

CONILON Coffee

3rd Edition

Updated and expanded

The Coffea canephora produced in Brazil

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**CONILON
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CERCEJA DE QUALIDADE
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Conilon Certification and Espírito Santo Experience

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1 INTRODUCTION

Increasingly, when issues related to competitiveness between companies are observed, the ability to incorporate technological innovations and meet the requirements specified in technical standards and regulations applicable to products, production processes and management systems stands out.

From the consumer market point of view, the demand has been increasing due to the objective evidence that products and services meet the requirements expressed by certification of conformity or other forms of declarations, such as, for example, around 600 thousand certificates of quality management systems and environmental management, according to the ISO (*International Organization for Standardization*) standards issued in the world and by the growing trend of certification requirements of products already practiced in Europe, Japan and the United States (LAGES; LAGARES; BRAGA, 2005).

The conformity evaluation recommended by ISO consists of the systematic examination of the product service level to specified requirements, and that becomes relevant in areas such as food safety, medical-hospital equipment, residue analysis, health protection and products of the export agenda (BRASIL, 2014c).

In general, tools used to evaluate the conformity of a product, process or service include certification, testing, supplier declaration, inspection and labeling. In this context, the certification organizations stand out, an intermediate entity between the supplier and the customer, which certifies that a product, process or service meets the requirements of a technical standard or regulation.

Certifications of management systems, notably socio-environmental management, are the most widely modalities used in Brazil, but there is a growing demand regarding the products and processes certification. For each of these modalities, there are a series of principles and guidelines based on international normative references that guide their application.

2 CERTIFICATION PROCESSES

The certification process is increasingly consolidating as an instrument of access to national and international markets. In this sense, the most appropriate certification for each company, considering its business and action context, will be the one that is recognized by the current and potential customers of its products and services.

There is also the understanding that certification can be a mechanism to stimulate the improvement of the property or company as a whole, the product quality, add value to trademarks and promote fair competition between suppliers of the same product or service, considering that the requirements for which the conformity of these products and services is attested, pre-established and publicly known, of competitors and the consumer market. In Brazil, before the internationalization of economic relations, certification has increased its importance, meaning an indispensable condition for commerce, especially the international one (ALVIM; GIESBRECHT, 2005).

The processes of certification are long and based on notoriety acquired over the years. The granting of a certificate, depending on the case, may be the final step of a long walk that goes through obtaining quality stamps existing in some product categories or even Certifications, such as the origin indication.

However, this mechanism created to guarantee to the consumers the origin or the productive practices that are behind a product and to value the work done by certain producers, is not free of problems (CUÉLLAR PADILLA; TORREMOCHA; BOUCHET, 2005; CUÉLLAR PADILLA, 2009). Of these, the following stand out:

- Certification mechanisms were created in the most economically developed countries, which are these products of differentiated quality main markets. Not only the production norms and rules, but also the control and evaluation mechanisms. This gives rise to total dependence on the countries of the South, which are forced to work under methods and evaluation processes they do not belong to them. In addition, certification has brought a new way of protecting markets;
- Procedures for conformity assessment with certain rules and criteria through the inspection system by a third party (company or certification body) bring high costs and excessive bureaucracy. These two elements make this system selective, causing damage to small producers. Thus, the systems that have more available labor and which best distribute the wealth in the rural environment have serious difficulties in being recognized for good practices in their modes of production;
- Conformity assessment systems, when generated by private bodies, enter into a market and competition logic. Credibility and recognition of environmentally or socially respectful products is generated by the competence-based private sector. In it, each certification body has to survive with the number of seals or customers it establishes in the context of competition with other entities. This manifests itself in difficult balance for the certification between the expected rigorousness of the assessment processes and the necessity of maintaining enough number of clients, generating less reliability in the process;

- Conformity assessment by third-party certification mechanisms is based on technical visits conducted annually by a professional not insert in the context. This may raise doubts as to the ability to assess the compliance of the way of management, in accordance with the technical standards of the certification in question, in a rigorous and reliable manner. Only an annual inspection in the coffee farms is, in many cases, insufficient to effectively capture the management techniques used;

- Environmental and labor legislation in Brazil is much more rigid than that of other coffee-producing countries, particularly conilon coffee. The certification standards require compliance with these local legislation, especially those certifications whose focus is more related to social and environmental issues. This increases the cost of rural properties adjustments compared to countries whose requirements are more flexible in relation to these issues. However, if Brazilian legislation is more rigid, it is expected that rural producers, who comply with the legislation, will be able to adjust, although with greater difficulties and costs, to the certifications requirements.

