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THE MANAGERS' OPINIONS IN A COMPETITIVE WORLD: THE CASE OF COFFEE AND BRFAIR IN BRAZIL

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ABSTRACT
Mutual respect, recognition and trust represent the founding stones for any cooperation among human beings and agricultural organizations make no distinction. For the first time, this research has investigated the reciprocal opinions of the managers of 22 coffee cooperatives, all members of BRFair, the umbrella association, that should cooperate for the enhancement of the growth of the Fair-Trade (FT) movement in Brazil. Through direct visits, telephonic conversation and skype talks, qualitative information and data were collected from 19 cooperatives, whereas the managers of three cooperatives have decided to not cooperate. The data reveal a large heterogeneity, in terms of number of members, areas with coffee, output, years of experience, and share of FT coffee with respect to total output. In some cases, the FT certification is only one of the strategies for diversifying the final market, whereas for some other respondents the FT certification has been a strategic decision. Three cooperatives emerge as leading the path for the promotion of the FT concept and for further diffusion of the organic methods, whereas many respondents admit a relatively scarce involvement in FT, organic and BRFair activities. Through a cluster analysis, three groups were identified: "Young, medium size and not very active", "Medium age, small size and mildly prepositive", and "Historical, large size and convinced". Thanks to this research, the self-consciousness of the BRFair members has increased and several activities have been planned for improving the participation and performances of the laggards.

KEYWORDS: Fair-Trade, Organizational behavior, Small farmers, Organic farming.

1. INTRODUCTION
This research has been conducted in the southern part of Minas Gerais, one of the States composing the Brazilian Federation and it analyses the reciprocal opinions of the managers of 22 coffee producing cooperative societies with a Fair-Trade (FT) certification, members of BRFair, an umbrella body established in 2010 for strengthening the lobbying and marketing capacities of the members (Pedini and Santucci 2016).

These managers work in a competitive market environment (Bengtsson and Kock, 2000; Brandenburger and Nalebuff, 2011; Walley and Custance, 2010), historically characterized by competition for the domestic and international markets, where nowadays some sorts of collaboration are also needed, to achieve institutional supports and to explore wider markets (Simas Graca and Barry 2019). Consequently, the managers of the member organizations belonging to BRFair must respect and trust each other, to define policies and strategies, and to create value, to survive and prosper together, against other competitors.

Consequently, this research has verified the opinions that the managers of each cooperative have about the other ones, to identify the organizations considered to occupy a leadership position among all other ones. The study can be defined as "research – action" (Greenwood and Levin, 2007) since its results have been used as "food for thought" for decision making by the members and managers of the organizations, in close coordination with BRFair.

In 2018 the national coffee area was estimated at 1.86 million hectares, corresponding to almost 62 million 60 kg bags (3.7 million tons) with 307,000 producers, mostly smallholders, in approximately 1,900 municipalities (CONAB, 2019). Coffee growing is present in 15 Brazilian states where soil characteristics, altitude, and climate determine the coffee qualities, which vary greatly in the different locations. The State of Minas Gerais alone concentrates about 50 percent of the coffee output in several regions: Cerrado Mineiro, Mantiqueira de Minas, Sul de Minas, Chapada de Minas, Matas das Minas, Cerrados de Minas (Bregagnoli and Ribeiro Neto, 2017; CONAB, 2019). According to ICO – International Coffee Organization, the coffee prices have fallen in 2018. Brazilian Naturals coffee had a monthly average in February 2018 of 120.83 US cents/lb and in February2019 this coffee had 100.06 US cents/lb as average price (ICO, 2019). In the same report, the exporting countries (including Brazil) in 2018 were responsible for 30.4 percent of total global coffee consumption (165,19 million 60 Kg bags) with the importing countries consuming the balance. The expansion of the area cultivated with coffee has not been without problems: deforestation, erosion, and reduction of biodiversity have affected many areas (Achinelli, 2003).

