Analysis of Bahian Cigar Production Chain

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Abstract This study aimed to delineate, characterize and analyze the Bahian Cigar Production Chain in order to collaborate with the development of the sector and benefit the social environment. Rapid Appraisal (RA) methodology that intensifies the collection of secondary data and allows the combination of informal and formal structured methods were used. This productive chain has existed for more than a century, it is traditional and influences the regional culture, in addition to contributing to the trade balance of Bahia and Brazil, therefore, the federal and state governments have proposed public policies to encourage the sector. However, Agricultural credit was not effective in Bahia, since it registered very low rates of concession. It was found that in Bahia the production of benefited tobacco fell from 7 tons (t) in 2012 to 2.1 t in 2015, as well as the production of cigars that reduced from 15.5 million units in 2012 to 14 million in 2015. The total value of exports of Bahian cigars and cigarillos to international markets fell by 79% (1997 to 2015). It was also verified that in 2015, exempt from taxes, 5.4 t of cigars and cigarillos of Cuban origin, worth approximately US $ 1.3 million, entered in Brazil.

Keywords: tobacco, agricultural credit, public policies


1. Introduction

From 1850, several cigar factories began to appear in Rio de Janeiro, Bahia, São Paulo and southern provinces, with an average of less than 5 employees per unit, approximately 300 factories until the end of the 19th century. Two of them, whose products marked the time, appeared in Bahia in 1851: Costa Ferreira & Penna and Vieira de Melo. From 1870, names like Danneman, Suerdick, Pimentel and Cia de Charutos Poock set their brand on the market. Bahia's cigars production, which reached 40 million units per year in the mid-nineteenth century, now reaches the mark of 60 to 70 million units per year, increasing the consumption of cigar in the national territory. [1]

Within the productive process of tobacco, concentrated in the cities of Maragogipe, Cachoeira, São Félix and Muritiba, the female labor force was intense. [2]

Nevertheless, the current scenario changed according to data collected at the Brazilian Institute of Geography and Statistics, as it was found that tobacco production in Bahia fell sharply over the years, from 10549 tons in 1990 to 3716 tons in 2015. [3]

Lately, government initiatives, through public policies, have been encouraging actions to resume the valorization of the product in the market and its production in the region. The Ministry of Agriculture, Livestock and Food Supply (MAPA) created the Chamber of the Production Chain of Tobacco in 2009 with the objective of supporting and monitoring actions for the development of activities related to tobacco. [4] According to MAPA, within activities already carried out by the mentioned chamber, the Tobacco Strategic Agenda 2010-2015 is found, which established an Integrated Plan of Research, Development and Innovation (RD & I), constituting directives for the Northeast, such as to highlight the richness of the portfolio of tobacco varieties; strategies to expand exports of Tobacco, Cigars and Cigarillos of Brazil; identify and classify potentially improved varieties; contemplate the actions of systematized collection of research demands to be sent to the Sector Research Program; among others. [5]

Among the initiatives that emerged in this period was the Sectorial Chamber of the Cigar Production Chain of the Agricultural, Irrigation and Agrarian Reform Secretariat (SEAGRI) of Bahia in 2010. This was born with the purpose of bringing together the entities of the chain with a focus on its development. [6]

1.1. Agro-industrial Production Chain

Developed by the French industrial school in the 60's, Analyse Filière brings with it the concept of agro-industrial production chain. The agro-industrial production chain can be defined as the sum of all production, logistics and marketing operations required for a product to pass from one or more basic raw materials to the state in which it can be used by the final consumer. [8] Various forms of organization may exist along the chain, for example, handcrafted, capitalist, cooperative or public. [7]

In an attempt to synthesize the wide variety of definitions of the production chain, three sets of elements are implicitly involved: the production chain can be
defined as a sequence of transformation operations, and can be separated and linked together by a technical chain; also defined as a set of commercial relations, which establish an up and downstream flow of trade between suppliers and customers; and as a set of economic actions that preside over the valuation of the means of production and ensure the sustainability and articulation of operations. [7] Summarizing, Chain (Filière) corresponds to the successive stages for a good to be produced and that within this process occur influences of the technology and the strategies of the economic agents, constituting of a system. [9]

"A productive chain encompasses supply of inputs and equipment, producers, processors, distributors, wholesale and retail. In addition, it is involved in an institutional environment such as laws and regulations, and support services such as transportation, warehousing, and market information. There is a strong interdependence of these processes, whose success depends on the efficient interaction of all links in the chain." [10]