3 FOOD SAFETY- WORLD TREND

The recent food crises in Europe have caused consumers to mobilize to demand greater clarity regarding the products consumed, with great appreciation of local, handmade and biological products. The phenomenon that occurred on this continent led to similar reactions in other parts of the world. This has revealed future trends regarding the internal domestic market and new niche markets, which Brazil is able to reach, provided that it adapts and is endorsed by public authorities.

Some examples of food-related crises can be listed:

In 1970 - Cases of food poisoning linked to the logistics of large-scale production worldwide.

In 1980 - Physicians distrust about biochemical additives and preservatives bringing risks of allergies and cancer (massive entry of the biochemical industry in South America).

In 1990 - Swine Fever; the toxins discovered in food; mad cow disease (mainly United Kingdom and France) with several fatalities.

Other problems can be cited, such as chicken with dioxin or hormones, residues of harmful phytosanitary products, beef with excess hormones, etc. besides these problems, one that generated the largest mobilization of consumers in the world happened due to the Genetically Modified Organisms (GMOs), raising doubts about food safety for human and animal health and the environment.

In Europe, the most effective mechanisms to ensure food safety have been the establishment of public regulations, that is, laws designed to ensure safety in the short term; the same has been occurring in the USA and Japan. Other issues, such as the environmental or social quality of production in these countries or in other parts of the world, have not been legislated publicly, except for regulations linked to organic food production. The option for consumers

and producers is the certification and conformity assessment mechanisms (CUÉLLAR PADILLA; REINTJES, 2009).

Thus food safety has been treated as a non-negotiable imposition and one of the requirements for commercialization, making it necessary for the risks of contamination to be first eliminated in order to prevent intoxication and other problems that may cause risks to the consumers health.

The concern of European consumers about food safety is understood as guaranteeing food free of chemical and biological contaminants. It is reflected, for example, in the United States transgenic tomato, which takes weeks to lose its organoleptic characteristics, but was rejected by European countries long before any kind of public control was exercised against its importation and distribution. It also explains the growth of family farming in developed countries, where its value is up to 30% higher than similar products.

The quality related to food products is a complex and evolving concept and encompasses several aspects such as “sanitary safety”, taste, gastronomy, loyalty, consistency of supply in the markets and the trust established between suppliers and customers.

These different aspects change due to the economic and social dynamics. In an economic context of saturated markets in developed countries, quality becomes an essential factor in the strategy of companies and a determining factor for consumers in the process of choice.

France was the pioneer in the development of indicators that characterize quality products, whose “interprofessional unions” have been working in partnership with public bodies to regulate the production process and market supply, with strict sanitary control and farmer quality of goods. The producer, in turn, is aware of his responsibility in the complex food safety system.

The production process traceability is increasingly important within the certification process; can be defined as the ability to identify, through the record of processes, the production history from its origin. It meets the consumers interests, especially regarding the safety of the food produced (ZAMBOLIM, L.; VALE; ZAMBOLIM, E., 2003).

As the traceability becomes more and more strict, that is, the ability to identify the farmer as well as his productive process increases, the responsibility of the primary chain has become a vital element for his own survival.

In Brazil, the certification mechanisms are still not very expressive, but the demand for controlled quality tends to increase significantly in the near future. There is a renewed interest in mechanisms guaranteeing the food quality, whether by its geographical indication, its traditional reputation or even the guarantees deriving from the traceability process.

In this context, it is possible to observe the growing interest of small Brazilian farmers for a new way of thinking and acting on rural properties. They consolidate their social role through the creation of alternative methods of cultivation respecting environmental and labor laws, minimizing or even abolishing the use of agrochemicals, not employing children and respecting labor rights.

The worldwide demand for certified products has significantly increased. The multilateral negotiations for the recognition of certifications and quality seals lead to the conclusion that

importers of fresh or processed food will increasingly require certification and consequently the process traceability. This is a theme that is consolidated in developed countries.

In the Brazilian scenario, through the creation of incentives to improve the quality of products offered in the market and the awareness of farmers and consumers about the need for food safety, certification practices and production traceability tend to be accepted more quickly.

It is considered that the first Brazilian coffees seal of quality was the “export type”, however it only attested the premium quality of few products. Distinctive quality seals are indeed an important tool for the consolidation of local productive arrangements in Brazil, demanding a deep organization whose individual failures can not harm the producers community.

The individualized accountability of farmers is essential for the system to work without the need for absolute control by the public authorities. Each actor controls the other and the flaws are detected before the product image is sullied in the market. The producer must be aware of his role importance in controlling the quality and safety of the food offered.