Within this complex scenario, in the last decade two new trends have been observed: the diffusion of the Fair-Trade (FT) movement and the adoption of organic production techniques. Data show a constant growth, worldwide, in the production and consumption of FT products (De Pelsmacker, Driesen and Rayp, 2005; de Ferran and Grunert, 2007; Brown and Getz, 2008; Pay, 2009; Reed, 2009;; Andorfer and Liebe, 2012; Del Giudice, Verneau, Amato, Caracciolo and Panico, 2014; Verhoef and van Doorn, 2016).

Fair-Trade is an ethical partnership based on dialogue, transparency, and respect, that seeks greater equity in international trade. It contributes to sustainable development by offering better trading conditions and by securing the rights of mainly smallholders and workers – especially in developing countries. To participate in the FT transactions, producers cannot act alone and must be organized into some sorts of groups, like cooperatives or associations. (Raynolds, 2009; Raynolds, 2012; Dragusanu, Giovannucci and Nunn, 2014).

Beside the minimum price that goes to the individual member, FT groups receive a premium for the improvement of their organization and a second amount for actions of community development (education, health, water and sanitation, roads, community centres, etc.). Problems, advantages, and disadvantages of coffee growing in Minas Gerais within the FT certification system have been recently explored by Padini and Santucci (2016). Pedini, Santucci and Silvestre (2017) have then analysed the costs of production and the price dynamics at home and in the international market and have concluded that the present system needs some modifications, mainly to include the exchange rate fluctuations, between the US dollar and the Brazilian cruzeiro.

At global level, the FT movement is managed by the NGO FairTrade International – FairTrade, whose board includes representatives of farmers, consumers, traders, and processors. In Latin America, the representation is made by CLAC - Coordinadora Latinoamericana y del Caribe de Pequeños Productores y Trabajadores de Comercio Justo (Latin American and Caribbean Network of Fair-Trade Small Producers and Workers). CLAC is a network that represents all FT certified organizations in Latin America and Caribbean. Its mission is to promote the interests, empowerment and development of its members and their communities. Another action is to favour the establishment of national initiatives, for encouraging domestic production and consumption of FT goods. In Brazil, BRFair - Associação das Organizações de Produtores Fairtrade do Brasil (Brazilian Association of FT Farmers Organizations) has the function of gathering and representing the Brazilian small farmers' organizations in the FT movement. BRFair was established in 2010, stimulated by a project supported by SEBRAE - Serviço Brasileiro de Apoio às Micro e Pequenas Empresas (Brazilian Support Service to Micro and Small Companies). BRFair's member organizations are certified with the FT label. In addition, most of them also have the Brazilian family farmers' label. The BRFair headquarters is rotating and currently it is headquartered in the Espírito Santo State. The main products of the BRFair members are coffee, fruit juices, honey, chestnut, soy, and wine grape. Currently, 24 producers' organizations are BRFair members, with products certified by FLO-Cert (Fairtrade's global certification body). In October 2018 there were 22 cooperatives of Arabica Coffee and one of Robusta Coffee.

Accepting the IFOAM definition (2019), "Organic Agriculture is a production system that sustains the health of soils, ecosystems and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic agriculture combines tradition, innovation and science to benefit the shared environment and promote fair relationships and a good quality of life for all involved". Organic coffee production is technically feasible (Ayalew, 2014) and the area under organic management was almost one million hectares in 2017 (Willer and Lernoud, 2017), in 33 countries worldwide. In Brazil, organic production started about 20 years ago, and the Brazilian Association of Organic and Sustainable Coffees (ACOB) was established in 1998. The 2017 harvest has been between 80 and 90 thousand bags of organic and

certified coffee and an additional amount of 20 thousand bags were under conversion to organic. To differentiate organic products from the conventional ones, producers, processors, and traders must be certified, according with national and international rules, by Certification Bodies, which must be accredited. It is a complex and difficult process, which is still evolving worldwide. In Brazil, organic certification is performed by several private organizations, accredited by the Brazilian Government.
Presently, a global trend is the contemporary presence, on many products, of both certifications: the organic one and that of FT (Pierrot, Giovannucci and Kasterine, 2010). This allows the consumers to choose products which are both ecologically and socially produced (Maaya et al., 2018). Another resent trend is to add a Geographical Indication (Maccari, 2016), that specifies exactly the place where the products come from, with the name of the location (lake, mountain, village, natural park).