The main uses of a production chain are: a space delimitation model for analysis within the production system, which seeks to explain the formation of sectors in the production system; industrial policy that seeks to identify the weakest links in the chain and encourage strengthening through appropriate policies; tool for technical-economic description of a sector that is used to indicate production operations; strategy and marketing: the analysis of the production chain functions as a tool to observe the competition, and it has the capacity to provide information; and, technological management, process of technological innovation. [7]

This can be observed in the study on the production chain of powdered milk in which sectoral public policies become essential to improve the competitiveness of the sector. [11] In another context, to improve coordination of the wheat chain government actions are necessary through credit policies. [12] In this sense, the idea of production chain began to be used by institutions and governments for a better understanding of its operation. [13]

It can be verified that the main studies on agro-industrial production chain focus mainly: the methodology of sectorial division of the productive system; the formulation and analysis of public and private policies; its use as a tool for technical-economic use; the methodologies of strategies of analysis of firms; the tools of analysis of technological innovations, and support for technological decision-making. [7]

In the chain of production occurs a succession of operations with the purpose of obtaining the final product, influenced by the technology and defined by the strategies of the agents, [14] occurring relations of interdependence or complementarity with the presence of hierarchical forces. [15] The market, government or a private policy generates dependency within the system, with a focus on controlling in the system certain strategic point. [15]

For systemic analysis of the production chain, it is necessary to understand some key points, which are: verticality - the segments are influenced by other links of the vertical chain; demand - responsible for the motivation of the flow of goods and services; coordination within the channels - must study the market, contracts, vertical integration, among others; and, competition between channels - due to their involvement in more than one marketing channel. [16]

Within the system the governance structure is based on the contractual relations between the agents of the segments, being able to be of formal or informal character, promoting a vertical integration for the production of the good. [17] The systemic approach exposes the relations of conflict and cooperation that occur among the agents of the system. [18]

Productive chains aim to serve the market with differentiated products and focus on quality and agility in supply, since price is the least relevant element perceived by its final consumer. [19]

Before analyzing the market, it is necessary to define it in terms of space (region, municipality, state, or country, for example) and type: (1) potential market (set of consumers that professes a sufficient level of interest for defined market offer); (2) available market (set of consumers who have interest, income, and access to a specific market offer); (3) qualified available market (set of consumers that have interest, income, access, and qualifications for a specific market offer), (4) target market (part of the available qualified market that the company decides to go after), (5) penetrated market (set of consumers who have already bought the product). [20]

In this case, the differentiation of products and services consists of developing marketing strategies so that a particular offer is perceived in a different way from the offer of the competition. The differentiation process must be done when something very valued is offered, that has a sufficient number of interested customers, and that this product or service is not yet offered by competing companies. To apply this strategy, it is necessary first to search the market to identify the attributes that are valued. [20]

As for the new expectations of consumption of products there are some tendencies, being the quality one of them that is defined by organoleptic attributes, of flavor, appearance, aroma, and hygiene. Quality is the main characteristic sought by the consumer, and what is proportionally linked to satisfaction. Therefore, higher levels of quality result in higher prices and profits, respectively. [21]

By analyzing consumer buying behavior, the various segments of a production chain can use strategies to meet their needs by efficiently reaching the entire market. Therefore, by focusing on the smaller and more homogeneous market segments of consumers with needs, the totality of their demand can be measured. [22]

Thus, research has become essential to the need to deepen and understand the BCPC, identifying the existing obstacles and opportunities, contributing to reorganization and incentive of the sector. The analysis of the production chain favors the strengthening of the actors involved in the production process, promotes reflection on the need for economic and social improvement actions, helps the actors in decision making, as well as favors coordination and competitiveness.

The deliberation to promote the study had as its starting point the need to configure the BCPC in the aspects of the organization of its segments, the identification of its actors and the elements that influence its development. Therefore, the objective was to delineate, characterize and analyze...
the BCPC, through the identification of the constraints that promote or impede its operation, in order to collaborate with the development of the sector and benefit the social environment.

In summary, the research is carried out to provide information on the production, industrialization, and commercialization of tobacco and cigars for actors in the chain, public managers, researchers, professionals linked to agribusiness, among others.