4 CODES OF CONDUCT

The increasing interest of consumers in product quality, not only in terms of organoleptic quality, but also regarding the social and environmental quality of the products, has led to the emergence of several codes of conduct in food production processes, among them coffee.

Codes of conduct are production rule books, the result of voluntary agreement among several actors in a production chain, which aim to establish production methods that respond to certain concerns about the social production responsibility, conservation or respect for the environment, respect for local cultures or sustainability guarantee, among others.

When these standards are translated into a seal, identifiable by the consumer, through a conformity assessment process of a certain production system, we will face a certification process (CUÉLLAR; PADILHA; REINTJES, 2009).

The codes of conduct main scopes developed for coffee certification include standards that allow the production sustainability, interdependent in its social, environmental and economic dimensions.

The social production responsibility responds to consumer concerns about the social quality of a particular product, that is, the social conditions of the coffee production process, such as working conditions, support for local producer groups and development processes implemented there. All codes of conduct adopt social responsibility in their protocols.

The environmental responsibility, understood as the environmental quality of a product, is another concern of the current consumer. It reflects the level of production respect to the environment and to ecological diversity. All codes of conduct adopt environmental responsibility in their protocols.

The main differences between existing codes of conduct are focused on environmental, social, labor issues or may be more comprehensive and related to the integrated process of sustainability. It is important to analyze, on the one hand, how deep are the established

criteria. In many cases, the codes of conduct social and labor items use the regulations of each producing country, where the code is less restrictive than that legislation. Secondly, they are based on criteria applicable to the production processes or also to the marketing and distribution processes; in many cases, this is important to ensure compliance with the criteria all over the custody chain (CUÉLLAR PADILLA; REINTJES, 2009).

5 CERTIFICATION

The habit of showing the production origin to consumers, as well as the intrinsic and extrinsic quality of the products, is being highly valued. Familiarity with the certification systems and standardization diversity is important for the coffee agribusiness chain members. It is necessary to understand that the criteria go beyond those traditionally described regarding cup quality, covering social responsibility and environmental conservation concepts and economic aspects.

The certification is a production accreditation process, whereby an entity declares that it recognizes that the products meet the requirements set out in a specific standardization and that they comply with the production, processing and/or marketing standards set out in the reference code of conduct. In Brazil, it is generally carried out by Non-Governmental Organizations (NGOs) or private companies accredited by the Instituto Nacional de Metrologia, Qualidade e Tecnologia- Inmetro (National Institute of Meteorology, Quality and Technology) for this purpose. In order for certified coffee to be sold in international markets, the certifiers must establish partnerships or agreements with recognized certification bodies in destination markets, usually multinational certification companies or bodies.

The certification is a third-party process and consists of several steps, of which an inspection made by a properly trained auditor is the most important one. This inspection is carried out based on specific regulations nationally or internationally defined, depending on the certifying entity and the adopted code of conduct, and to which the coffee farmer needs to adapt.

The certification aims to inform consumers, supermarket chains and roasters, the production location and attributes that can be used as a marketing source and reliability for the product promotion and dissemination. It also allows the search in the source, in case of any eventual problems occurred during the production process. It can allow the producer to infer about the acceptability of his product by the consumer market, generating information that improves property management, the quality standard of his product, increasing the value added to his production and controlling the cost/benefit ratio of the different types of management that are being adopted in their production system (ZAMBOLIM, L.; VALE; ZAMBOLIM, E., 2003).

Adopting certification means implementing a universal language for communication with all segments of the coffee production and marketing chain; creates possibilities for expanding consumption, providing identification of consumer demands, especially those that pay better,

and generates added value to the product. It is, in any case, geared to commercialization channels of great geographical scope, or where many actors operate, that is, a context where the producers and consumers are distant, either in geographical terms or in the number of intermediaries between them.

Each Code of Conduct works with certain standards that must be followed at all stages of coffee deployment, management and/or marketing. For these procedures and standards, the coffee farmer, who spontaneously wants to join the certification process, should be aware.

There are big business and civil organizations that have established their own certification mechanisms based on certain codes of conduct. The main certifications adopted in coffee cultivation are:

- **GlobalGap:** quality management system set up in 1997 through the initiative of 22 European retailers. The protocol defines a set of rules, including environmental protection (integrated production, minimization of negative impacts of production on the environment), good production practices (reducing the impact of residues on food), food safety (hygiene conditions) and traceability (ZAMBOLIN, 2006; GLOBALGAP, 2014).