Some Authors have studied the relationships between farmers' organizations, buyers, and consumers (Marshall, 2016; Davila and Molina, 2017), whereas our study is the first one focused on the reciprocal opinions of the managers (Presidents, Vice Presidents, Directors, Sales Managers) guiding the coffee producing cooperatives belonging to BRFair, to explore what the managers think about their own engagement and what they think about the other cooperatives. The study has also permitted to find out which actors can be defined "leaders" and therefore guide the movement in its relationships with the markets, the policy makers, and the research centres.

2. MATERIALS AND METHODS

The research has been realized jointly by the Authors during the months July 2018 – April 2019. The first months were devoted to an update of the literature and grey documents about coffee production, markets, producers' organizations in Brazil. By the end of September, thanks to a grant by the University of Perugia, it was possible for one of the Authors to spend two weeks in the research area. In this period, the questionnaire has been finalized, tested with three respondents in different organizations and modified. Seven of the 19 interviews have been performed in this period, always with the face-to-face method, whereas the remaining 12 have been realized in October and November 2018 by the Brazilian co-Author: seven face to face, and five by internet interviews, due to the great distances to the siege of the organizations. Three organizations decided to not cooperate and consequently this study relies on the answers of the 19 responding participants about them, but we ignore the opinions of the managers of the missing three cooperatives.

The final version of the questionnaire included five questions:

1. What do you think about your own organization and each one of the other ones, regarding the diffusion of organic methods among coffee producers? (D1)
2. What do you think about your own organization and each one of the other ones, regarding the diffusion of the Fair-Trade concept and practices among coffee producers? (D2)
3. What do you think about your own organization and each one of the other ones, regarding the

protection of the Fair-Trade minimum price concept? (D3)

4. What do you think about your own organization and each one of the other ones, regarding the strengthening of the coordination within the Fair-Trade? (D4)
5. What do you think about the relationships between your own organization and each one of the other ones? (D5)

The possible answers were formulated in a Likert (1932) scale, convertible into scores: a) Not relevant: 1 point, Partially Relevant: 2 points, Relevant: 3 points, Very relevant: 4 points.

Respondents could attribute no answer at all, in those cases they considered to not have enough knowledge about one or more of the other organizations. This has happened only in a few cases, since in this area of Brazil and specifically for coffee producers there are frequent opportunities for meeting and mutual knowledge: training programs, trade fairs, seminars, workshops, etc.

Structural data and qualitative information were also asked: date of foundation, number of employees, total number of affiliates, number of coffee producers, total area with coffee, total output of coffee, date of first sales with "Fair-Trade" certification, date of first sale with organic certification, presence of other certifications, presence of own label. Qualitative information includes past and ongoing projects for the improvement of the organization, for the expansion of organic methods, for social purposes (as imposed by the Fair-Trade certification), etc. Furthermore, in many cases the respondents were open and communicative, proud of their achievements, and have voluntarily and spontaneously revealed facts and figures that were recorded by the interviewers.

The time required by the interview ranged from 30 to 120 minutes, averaging 63 minutes. Interviews were generally proceeded and / or followed by a visit to the structures of the cooperatives (offices, labs, testing rooms, stores, shop, etc.) and by the traditional greetings and coffee drinking.

The data contained in the questionnaires have been then transferred into a data base realized with Excel and analysed together by all Authors during January and February 2019. The next step, in March and April 2019, has been the realization of a cluster analysis, to aggregate the managers / cooperatives into groups based on homogeneous characteristics (Arabie and Hubert 1994). This analysis was carried out throughout the following stages: a) choice of clustering variables; b) choice of the metric to measure distance between the observations; c) identification of the number of groups using a hierarchical method of clustering; d) implementation of K-means cluster analysis based on the results of point "c"; e) description and interpretation of the final identified groups.