2. Methodology

2.1. Delimitation and Characterization of the Study Area

The delimitation of the agro-industrial system is of extreme importance, the following points must be observed: product, components, territory, and time. This delimitation should also promote the identification of the main actors involved in the chain. Due to the systemic nature of the analysis of BCPC, it was essential to delimit space so that its analysis could be performed efficiently.

In this study the three macrossegments of BCPC (raw material production, industrialization, and commercialization) were analyzed. Following the guidelines, the investigation was conducted in areas of cigars production in the state of Bahia, including the territory of identity of the Recôncavo Baiano, in the municipalities of agro-industries that produce cigars, including Cachoeira, Cruz das Almas, São Félix and Governador Mangabeira.

2.2. The Rapid Appraisal

For the development of this research was used the methodological approach Rapid Appraisal (RA), which is a method used when there is a need for a quick and low cost evaluation, collecting data in a systematic way to generate results and provide managers with information on the performance of the activity. The methodology enables a rapid analysis combining informal (conversations, observations in loco, etc.) and structured formal methods (census, research, and experiments). Data collection, through interviews, is carried out with a small number of people, using strategic elements called "key agents". The results are accurate, reliable, valid, and conclusive, since they are obtained from quantitative analysis. RA assists in identifying problems, emerging issues, and opportunities. It also serves to provide information and strategies that enable the formulation and implementation of policies.

The analysis of competitiveness has already been done with RA using extensive secondary information, semi-structured interviews with "key agents" and direct observation. RA were used in the study of Agricultural Innovation Systems in order “to guide the analysis of complex agricultural issues and the capacity for innovation of agriculture”. It proved to be an efficient methodology for public opinion, as for understanding the structure and markets.

The snowball sampling method were used in RA for identification of the participants, and collection were done in secondary sources. In this form of sampling, statistical laws are not applied, depending on the criteria established by the research. The method uses a semi-structured interview with "key agents" to collect data that, in the BCPC, will be represented by several actors that have representation within the chain and knowledge about the activity. These have been identified in literature, public documents, articles, news published on the Internet, meetings of the Sectorial Chamber of Bahian Cigar (MAPA / SEAGRI) and several articulation visits in the region since 2010.

To obtain the data, the research consisted of steps of secondary data collection, field actions composed of observations in loco and personal interviews with semi-structured form with the "key agents" of the BCPC.

The population of the study was delimited by the members of the BCPC of the Identity Territory of the Recôncavo Baiano and to obtain the sample, characterized as non-probabilistic, the snowball sampling method was used. Therefore, 15 producers of raw materials were interviewed and the 6 companies in the industrial segment (100%) of the Recôncavo Baiano, which also commercialized tobacco benefited or cigars at the production sites, using semi-structured forms. The inclusion of employees, respondents of the semi-structured forms, was related to the merit of their knowledge about the activity, becoming important elements to contribute to the development of research and the production chain.

3. Results and Discussion

From the referential, secondary and primary data, it was possible to identify the economic agents within the segments, the processes of transformation from tobacco to the final product (cigar), identify obstacles that prevent chain development and possession of the conjuncture, proposing solutions to promote the activity.

3.1. Schematic Model of BCPC

The chain-chaining logic of operations, to define the structure of a production chain (PC), must always be downstream/upstream and can be segmented into three macrossegments. In many practical cases, the boundaries of this division are not readily identifiable. In addition, this division can vary greatly depending on the type of product and the purpose of the analysis.

Based on the theoretical model of agro-industrial production chain, in dialogues with the technical leaders, the interviews with the actors and the observations made in visits to the production areas in the Recôncavo Baiano, developed the model of the Production Chain of the BCPC as the guiding archetype of the studies executed in this work (Figure 1). In this way, it is possible to understand how the transformations of raw material (tobacco) occur in cigar until its commercialization.
Figure 1. Proposed model of the Bahian Cigar Production Chain (BCPC)
3.2. Production Segment of Raw Material: Tobacco

The segment must be represented by firms that supply the raw materials to start production so that companies of later segments continue in the process of obtaining the final product. Their form of organization can be handcrafted, capitalist, cooperative, or public. [7]

This first segment is represented by the operations that converge for the production of leaf of tobacco within the farms.