- **Fairtrade:** it emerged in Europe in 1997 as a federation of 17 fair trade certifiers working in different European countries. There are currently two organizations within the Fairtrade Labeling Organizations (FLO): FLO and V, entity responsible for the definition of standards, business facilitation and support to producers and FLO certGmbH, responsible for the inspection and certification of producer cooperatives associations and the commercial product process (CUÉLLAR PADILLA; REINTJES, 2009). The FLO standards are a set of guidelines on working conditions in production, social requirements, some environmental criteria, as well as conditions for the products purchase by importing companies.

Fairtrade establishes a production and marketing system that ensures producers the minimum price and a “prize” for the coffee produced under ethical and social standards. The “prize” is additional value paid by certified buyers to cooperatives and/or small producers’ associations in the chain of custody. With a view to family coffee farming, with an incentive for association/cooperativism, part must be invested in improving quality, productivity and social actions for producers and/or their communities (FAIRTRADE, 2014). Codes of conduct regulate the production process, trading and establish verification/certification criteria for all segments involved (chain of custody). In Espírito Santo, family producers linked to the Cooperativa dos Cafeicultores do Sul do Estado do Espírito Santo - CAFESUL (Coffee farmers’ Cooperative of the State of Espírito Santo), based in Muqui, and the Cooperativa Agropecuária Centro Serrana - COOPEAVI (Mountain Center Agricultural Cooperative), with headquarters in Santa Maria de Jetibá, are certified through their cooperatives and traded coffee to the *Fairtrade* market.

- **Organic production seals:** the standards by which the different certification bodies work depends on the markets to which the products will be routed. The general rules are the same, but there are some specificity that respond more to market protection objectives than to substantial differences of demands. The main markets that import organic production and which require their own rules are the European Union, the USA and Japan. Nevertheless, in Brazil, for some years, legislation has been developed that regulates organic products,

establishing the rules under which certification bodies must operate to guarantee products as organic (Law N° 10.831/Decree N° 6.323) (BRASIL, 2003, 2007).

In this regulation, other systems of conformity assessment have been recognized, in addition to third-party certification, such as the *Sistemas Participativos de Garantia* (Participatory Guarantee Systems) or the *Organizações de Controle Social - CBOs* (Social Control Organizations). The code has been developed by the IFOAM (*International Federation of Organic Agriculture Movements*), and in it the agricultural system is considered part of the ecosystem and must, therefore, respect ecological cycles, without using chemicals that are harmful to human, and animal health and the ecosystem. The most important principles are the respect and enhancement of natural resource cycles. Thus, it is a code that proposes the soil cultivation for a healthy coffee production, without the use of toxic chemicals preserving the natural resources (IFOAM, 2014). In Espírito Santo, there are properties certified by the Instituto Biodinâmico- IBD (Biodynamic Institute) and the Instituto Chão Vivo de Avaliação da Conformidade.(Chão Vivo Institute for Conformity Assessment).

- *Rainforest Alliance*: is based on RAS- Rede de Agricultura Sustentável (Sustainable Agriculture Network). The standards used for RAS socio-environmental certification were developed in 1992 and have been frequently reviewed. The establishment of standards, audits and training are separate to avoid conflicts of interest. The most recent review is in accordance with the ISEAL (*International Social and Environmental Accreditation and Labeling Alliance*) code of practice and the use of the *Rainforest Alliance Certified Seal*.

Properties and companies that meet RAS certification requirements (RAS, 2014), as verified by on-site audits, are recognized through *Rainforest Alliance Certified* (RAINFOREST ALLIANCE, 2014). It indicates quality and commitment in the application of sustainable practices and conservation. It encompasses the main aspects of sustainable agriculture, with special attention to the environment and the workers and community well-being. It suggests that integrated pest and disease control be done and values the properties that have native forest restoration projects and the construction of ecological corridors. In the critical criteria, it is observed that the property must have conservation program of ecosystems, because its alteration or destruction are prohibited; wild animals must be respected and the hunting or wildlife trade are not allowed; untreated wastewater and solid waste can not be discharged into water sources; the salaries payed can not be below the minimum established by the region law and forced labor is not allowed; working with suitable equipment for the agrochemicals use is mandatory; the transgenic crops cultivation is not allowed and the new areas to be planted must be suitable for coffee cultivation.

- *UtzCertified*: ensures social and environmental quality in coffee production, focusing on product traceability and food safety criteria. With the *UtzCertified*, the consumer is informed about the coffee origin and the guarantee of having been produced with sustainable agricultural practices and with special care with the worker and his family (UTZ CERTIFIED, 2014).