To cluster the respondents, the following variables have been considered, after standardization in the interval [0,1] (Milligan and Cooper 1988), to avoid scale bias on cluster procedure:

1. Bags in 2017 (n)
2. Members (n)
3. Surface area (ha)
4. FT share (%)
5. Years of existence (n)
6. Diffusion of organic methods (4-point scale, 1 = not relevant to 4 = very relevant)
7. Diffusion of the FT concept and practices (4-point scale, as before)
8. Protection of the FT minimum price concept (4-point scale, as before)
9. Strengthening of the coordination within the FT (4-point scale, as before)

The clustering procedure has been applied only to 21 cases, because the information about the organization A12 were not enough. Thus, the cluster analysis process was implemented using a two-stage approach. The former included the implementation of a hierarchical cluster algorithm (Ward method) which, based on the selected metric (Euclidean Distance), allowed to correctly identify the number of groups using the obtained dendrogram. Then, a K-Means clustering algorithm was implemented using the Ward's cluster centres as initial for k-means. K-means is a partitional clustering method which starts assigning cases randomly to an initial partition of K clusters, each represented by a centroid, then moving cases from one cluster to another by reducing the distance of each case from the centroid, using an iterative process. K-means represent one of the most popular not-hierarchical clustering algorithms (Jain, 2010; Sarstedt and Mooi, 2014), because of its simplicity and easiness to be implemented (Nidheesh, Nazeer and Ameer, 2017). In addition, the results obtained are less affected by outliers and by the presence of irrelevant clustering variables than the hierarchical methods. All the statistical analyses were carried out using the SPSS 21 software.

3. RESULTS

The 22 Cooperative societies presently members of BRFair are very heterogeneous (Table 1). The oldest one was established in 1956 and the youngest in 2012. Their size varies from 14 to 9,500 members and from 150 to 7,000 hectares (Coop A12 probably exceeds largely both these figures). The 2017 coffee output was from 3,000 to 72,000 bags, with the FT share being between seven and 66.7 percent. The FT certification has been acquired, after several years, but four cooperatives were given the FT recognition since the first year of their existence.

Only five cooperatives have the organic certification too, in one case since 2000. Other types of sustainability certifications are Certificaminas (5 cases), UTZ (7), Rainforest (3), 4C (3), etc.

The information acquired during the meetings allows affirming that in most cases the cooperatives are pursuing a multi-channel strategy, also considering the different ecosystems and attitudes of their members. The respondents have revealed that they are trying to diversify their production, also respecting what their members desire and can do. Furthermore, some cooperatives are investing in roasting, processing, and packaging plants, to realize different products, for more employment and added value, for both domestic and foreign markets. Less and less coffee is marketed in bags, a low value commodity, whereas the various certifications (sustainable, organic, sustainable + fair trade, organic + fair trade, mountain coffee, specialty coffee, etc..) allow to achieve some premium prices. Furthermore, the processing and packaging, as powder or capsules, with different blends and nice-looking packages, facilitate the penetration into richer markets.

The FT certification is positively evaluated because it gives some better income to the producers. The premium for the cooperatives has been used a) for the improvement of their organization (new offices, storage facilities, processing plants, cars and lorries, participation in national and international fairs, etc.) and b) for the improvement of the agricultural practices (soil analysis, integrated pest management, modern tools, advice and training courses, some small experiments, etc..). The second premium for community development activities in the rural areas has been used for better schools, health, water and sanitation, roads, community centres, etc.

Some general initial considerations arise from the data in Table 2, where the distribution of the self-evaluation marks is reported. Most respondents admit that their organizations are not active, or just a bit active for the development of organic agriculture.