In 2013, the largest producer was China (3.2 million tons), Brazil was in 2nd place (850.7 thousand tons), India was the 3rd (830 thousand tons), the United States (USA) the 4th (345.8 thousand tons) and Indonesia the 5th (260 thousand tons). [37] In the analysis of the historical data series, it was verified that India presented production growth from 2009 and Indonesia from 2011. [37] Although China was the world's largest producer in 2013, it was not the fastest growing country in the period from 1990 to 2013, as it achieved a growth rate below some countries, 19.1%. [37] Indonesia is the one with the highest growth among the five largest producers in the world, with 361.1%. [37] Brazil had the second highest growth rate with approximately 91% and India with the third, 50.5%. [37] The USA did not have growth within this period and presented reduction of its production with a rate of 53.1%. [37]

In a publication of the Ministry of Agriculture on the projections of agribusiness for Brazil from 2015/16 to 2025/26, it is expected a production of tobacco in 2025/26 of 817 thousand tons with a planted area equivalent to 414 thousand hectares. Therefore, the importance of tobacco for the Brazilian trade balance and income formation in the producing regions can be perceived.

Currently, Brazil is the 2nd largest producer in the world, and it has become the largest exporter of tobacco, due to the quality of the product offered to the market. In 2015, this country exported approximately 85% of its production, representing 1.1% of total exports of Brazil, resulting in a total of US$ 2.2 billion shipped, with its largest market targeting the European Union (EU), with 43% of total shipments. [39]

Analyzing IBGE data, the South region is the largest tobacco producer in Brazil, where production was 850 thousand tons in 2015. This region is characterized by producing a type of clear tobacco mainly intended for the manufacture of cigarettes. Based on 1990 (398 thousand tons) and 2015 (850 thousand tons), production in this region increased by 453 thousand tons of tobacco (leaves), and it is currently responsible for 98.5% of Brazilian production. As for the area planted (ha) with tobacco in the South Region, the same production behavior occurred, since there was an increase of 170 thousand ha based on the years of 1990 and 2015. [3]

Therefore, Tobacco still represents a crop that is present in many countries of the world and of importance to the balance of trade of each one of them.

In Brazil, there is a predominance of tobacco production in small farms with a mean area of 15.2 ha. [40] Bahia is also characterized by production in small farms. In a survey from IBGE, it was found that 74% of the properties of tobacco producers in the state of Bahia have an area of less than 5 hectares (ha). [41]

Tobacco producers interviewed in this survey have owned rural properties in the Recôncavo region for about 27 years on average, and they have been producing tobacco for almost 26 years, on average. Of these, 80% have rural properties with an area smaller than 9 hectares and 80% have a cultivated area with tobacco below 3 hectares. For 86.7% of these producers the main economic activity of the property is tobacco.

Tobacco production, intended for the production of cigars, is carried out in specialized farms located in Cachoeira, Castro Alves, Cruz das Almas, Maragogipe, Muritiba, São Félix, among others, known as Mata-Fina region. Due to special edaphoclimatic specificities of the region, it produces the best tobacco for cigars in Brazil of internationally recognized quality. A true tobacco culture was created, which reflections extend to the present day, shaping customs, behaviors, economic, social and political relations. [42] The identity territory of Recôncavo Baiano is composed of twenty municipalities, [43] of which only eight had a record of planted area for a total of 2838 hectares. [3]

Analyzing data of IBGE, it is observed that Tobacco production in the Northeast and Bahia has been falling over the years. In the Northeast, 45124 tons were produced in 1990 and decreased to 16649 tons in 2015. The same way in Bahia, which recorded 10549 tons (1990) and 3716 tons (2015). In Bahia there was a stabilization of the fall from 2012 to 2015, which presented a slight increase from 3 thousand tons (2012) to 3.7 thousand tons (2015). During this period, Bahian production reached RS 19.3 million in 2012 and RS 22.4 million in 2015, and the year that obtained the highest value was 2006 with the amount of RS 53.3 million for 13 Thousand tons produced. [3]

This discrete and positive reaction in the increase of production in Bahia may be the result of public policies of incentive to the sector that were established in this period, such as:

b) promotion, together with MAPA, of the Geographical Indication (GI) of the Bahian cigar that is in the final stage. [6]
c) creation of the Recôncavo Cigar Route by SETUR and SEAGRI in 2011. [44]
d) encouraging the export of tobacco to the Chinese market in 2011 through a bilateral Brazil-China agreement. [45]
e) support to research projects to characterize Geographical Indication (GI) in Bahia, cigar and others, fomented by the Foundation for Research Support of the State of Bahia (FAPESB), Public Notice no. 021/2011. [46]
f) elaboration of the law (PL) that is processed in the Legislative Assembly of Bahia to transform the Cigar into Intangible Heritage of Bahia.
During the years from 1990 to 2013, there was a reduction of planted area (ha) in the Northeast: Bahia, Alagoas, and Recôncavo Baiano, as shown in Figure 2 [3]. That may have been influenced by the intensification of the established anti-smoking policy by the Federal Government since 1980, without distinction of cigarette or cigar tobacco. This policy had its initial mark with Federal Law No. 7488 (06/11/1986), which instituted the National Day to Combat Tobacco, focusing on the promotion of a national campaign aimed at alerting the population to the harmful effects of tobacco use. [48]