- *Smithsonian Bird Friendly*: promotes the certification of the shaded coffee agroecosystem production areas as a viable supplementary *habitat* for birds and other organisms. It is

applicable to properties and cooperatives. Requires an organic property certification (BIRD FRIENDLY COFFEE, 2014);

- Common Code of the Coffee Community (4C): it is an initiative that establishes a set of rules and procedures for the culture and handling management throughout the production chain. 4C has in mind, in addition to the production technical aspects, the environmental preservation and labor social conditions. It counts with significant participation of the industry, producers, governmental and non-governmental organizations and civil society (CODIGO, 2014). Nestlé has a 4C unit located in Água Branca and belongs to the worldwide program known as *Nescafé Plan*.

- Produção Integrada de Café - PIC (Integrated Coffee Production - ICP): this is a Brazilian standard in the implantation phase (IN nº 49) (BRASIL, 2013). It focuses on the production traceability, biodiversity preservation and good agricultural practices use, with food safety criteria through integrated pest management (IPM) and disease and compliance with labor and environmental standards and legislation.

The principles of ICP are its holistic application, the property as an implementation unit, agroecosystems stability, soil fertility preservation and improvement, balance and minimization of nutrient cycle losses (IPM) as the basis for decisions about plant protection, biological diversity protection, product quality assessed by ecological parameters, minimization of external costs and undesired impacts, and updating the producers knowledge. The producers participation is free, but farmers need to organize themselves into associations, cooperatives or similar entities. The ICP's accreditation in Brazil is carried out by Inmetro. However, in practice, there is no coffee plantation certified in Brazil by this mechanism.

- Certifica Minas Café: it is a program established by the Government of the State of Minas Gerais, coordinated by the Secretaria de Estado de Agricultura, Pecuária e Abastecimento de Minas Gerais - Seapa (State Secretariat of Agriculture, Livestock and Supply of Minas Gerais), executed by the Empresa de Assistência Técnica e Extensão Rural do Estado de Minas Gerais - Emater-MG (Technical Assistance and Rural Extension Company of the State of Minas Gerais) and managed by the Instituto Mineiro de Agropecuária - IMA (Minas Gerais Institute of Agriculture and Livestock) with the support of the Empresa de Pesquisa Agropecuária do Estado de Minas Gerais - Epamig (Agricultural Research Company of the State of Minas Gerais), has the following objectives and premises:

- Encouraging participating organizations to adopt quality systems in the coffee production chain that contribute to safety and reliability;

- Developing a quality management system based on good agricultural practices, allowing equivalence with other existing systems and standards;

- Seeking exchange of technology, regulation, updating, equivalence with national and international entities of this segment;

- Recognizing precepts established by national and international entities such as the Ministério da Agricultura, Pecuária e Abastecimento - Mapa (Ministry of Agriculture, Livestock and Supply), Agência Nacional de Vigilância Sanitária - Anvisa (National Health Surveillance Agency), Inmetro and the Organização das Nações Unidas para a Alimentação e a Agricultura-

FAO (Food and Agriculture Organization of the United Nations), collaborating in mutual understandings and promotion of actions to support the sector;

- Establishing an independent verification system;
- Implementing a certification scheme for the entire territory of the State of Minas Gerais, applicable to all types of participants coffee farms, regardless of regions and technologies applied to the production process;
- Keeping transparency and independence regarding the criteria and decisions taken;
- Preserving the public character regarding the criteria adopted and the certified coffee properties;
- Establishing the requirements of the Manual of Regulations for Coffee Properties Certification based on concepts and criteria of quality management and food safety, good agricultural practices and environment protection, hygiene and safety at work, besides social responsibility;
- Promote voluntary participation in the program;
- Establishing criteria and structure for third party certification that is recognized and independent.

6 GEOGRAPHICAL INDICATION

Geographical Indication (GI) is an intellectual property right. Therefore, the Instituto Nacional de Propriedade Industrial - INPI (National Institute of Industrial Property) is responsible for granting the registration and issuing the certificate of products that have a unique quality depending on the environment natural conditions where they were produced (LIMA et al., 2009). The term Geographical Indication was consolidated when producers, traders and consumers began to identify that some products originated from certain places presented particular qualities from that region and began denominating them with the name that identified its origin. These characteristics give the product an intrinsic value and its own identity that distinguish them from other products of the same nature available on the market.

The GI seal confers on the consumer a guarantee of these particularities and the origin of the product, as well as the historical identity, production techniques, geographical and cultural characteristics of a particular region. The GI represents an effort to redefine territory of the production process or reestablish the links of the products with the territory in which they were generated. Classic examples of products that have earned the status of origin denomination are Port Wine from Portugal, red wines from the Bordeaux region, sparkling wines from the Champagne region and Rochefort cheese in France, as well as Spanish wines from the Rioja region or Montilla -Moriles in Andalusia, Iberian Ramon, Parma ham, Italy, Colombian coffee, among other products and regions (FROEHLICH, 2012).