ISSN 2582-2292

Vol. 3, No. 02 Mar-Apr; 2021

Table 1 - Facts and figures about the 22 Cooperatives

n	Est.	Certifications			Members (n)	Coffee (ha)	Bags in 2017 (n)	FT (%)	Own label
		FT	Org	Others					
A1	2010	2015		Certificaminas, 4C, UTZ	152	1,500	30,000	18.1	no
A2	2007	2010		IBD organic *	44	404	7,000	20.8	no
A3	2004	2013			126	1,861	35,000	5.7	yes
A4	2006	2013	2018	Certificaminas	65	1,527	22,000	40.9	no
A5	2009	2009			98	1,500	30,000	59.4	no
A6	2006	2009		UTZ	14	340	4,500	42.2	no
A7	2010	2010			110	976	20,000	52.5	no
A8	2005	2012			57	427	10,000	60.0	no
A9	2008	2008	2015	UTZ, RAS, Certificaminas	120	831	33,259	36.7	no
A10	2004	2009		Rainforest	61	718	12,000	58.3	no
A11	2008	2009		4C, Certificaminas	206	1,300	37,000	32.4	no
A12	1979	2005		UTZ	9,500			NA	no
A13	2006	2007			125	1,125	30,000	46.7	no
A14	1956	2014	2018	UTZ, 4C	640	7,000	23,100	64.9	coming
A15	2012	2012		Rainforest	100	3,283	105,000	20.0	yes
A16	2005	2014		UTZ, 4C, RAS	81	2,839	40,000	30.0	no
A17	2001	2006		Certificaminas	257	1,600	3,000	56.7	yes
A18	1991	1998	2000		465	4,000	60,000	66.7	yes
A19	2006	2006		Rainforest	94	688	17,000	41.2	yes
A20	2009	2011			23	150	5,000	7.0	yes
A21	1989	2008	2016	UTZ, RAS	220	2,500	72,000	62.5	yes
A22	1998	2008			166	750	20,000	35.0	yes

* Only two members have the organic certification

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Vol. 3, No. 02 Mar-Apr; 2021

This is probably a technical evolution that will require more time and more efforts (locally organized research and trials, training, extension, etc.), although there are already a few Cooperatives with some organic certified coffee. In any case, it is a fact and well known by the organizations that there is a strong tendency for buyers to prefer organic FT coffees in detriment of conventional FT coffees. A strong engagement is declared concerning the protection of the FT price, where almost all respondents consider their actions relevant or very relevant.

Table 2 - Opinion about own engagement

How do you rate the engagement of your organization…		Very relevant	Relevant	Not relevant	Nihil	Total
Q1. For the diffusion of organic methods among coffee producers?	n	3	3	6	7	19
	%	15.8	15.8	31.6	36.8	100.0
Q2. For the diffusion of the FT concept and practice?	n	11	5	2	1	19
	%	57.9	26.3	10.5	5.3	100.0
Q3. For the protection of the FT minimum price?	n	13	5	0	1	19
	%	68.4	26.3	0.0	5.3	100.0
Q4. About the participation and involvement in BRFair?	n	6	9	1	3	19
	%	31.6	47.4	5.3	15.8	100.0

This position is coupled with the opinions about the relevance of actions for the development of FT, although there are three respondents who admit that their organizations are not active in this sense. Finally, and this requires much attention in the future, the self-assessment about the participation in the BRFair organization indicates that several respondents feel that their participation could be better and more pro-active.

The answers to question Q5, the overall relationships with the other organizations is not exciting: the overall score is 2.19 out of four, slightly above relevant. Cooperatives A1 and A2 are almost unknown: only nine and eight respondents attribute a value to their relationship and this value is low: 1.56 and 1.25, respectively. The same, to lesser extent, can be said for Coop A12, that is judged by a higher number of respondents, and receives only 1.4 out of four. Only one cooperative, A17, is valued by all respondents, but receives a relatively low judgement. The same derives from the analysis of the judgements expressed about the managers of other cooperatives: A4, for example, expresses an opinion about all other 21 organizations, but the quality of the relationships is considered quite poor, only 1.48 out of four. Only the respondents of two cooperatives consider positively the quality of the relationships with the other members of BRFair: A11 expresses an overall opinion of 3.38/4, similar to A21, that attributes an average of 3.20.

