materials in energy production	23	0,261	0,449	0	1
	Development or exploitation of new energy sources	23	0,348	0,487	0	1
<b>Environmen- tal Financial Information</b>	Environmental Investments	23	0,565	0,507	0	1
	Environmental costs and/or expenses	23	0,217	0,422	0	1
	Intangible environmental assets	23	0,000	0,000	0	0
	Environmental liabilities	23	0,000	0,000	0	0
	Environmental accounting practices	23	0,000	0,000	0	0
	Environmental insurance	23	0,000	0,000	0	0
<b>Environmen- tal Education and Research</b>	<b>Environmental education (internally and/or commu- nity)</b>	<b>23</b>	<b>0,696</b>	<b>0,470</b>	<b>0</b>	<b>1</b>
	Research related to the environment	23	0,304	0,470	0	1
<b>Carbon Cred- it Market</b>	Clean Development Mechanism Projects (CDM)	23	0,174	0,388	0	1
	Carbon credits	23	0,043	0,209	0	1
	Emission of greenhouse Gases (GHG)	23	0,087	0,288	0	1
	Reduced Emission Certificates (CERs)	23	0,087	0,288	0	1
<b>Other Envi- ronmental Information</b>	<b>Mentions sustainability or sustainable development</b>	<b>23</b>	<b>0,739</b>	<b>0,449</b>	<b>0</b>	<b>1</b>
	Forest management and / or reforestation	23	0,522	0,511	0	1
	Biodiversity conservation	23	0,565	0,507	0	1
	Environmental relationship with stakeholders	23	0,043	0,209	0	1

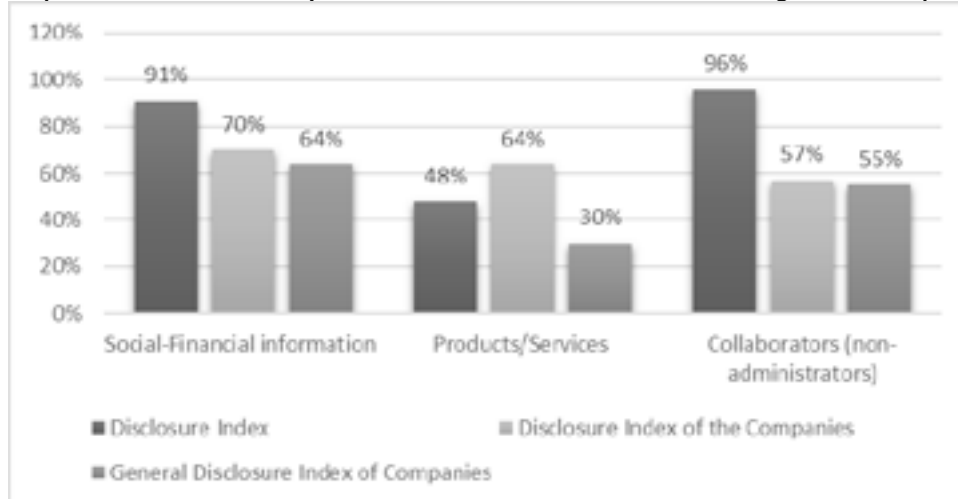
Source: Research data.

The variables of the categories listed in Tables 2 and 3 were used to quantify Disclosure index according to graphs 1 to 3.

Graph 1 presents the Voluntary Disclosure of Social information of Brazilian agricultural cooperatives, where the DI and GDIC indices indicate the existence of greater concern with disclosure of social-financial information and non-managerial employees. With regard to DIC, categories such as financial and social information and products/services presented a higher rate of disclosure, leading us to believe that cooperatives are more concerned with disclosing aspects related to these variables.

In addition, it should be noted that certain subcategories had very low index of disclosure, as is the case of “complaints about products and services” and “employee satisfaction”, thus lowering the General Disclosure Index of Companies that fall within the categories of products / services and collaborators (non-administrators), respectively, which demonstrates a lower concern in disclosing this type of information to the user.

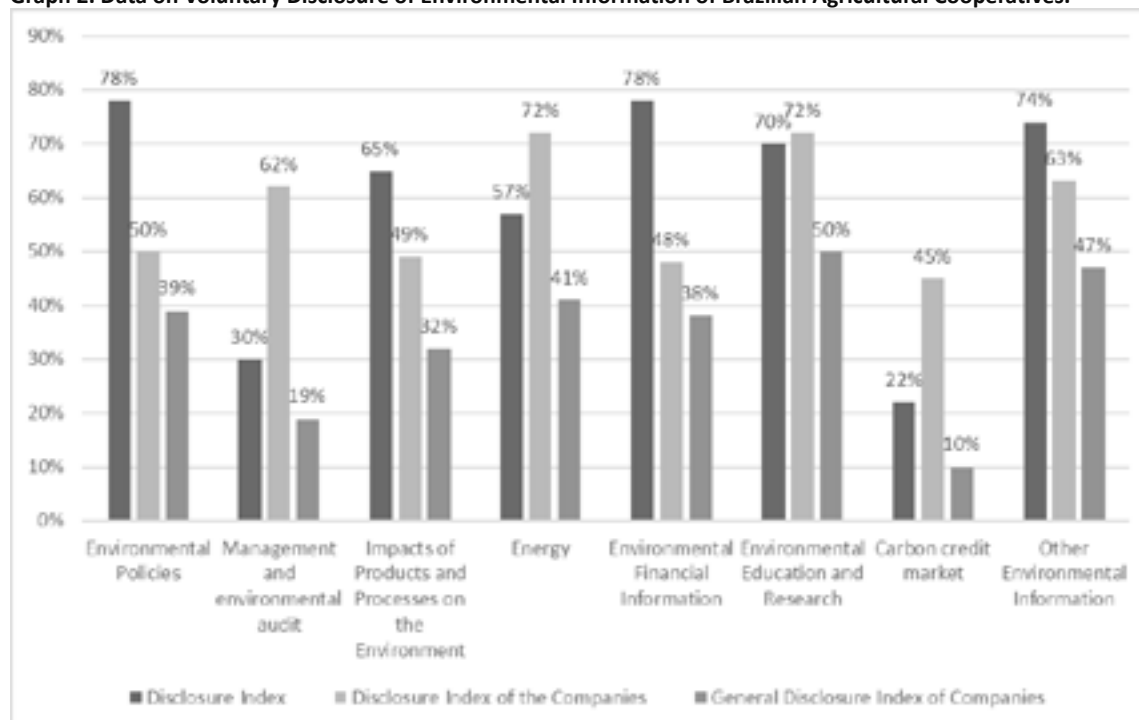
**Graph 1. Data on the Voluntary Disclosure of Social Information of Brazilian Agricultural Cooperatives**