In Brazil, geographical indications are governed by Industrial Property Law 9.279 / 96, and the product or service may be recognized by the following modalities:

- Geographical indication: product from a proven product. Art.177 - "It is considered

geographical indication the name of a country, city, region or locality of its territory, which has become known as the center of extraction, product or manufacture of certain products or the provision of certain services” (MAPA, 2014b).

- Denomination of product origin: product scientifically certified. Art. 178 - “It is considered designation of origin the geographical name of a country, city, region or locality of its territory, that designates a product or service whose qualities or characteristics are due exclusively or essentially to the geographical environment, including natural and human factors” (BRASIL, 2014b).

The first region to have GI of origin, according to the rules of the World Intellectual Property Organization (WIPO) and INPI, for coffee was the Cerrado region of Minas Gerais in 2005. The product that it exemplary identifies is Café do Cerrado, with coverage in 55 municipalities located in Alto Paranaíba, Triângulo Mineiro and northwest of Minas Gerais, in the region of Cerrado Coffee, with an area of 160 thousand hectares of coffee, about 3.5 thousand coffee farmers and the production of approximately 5 million bags of coffee per year (IMA, 2006; LIMA; MOURA; SILVA, 2011; EXPOCACCER, 2015). Gradually, other coffee regions are entering and being certified as was the Café da Serra da Mantiqueira in 2011, Café Norte Pioneiro from Paraná in 2012 and Alta Mogiana from São Paulo in 2013 (INPI, 2013).

The conilon coffee represents great potential for the GI implementation in the State of Espírito Santo aiming to value the region and the family coffee farming that most produces this coffee in Brazil. Making efforts in the segments of the production chain to study the “Conilon Capixaba, Robusta de Qualidade” (translated to English as Capixaba Conilon, the Quality Robusta” case would be of great importance for this coffee industry future in Brazil.

7 COFFEE CERTIFICATION: ESPÍRITO SANTO EXPERIENCE

The certifications gained visibility in the coffee market with initiatives highlighted mainly by *Fairtrade* and *UtzCertified*. In Espírito Santo, certification of organic coffee in Arabica and Conilon was verified. The Cooperativa dos Cafeicultores das Montanhas do Espírito Santo-Pronova (Coffee Farmers Cooperative of the Espírito Santo Mountains), was part of the *Fairtrade* and *UtzCertified* certification process, starting in 2006, seeking to open a range of participatory market access options for its members. However, from 2009, only *Fairtrade* has been maintained. Pronova was incorporated by Coopeavi in March 2015, continuing the certification process mainly to the specialty coffee market. The certification has been slowly implemented and dispersed in the coffee industry, which is no different in Espírito Santo, especially in the conilon area.

With the exception of organic certification and mainly *Fairtrade*, certification is being carried out by medium and large farms and cooperatives. The small producers access is hampered by the certification costs and, mainly, by the management difficulty and problems in the product quality. The Espírito Santo Conilon certification is contemplated as a strategic action in the Strategic Plan for the Development of Capixaba Agriculture (ESPÍRITO SANTO, 2008) with the

objective of strengthening the state coffee agribusiness chain. The standardization for use of the “Conilon Capixaba, Robusta de Qualidade” seal is another important action linked to the geographical origin identification. Small producers can be included via producers cooperatives or associations, providing volume and premium intrinsic coffee quality standards that allow the reduction of individual costs for certification of family-based properties (De MUNER et al., 2003).

There is a clear need to seek new forms of certification that are more adapted, be them economically, socially or culturally, to the different realities of small producers, mainly by moving towards group certification, with audits in part of the properties. This is the alternative for cost reduction and involves all actors in the production chain. Another model is the “verification”, a less rigorous and lower cost version than the certification. The model adopts strict social control without the figure of the external inspector (SANTOS, 2004).

In the case of the organic conilon coffee production, Espírito Santo had the Chão Vivo Association, which acted in the certification and technical assistance of organic properties. This entity was created on November 16, 1999, based on an articulation of the Family Agriculture Forum, as a non-profit entity. It acted in the states of Espírito Santo, Bahia, Minas Gerais and Pernambuco. In 2005, it signed a technical cooperation agreement with the German company Oko-Garantie GMBH-BCS, making possible the Capixaba organic production commercialization in the European, American and Japanese markets (INCAPER, 2005). However, it had itself to adapt to the rules of the Federal Law N° 10.831/2003 and the decree No. 6323/2007 (BRASIL, 2003, 2007) that establish monitoring parameters for organic production areas and stipulate several criteria for producers to adapt their production to the system required by the Ministry of Agriculture. Thus, the Instituto Chão Vivo de Avaliação da Conformidade (Chão Vivo Institute for Conformity Assessment) was created. Properly accredited by Inmetro and licensed by Mapa, it can act in the certification of organic properties in all Brazilian states.