Concerning organic agriculture, only three (A17, A18, A21) of the 19 respondents consider “very relevant” what they are doing for the promotion of the organic techniques. Three more consider “relevant” their actions. Most respondents recognize to be not prepositive. Altogether, the average mark that the 19 respondents attribute to themselves is 2.10, similar to the average mark the 22 Coops receive. There is a meaningful correlation between the two variables. For example, A7 has recognized to itself the value three, meaning “what my organization does is relevant for the development of organic agriculture”, and the average mark received from the 16 other organization is almost the same, 3.1/4. Also meaningful is the case of A18, that has given to itself the mark 4, meaning “what my organization does is very relevant for the development of organic agriculture”, and that has received from 18 other respondents the average mark 3.6/4. Slightly different is the case of A21, that attributed to itself the top mark, but is known by a lesser number of respondents (16), which attribute only 2.8 out of four. Altogether, it is evident that for this aspect the most important organizations are A18, with 18 respondents and a 3.4 mark, followed by A17 with 16 respondents and 3.1/4, and by A21, with 16 respondents and an average mark of 2.8/4. Other cooperatives appear to be peripherical, almost unknown and not relevant for this specific field of action, the development of organic coffee production. This is the case, for example, of A1, A2, A3, A6, A19, which receive a low mark by few respondents.

Regarding the promotion of the Fair-Trade concept among their members, the situation expressed in the survey is obviously much better: 11 respondents (58%) consider to be very active, and five (26%) active. The average self-attributed mark is 3.5 out of four, but both the average received mark and the average attributed mark are lower, respectively 2.97 and 3.1. The promotion of Fair-Trade is something that should concern all stakeholders, but the FT share in their total output is not homogeneous. It ranges from six percent of bags for the cooperative A3, to 67 percent for cooperative A18. This latter has the longest experience with Fair-Trade, since the first certification was received in 1998, whereas A3 had its first FT certification in 2013. On the other and, the relatively short period of engagement cannot be the only justification, because other organizations, with less years of FT experience, show a much higher FT share of their output.

Focusing better into the FT business model, to analyse the protection of the FT price, all respondents see themselves very much engaged for this goal. The self-attributed mark is 3.6 out of four, and the average mark received is quite high, 3.28. This means that most participating organizations receive a positive opinion from their BRFair partners. On the other hand, there is a small difference with the attributed mark, which remains quite good. A18, in the FT movement since 1998 and with the biggest share of FT coffee in the output, receives the highest mark. Practically, 17 respondents out of 19 give the top mark, without hesitation. Coupled with the mark 3.61 received in the previous question, these

ISSN 2582-2292

Vol. 3, No. 02 Mar-Apr; 2021

two marks put the Coop A18 in the pole position for Fair-Trade promotion and defence of the FT price. In the lowest positions, we find again the three non-participating organizations: A1, A2 and A12, which are – especially the first two – evaluated by few respondents and receive the lowest marks, respectively 2.50, 2.50 and 2.42.

The last question concerns the appraisal of the participation in BRFair, the umbrella organization. Only four respondents think to be very active, and that their participation is very effective, whereas some recognize to be not active at all. This participation, during the interviews, was declined with different aspects: physical attendance to the meetings, active participation in the discussions, pro-active role in the proposition of new initiatives. Once again, Coop A18 receives the top mark: 3.72/4, followed by some other Organizations (A5, A13, A14 A21, A22) which all receive very positive appreciations from many fellow cooperatives.

Table 3 - Ranking of agents and total average mark.

Coop	Opinions received		Mark	
	n.	% *	Total	Average
A18	71	93.42	14.89	3.72
A7	70	92.11	13.25	3.31
A21	68	89.47	13.07	3.27
A5	64	84.21	11.99	3.00
A14	64	84.21	12.24	3.06
A17	62	81.58	11.09	2.77
A13	61	80.26	11.11	2.78
A15	61	80.26	11.41	2.85
A16	61	80.26	10.62	2.65
A4	60	78.95	11.21	2.80
A22	58	76.32	12.93	3.23
A9	56	73.68	11.18	2.79
A10	56	73.68	10.17	2.54
A11	55	72.37	10.08	2.52
A8	54	71.05	10.50	2.63
A20	50	65.79	10.23	2.56
A6	46	60.53	10.02	2.50
A12	46	60.53	8.24	2.06
A19	43	56.58	11.35	2.84
A3	38	50.00	10.46	2.62
A1	24	31.58	9.13	2.28