The reaction with slight growth of planted area (ha) happened in 2014 and 2015 for all that are related in Figure 2 [3], however, in a very discrete way, as in the case of the Recôncavo Baiano, with 2666 ha and 2838 ha, respectively.

Therefore, the anti-tobacco policy seems to have affected only the tobacco production of the Northeast, Bahia and Recôncavo Baiano (producers of dark tobacco for cigars), since they have suffered from the reduction of the planted area over the years, while South Region presented growth in the same period.

Based on IBGE data, it was determined that the value of R$ 6208.00 (2015) paid per ton of tobacco from Bahia was above the R $ 1440.40 in the Northeast (excluding Bahia). Despite the fall in the area of production and the amount of tobacco produced, Bahia presented a growth rate of 479.1% of the value paid per ton (1994 to 2015), whereas the other reached 201.5%. [3] This growth, 479.1%, is related to the quality of the tobacco that is grown for cigar production, with Brazil-Bahia being the main variety, as well as for leaf export. Therefore, the

![Figure 2. Area planted with tobacco (in hectares) in the Northeast, Alagoas, Bahia, and in the Identity Territory of Recôncavo Baiano](image)

![Figure 3. Quantity of tobacco produced (tonnes) in leaves in Bahia and in the Identity Territory of Recôncavo Baiano](image)

Based on data from the Foreign Trade Information Analysis System, it can be determined that the value (US$ FOB) of Bahian exports of tobacco destined for wrapping of cigars and cigarillos increased by 187.5% from 2000 to 2015, [49] demonstrating clear appreciation of the product in the foreign market and recognition of its quality.

Due to the tradition of tobacco production, tobacco companies and cigar producers, Recôncavo Baiano is currently responsible for almost all tobacco production in Bahia (Figure 3) [3], demonstrating the importance of the sector to the economy of this territory of identity. However, the production of the Recôncavo fell during the years, presenting a rate of -34.9%, that is, it was negative because it is related to the reduction of the planted area in Bahia and Recôncavo.

The highest value (R$ thousand) for production in Bahia is still of responsibility of the municipalities of the Recôncavo Baiano (Figure 4) [3], even with the reduction of the planted area from 5089 ha (1990) to 2838 ha (2015), with a consequent reduction in production from 4545 tons (1990) to 2957 tons (2015). When Recôncavo is subtracted from the rest of Bahia, it was observed that the tobacco contribution of this territory is very significant for the Bahian trade balance in relation to the values obtained by other Bahian municipalities outside this territory of identity.
In summary, the actions of anti-tobacco policies seem to have interfered only in the Northeast Region, since the production of light tobacco in the South of Brazil, which was primarily aimed at cigarettes, did not reduce, but had an annual growth rate of 78.9% and the quantity produced (tons) of 114% for 1990 and 2015. In the same period, with negative values, the Northeast suffered a drop of 71.2% for planted area (ha) and 63.1% for quantity produced (tons). Bahia also reduced both the planted area (ha) and the quantity produced (tons) reaching respectively negative values of 77.4% and 64.8%. Recôncavo Baiano, a traditional region of production of dark tobacco for cigars, was also penalized with negative rates that reduced the planted area by 44.2%, as for quantity produced by 34.9%.[3]

From 1990 to 2015, the amount of tobacco produced in tons of leaves in the southern region of Brazil had an average annual growth of 3%, while Bahia shrunk its production with a negative value of 3.9% (Figure 5). The economic and social situation of production areas of Bahia is worrying due to this continuous reduction of activity and not being egalitarian in relation to the southern states of the country.