In 2007, there were 33 conilon coffee properties certified and several other producers in the certification process, with a production area of around 138 ha totaling an average annual production of 2.326 60Kg bags (De MUNER et al., 2007). The main municipalities that produced this coffee were Rio Bananal, Jaguaré, Nova Venécia, Iconha and São Mateus. In 2014, 66 properties were found, with 127 ha of organic conilon coffee and production of 3.530 bags. Of these properties, 14 are certified and operate 46 ha of coffee and produce 1.150 bags. Another 52 properties, with 81 ha and 2.380 bags of organic coffee are linked to OCS (Schultz, D., Seag/Organic Agriculture Management, 2014 personal communication). This organization modality does not represent a form of certification, however, it allows the trading of organic products, not directly certified to the consumer, based on Law 10.831, dated September 23, 2003 (Table 1). The OCS can only be formed from the legally recognized family farmers’ organization, and the guarantee is based exclusively on the trust relationship between buyers and consumers. The OCS must be duly registered in the Mapa for their products marketing directly to the consumer. The farmer identification occurs through the Register Declaration, in a visible place at the trading location (BRASIL, 2014a).

Table 1. Municipalities, properties, fields and production of certified coffee and the social control organization (OCS) in the State of Espírito Santo, 2014

Municipality	Certified production			OCS Production			Total	
	Property	ha	bags	Property	ha	bags	ha	bags
São Mateus	5	16	260	-	-	-	16	260
Jaguaré	2	12	340	-	-	-	12	340
Rio Bananal	1	6	170	-	-	-	6	170
Iconha	2	3	80	12	25	680	28	760
Santa Teresa	1	1	40	-	-	-	1	40
Boa Esperança	-	-	-	7	10	300	10	300
Mantenópolis	-	-	-	10	6	200	6	200
Nova Venécia	3	8	260	23	40	1200	48	1460
TOTAL	14	46	1150	52	81	2380	127	3530

Source: Schultz (2014).¹

From 2007 to the present, there has been a decrease in the number of coffee farmers and in the production area of certified organic conilon. Organic coffee has a high production cost, mainly due to the great need of manpower. It is also reported the extreme difficulty in obtaining prices that compensated the costs, no prizes for organic production were obtained and there was no market for organic conilon coffee commercialization. This coffee was commercialized as conventional coffee, which caused the producers demotivation to the organic cultivation system and the migration of part of them to the system without pesticides (SAT). However, most of them continue in the coffee industry by exploring in a more agroecological manner and using good agricultural practices. According to the extension agents of the Instituto Capixaba de Pesquisa, Assistência Técnica e Extensão Rural- Incaper (Capixaba Institute for Research, Technical Assistance and Rural Extension), the situation of organic coffee cultivation in Jaguaré, Nova Venécia and Rio Bananal has been similar and chemical fertilization has been introduced in the production process. However, the principle of environmental preservation and social value continues to be practiced (MC Lubiana, former president of Chão Vivo/organic conilon coffee producer, Nova Venécia, ES, 2014. Personal communication).

Meridiano coffee industry marketed organic coffee in 2007 provided by state family farmers, forming conilon and arabica *blends* for the local and overseas market. Due to the noticeable decrease in this raw material supply, these *blends* are no longer produced and have been replaced by conventionally produced coffees, originating from family-based agriculture. The consolidation of the production and commercialization of certified organic conilon has many bottlenecks in the productive segment because of the lack of appropriate technologies, high production costs and certification due to lack of organization of coffee farmers for better product management and commercialization, in view of this market demand and logistics.

A success case to be reported is Fazenda Modena, owned by Mr. Raimundo Paula Soares, located 8 km from Linhares and 130 km north of Vitória. This property is the first and only

¹Verbal information granted by Decimar Schultz in 2014.

certified *Rainforest Alliance* and *UTZCertified* conilon coffee in Brazil. Its current production is 8.000 bags of 60 kg, of which 2.000 certified were marketed to England in 2014. The crops productivity vary between 70 and 80 60 kg/ha bags. This venture beginning was in 2009/2010, and the main reason for the exploitation was the challenge for the conilon coffee sustainable production. Several early, medium, late and super late clones originating from the Incaper clonal compositions are used in 100 ha cultivated. The value of coffee sold was US\$ 165.00/bag. The property also has 55 ha of protected area. The post-harvesting processing area consists of four dryers and a complete system for the production of peeled cherry coffee, drying, sorting, transport besides silos and cleaning machines.