A2	21	27.63	9.46	2.37

* on a theorical total of 76

To summarize, Table 3 shows the ranking of the 22 cooperatives, based on the total number of opinions received, with also the total mark received, for all four aspects considered (promotion of organic, promotion of FT, defence of FT price, participation in BRFair). Cooperative A18 confirms to be the one most known and the best appreciated by all other respondents. It has received 71 judgements out of the total of 76 (19 respondents x 4 questions) and the highest mark, 14.89 out of 16 (mark 4 x 4 questions). Six cooperatives, that can be defined "leaders", receive an average mark above three (A18, A7, A21, A5, A14 and A22). Two cooperatives, A1 and A2, confirm their peripherical position, since they are almost unknown by the other organizations and their commitment receive low marks, respectively 2.28 and 2.37. Cooperative A12 too gets a low mark, although it appears to have slightly more relationships with other BRFair members. Another interesting observation is the meaningful correlation between notoriety and mark: 0.7245. In other words, cooperatives which are well known by the other cooperatives are also positively appreciated, and vice versa. This also means that we are in presence of positive, prepositive and committed organizations, whose engagement is recognized by the other stakeholders.

Cluster Analysis

Table 4 shows the distribution of the cases between the three clusters identified accordingly to the clustering procedure. Each cluster defines a different profile of coffee producing cooperatives. The final centres of the clusters, corresponding to the mean value of the clustering variables among each group, are then summarized in Table 5.

Table 4 - Cases distribution among clusters

Cluster	Nickname	n	%
1	Young, medium size and not very active	7	33.3
2	Medium age, small size and mildly prepositive	11	52.4
3	Historical, large size and convinced	3	14.3
Total		21	100.0

Cluster 1 – "Young, medium size and not very active". The first cluster includes seven cooperatives (A1, A2, A3, A11, A15, A16 and A20) and is the second one in terms of dimension, accounting for one third of the total. These cooperatives have a medium size, both in terms of sales volume and surface area. In fact, their coffee output was, on average, 37,000 bags, with a coffee area equal to 1,620 ha. This group shows the lowest average number of members among the three groups (105), thus indicating the large size of the individual members belonging to the cooperatives of this group. Averagely, they are the youngest cluster in terms of years since foundation (11) and show the lowest

FT share (19.15%). Moving to their perception about the "Diffusion of organic farming", the average mark attributed to this group is quite low (1.88). A higher mark, but still the lowest among the clusters, is expressed relating to the "Diffusion of FT principles" (2.79). More specifically, the "Protection of the Fair-Trade minimum price" concept is judged, on average, more than relevant (3.11), whereas the mark received by these cooperatives about the "Strengthening of the coordination within the Fair-Trade" is quite lower (2.42). In other words, this cluster is perceived to be the least active concerning their approach to organic farming and FT participation.

Table 5 - Final centres of the clusters

Variables	Cluster		
	1	2	3
Diffusion of the organic methods	1.88	2.06	2.99
Diffusion of the Fair-Trade concept and practices	2.79	3.07	3.28
Protection of the Fair-Trade minimum price concept	3.11	3.36	3.65
Strengthening of the coordination within the Fair-Trade	2.42	2.85	3.48
Bags in 2017 (n)	37,000	18,342	51,700
Members (n)	105	106	442
Surface area (ha)	1.620	953	4.500
FT share (%)	19.15	48.14	64.70
Years of existence (n)	11	14	40

Cluster 2 – "Medium age, small size and mildly prepositive". This second group is the most numerous, including 11 respondents (A4, A5, A6, A7, A8, A9, A10, A13, A17, A19, A22), 52.4 percent of the total. In terms of surface, these cooperatives show a small-medium dimension, since their members cultivate, on average, 953 ha. The cooperatives belonging to this group have a small size in terms of average sales volume (18,342 bags) and, to a less extent, in terms of members (106). Within this group there are relatively young cooperatives (14 years), associated with a good FT share (48.14%). Concerning their perception in terms of "Diffusion of organic farming", the respondents consider partially relevant (2.06), what there are doing about this topic. A higher judgment is expressed in terms of the "Diffusion of the Fair-Trade" concept, with an average score of 3.06 (relevant). Similarly, the "Protection of the Fair-Trade minimum price" concept is perceived as a strength of this cluster, which receives a high mark (3.36). With a lower mark (2.85) but almost relevant is recognized the "Strengthening of the coordination within the Fair-Trade" by the members of this group.