Source: Authors.

In Graph 2, the voluntary disclosure of environmental information of Brazilian agricultural cooperatives is presented in the DI index of the categories “Environmental Policies” and “Environmental Financial Information”, with the highest level of disclosure, therefore, there is a major concern in disclosing these subjects. In contrast, the category “Carbon credit market” had the lowest disclosure DI Index, as well as GDIC Index, showing less concern with the disclosure of this topic. In relation to DIC the categories “Energy” and “Environmental Education and Research” presented a higher disclosure index, which leads us to believe that cooperatives are more concerned with disclosing information related to these variables. The GDIC index had a relatively low disclosure, compared to other indices, considering that the general quantity of information disclosed of categories reached a maximum of 50% for the category “Environmental Education and Research”.

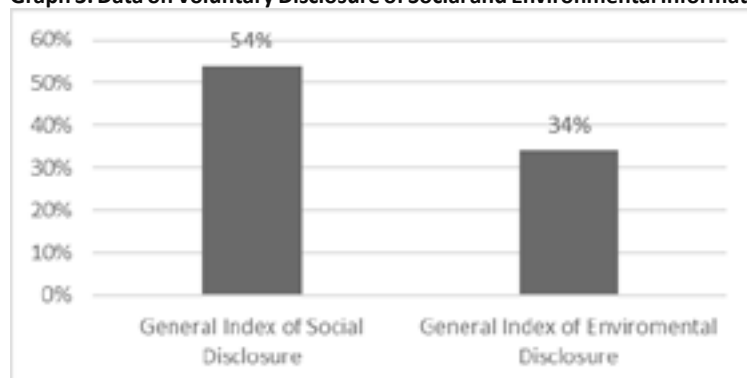
**Graph 2. Data on Voluntary Disclosure of Environmental Information of Brazilian Agricultural Cooperatives.**



Source: Authors.

Graph 3 presents the voluntary disclosure of social and environmental information of Brazilian agricultural cooperatives, showing in general a greater dissemination of social issues than environmental issues, with a difference of 20 percentage points, which highlights concern with the seventh cooperative principle: Interest in the community.

**Graph 3. Data on Voluntary Disclosure of Social and Environmental Information of Brazilian Agricultural Cooperatives.**



Source: Authors.

From the analysis of graph 3, it can be seen that general mean disclosure (GSD + GED + 2) is 44%, a percentage still considered low, given the importance of disclosing social-environmental practices of the cooperative with information users.

## 5 CONCLUSIONS

This research had the objective to describe the voluntary disclosure of socio-environmental information among Brazilian agricultural cooperatives. The article focused on the analysis of annual reports and similar reports of 2015. The sample was taken from the “400 largest agribusiness companies” ranked by the Exame magazine. Sixty-two (62) cooperatives present in the aforementioned ranking were verified; however, only 23 disclosed an annual report on their websites and were chosen as the research object.

Based on the mean values, it is possible to observe a low disclosure level of socio-environmental information by agricultural cooperatives. However, there is some emphasis on social information, mainly related to concerns with the local community and education, including the environmental education. This result is in accordance with cooperative principles.

According to the analysis of the research, it is clear that cooperatives are more concerned with disseminating social information than environmental information. Among social information, the category “collaborators non-administrators” was the most publicized. Regarding environmental information, the categories “environmental policies and financial and environmental information” were the most reported. It should also be noted that some social and environmental information, such as “products and services and carbon credit market”, were the least publicized.

However, when analyzing the 62 cooperatives present in the ranking, we found that only 23 disseminate socio-environmental information and the mean disclosure index is below 50%, a fact that shows a lack of concern by Brazilian agricultural cooperatives with providing information to users.

The contribution of the research was the analysis of voluntary disclosure of social environmental information by Brazilian agricultural cooperatives. The use of a comprehensive and representative metric composed of 11 categories and 48 subcategories allowed the level of voluntary disclosure of agricultural cooperatives to be measured, in addition to providing empirical evidences on the research object, thus the findings contribute to the Brazilian literature on the subject as well as directing future research.

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