Another success case that can mentioned is that of CAFESUL. This cooperative received the *Fairtrade* certification seal in 2008 and currently all 136 cooperators are certified. Approximately 20.000 bags of conilon coffee are produced annually, of which about 6.000 were marketed as certified in 2014; the amount reached was an average of R\$ 265.00/bag. This price was 15% to 20% higher than the one practiced in the local market. Besides this quotation, a prize of R\$ 300.000,00/year was paid, paid by coffee buyers and destined for investment in the cooperative. This amount was applied to improve productivity and quality in properties, in the cooperative itself and in the communities where it operates, in accordance with the Ordinary General Meeting decision. The quality of the certified coffee marketed was type 6, 7 or 8, according to the buyer's requirements. For CAFESUL operational manager, Talles da Silva de Souza, certification has become increasingly important due to the consumers demands in the search for sustainable coffees. Companies have included this requirement when purchasing their raw material. Therefore, the prospect is certified coffees sales increase.

In addition, Nespresso has carried out the *AAA Sustainable Quality*TM program focused on conilon coffee in the northern and southern regions of the State of Espírito Santo. This is an integrated management program of good agricultural practices that guarantees the fulfillment of quality and sustainability requirements. This program main focus is to ensure future supply of high quality coffees demanded by the company and protect the lives of coffee farmers, their families, communities involved and the local environment (Guilherme Malphigui Amado, Nespresso Green Coffee Manager, 2014. Personal communication). The AAA Program aligns quality principles to sustainability and assists farmers in improving farm management and productivity. Prizes for quality and sustainability can reach 30% to 40% of the coffee market values. Its objective is to add value, not only to the company and to the producers, but also to the communities of the regions that supply coffee. It is estimated that about 1% to 2% of the coffee produced worldwide offers the sensory and quality characteristics that fit these specifications. Strategically, it is very important to ensure the future of these coffees quality and volume. This company's goal for 2020 is to acquire 100% of arabica and conilon coffees at AAA Program farms and more than 50% of these coffees with *Rainforest Alliance*, *Fairtrade* or *Fairtrade USA* certification.

The "Programa de estímulo à produção e comercialização de cafés especiais do Espírito Santo (Encouragement Program for the Production and Marketing of Specialty Coffees from

Espírito Santo)”, launched in 2014, is coordinated by the Serviço Brasileiro de Apoio às Micro e Pequenas Empresas no Espírito Santo - Sebrae-ES (Brazilian Service of Support to Micro and Small Businesses in Espírito Santo) and has as target coffee producers and roasted and ground coffee processing units (SEBRAE, 2015). The project aims to tailor and certify 2.500 coffee farms, produce 500 thousand certified bags of quality and / or sustainable coffee, promote the production of specialty coffees (premium, gourmet and sustainable) by the roasted and ground coffee industries, process approximately 150 thousand bag in Espírito Santo, value the use of quality conilon coffee in the *blends* of specialty coffees, enable their access to the main consumer markets of Brazil and Abroad, increase the integration of local roasting associations, cooperatives and industries with retail chains and to obtain typification of the coffees produced, as well as their quality potential according to the different coffee regions of Espírito Santo.

This initiative has the partnership with ABIC, Bandes, CCCV, CETCAF, FAES/SENAR, Findes, Incaper, OCB/ES, Seag, Sebrae and Sincafé. Its main actions are the structuring of an organizational model, the provision of consultancy for the properties adequacy, technological diagnostics of the roasting industries, integration between producers and local roasters, research to characterize the coffee produced in the Capixaba regions, research to improve industrial coffee production, integration with the international trade, marketing actions, corporate management actions and administration and monitoring.

8 FINAL CONSIDERATIONS

The implementation of coffee certification is being carried out according to the demand of the marketing agents and the producers. New entrepreneurs are working to value the quality of coffee for export. The certification will certainly play a significant and decisive role in the presentation of a product with socio-environmental management, identification of the origin and green coffee quality, a basis for improving the industrialized coffee quality. Programs for improving the sustainability and quality of roasted and ground coffee consumed in the Brazilian domestic market have been sought through specific programs.

The certification is a challenge to be overcome by all those involved in coffee agribusiness, aiming at more sustainable practices and guaranteeing quality and productivity in the long term and with the possibility of better payment for those who participate in the productive chain, especially the rural producers who constitute the weakest link in the chain.

The certification of Espírito Santo coffee is an indispensable condition for these products insertion into differentiated markets, which can be both exported and consumed in the Brazilian internal market, meeting the food safety standards demanded by the actors in the production chain.

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