Cluster 3 – "Historical, large size and convinced". This third group is the less numerous, being composed by only three cooperatives (A14, A18 and A21). Regarding the structural characteristics, within this group there are large organizations, with an average coffee area of 4,500 ha, thus reflecting in a business volume of 51,700.00 bags in 2017, thanks also to the largest number of members. Also, the actors belonging to this group are by far the oldest among the three groups, as they have, on average, more than 40 years. As expected, FT products represent for them the most relevant market, absorbing the 64.70 percent of total sales. Considering the respondents' opinion about the promotion of organic farming and FT principles, these cooperatives are absolutely recognized as the most proactive and engaged, with average marks respectively equal to 2.99 and 3.28. The responding managers consider that these three cooperatives also greatly contribute, in terms of "Protection of the Fair-Trade minimum price concept" and of "Strengthening of the coordination within the Fair-Trade" with an average mark respectively amounting to 3.65 and 3.48.

4. CONCLUSIONS

This research has revealed that the coffee producing cooperatives within the BRFair umbrella are extremely heterogeneous, not only in terms of structural data (membership, area and output, share of FT products, but also regarding the managers' attitudes about the Fair-Trade concept itself and about the implementation of the organic farming techniques. The respondents' self-assessments and their opinions about the managers of the other cooperatives reveal that these people are conscious of the existing diversities, but it is hard to predict the natural evolution of their relationships. On the other side, it is of vital importance that the mutual opinions improve, to have a coordination based on trust and respect (Balkundi and Kilduff, 2006)

As expected, only a few cooperatives are perceived by the managers of most cooperatives as leaders, early adopters of innovations and changes, while the respondents of some cooperatives admit being laggards, even passive (Rogers, 1983).

Thanks to the cluster analysis, it was possible grouping the BRFair members into three categories, one of which, composed of only three cooperatives, is recognized by the managers of the other organizations, as guiding – informally, the evolution of the BRFair movement. This admission is quite relevant, because it could predict that this relatively young 2nd level aggregation (BRFair was established only in 2010) could increase and expand its activities through a bottom-up consensus building process.

The challenges ahead, for the different stakeholders, are numerous and clear. The leading cooperatives should probably take care of the development and growth of the smaller and less dynamic organizations, while these last ones should try to bridge the gap and adopt new approaches at faster pace. In the coopetitive coffee market, but more generally in all commodities, where the actors fight to win the best prices and conditions, cooperation is not easy and must be gained each single day (Bruni and Santucci 2016). Awareness raising activities, as well as the continuing education of members and managers are a must, as assessed also by Fergus and Gray (2014), who have studied the dynamics within a FT coffee cooperative in Peru. This process has a direct impact on the success or failure of trade relations with buyers (importers and roasters) of Fair-Trade coffee. A strong commitment is declared regarding the FT price protection, which is an important strategic factor for the strengthening of the movement in general. However, not all organizations consider themselves active, and this is worrisome, since much of this responsibility lies with the managers themselves, who must be able to stand firm, also in unfavourable moments, to defend the FT price against the temptation of easier short-term profits (Pedini and Santucci 2016). Dragusanu, Giovannucci and Nunn, in their article (2014) describe thoroughly all positive and problematic aspects of Fair-Trade and also mention the needs for transparency within the organizations, as well as the need for horizontal and vertical integration.

BRFair, as umbrella organization, should be – first - the "meeting space", the place where the different actors meet and interact, freely and democratically, to establish and achieve some common goals. Secondly, BRFair should act pro-actively and establish a program with activities (meetings, visits, study tours, short training courses) and targets, to facilitate and to support the managers of the member cooperatives. As a matter of fact, the quality of human resources, in terms of knowledge, skills and attitudes, within the cooperative movement has always been a field of research and action (Singh and Eallabh, 1994) However, it is critical that BRFair understands the differences that characterize the associated organizations and adopts differentiated, tailor-made policies for each one of them, as a method to achieve greater institutional harmony.

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