Currently the largest tobacco producers in the Recôncavo Baiano, in descending order, are the cities of Governador Mangabeira (1st), Cabaceiras do Paraguaçu (2nd), Cruz das Almas (3rd), Muritiba (4th), and Sapeaçu (5th) according to data collected. After 2012, most of the municipalities production remained stable, with the exception of Cabaceiras do Paraguaçu, which increased from 790 t (2014) to 1000 t (2015). [3]

In the municipality of Governador Mangabeira there are two tobacco processing companies/ producers of cigars competing with their own tobacco production areas, that is, verticalized. The tobacco produced in these rural properties serves the domestic and foreign markets, so it is possible to relate to the position of the largest producer.

In Recôncavo, analyzing calculations made from data of IBGE, the previously related largest producers had annual growth rate of the produced quantity of tobacco in leaves very divergent, because, while Governador Mangabeira (833%), Muritiba (714.8%) and Cabaceiras do Paraguaçu (209.6%) presented high and positive values, showing growth of activity, Cruz das Almas (-71.6%) and Sapeaçu (-91.6%) obtained negative values. [3] Both the production and the planted area have shrunk in the last two municipalities reported. During this period, some companies producers of cigars in Cruz das Almas closed and others changed their municipality. This product has been shown to be important both economically and socially for the municipality of Governador Mangabeira and region, as shown in Figure 6 [3] [50] where it can be seen that this raw material contributes to the Gross Domestic Product (GDP) of Municipal Agriculture, as for the sum of all temporary crops produced in the municipality, extracting the value of the tobacco from the result. In 2013, the contribution of tobacco (R $ 6.8 million) to the GDP of Municipal Agriculture (R $ 20.9 million) was 32.5%, while in 2005 it was its largest contribution with 72.6% (Tobacco R$ 7 million and Agricultural GDP R$ 9.6 million), demonstrating the importance of this crop for the municipality. The trend line of the value of tobacco in the municipality is ascending demonstrating the valuation and tradition of tobacco production in the market.
In this municipality, without tobacco, the GDP of the Municipal Agriculture would fall, influencing socially and economically, being able to provide problems in generation of direct and indirect jobs in the municipality and region. This finding is demonstrated by the participation of tobacco in the GDP of Municipal Agriculture over the years.

The tobacco produced has a direct impact on the total value (R$ thousand) of the temporary crops produced in the municipality of Governador Mangabeira, because when we analyze the history of the values obtained by tobacco in relation to the other crops produced in the region, it is verified that the values of Tobacco in the years from 2004 to 2011 and from 2014 to 2015 exceeded the values obtained by other temporary crops. The activity is attractive, traditional, and important for the economy of the municipality, since it presented an annual growth rate of the total value of municipal tobacco production (R$) of 1904.9%, with reference to 1994 (R$ 344 thousand) and 2015 (R$ 6.9 million).

### 3.2.1. Bank Financing for Tobacco Production

For the development of the raw material production sector, as well as other segments of the cigar production chain, policies are needed to promote the activity through resources destined for costing, investment, and commercialization.

One of the agricultural policies of the Brazilian federal government, Rural Credit, designates resources for expenses that range from the purchase of inputs to the harvesting of production (Costing) and also for durable goods or services (Investment), subject to the regulations established by the Central Bank of Brazil (BACEN). [51] Rural credit serves both producers and cooperatives, and it is increasing each year and its largest share is allocated to the cost of production.

In order to serve family small farmers, the federal government created the National Program for Strengthening Family Agriculture (PRONAF) through Federal Decree No. 1946 of 06/28/1996 [52] and on 07/24/2006, Federal Law No. 11326 was published, which establishes the guidelines for formulation of the National Policy on Family Agriculture and Rural Family Enterprises. [53] The Central Bank of Brazil (BACEN) directs that there will be the granting of investment financing for tobacco producers by Pronaf who are associated or integrated to agro-industries, however, the items that will be financed can not be exclusive to tobacco crop and should be used for other agricultural activities. [54]

Resolution No. 4136 of 09/27/2012 of the BACEN, related to PRONAF and Rural Credit Manual (MCR), makes a caveat about tobacco production. This establishes that, in the 2012/2013 and 2013/2014 harvests, at least 20% (twenty percent) of the income from the rural property is from activities other than tobacco. [55] For the years 2016 to 2021, the new Resolution No. 4513 of 08/24/2016 of the Central Bank of Brazil establishes the following criteria: 

- I - 20% (twenty percent) in the agricultural year 2016/2017; 
- II - 25% (twenty five percent) in the agricultural year 2017/2018; 
- III - 30% (thirty percent) in the agricultural year 2018/2019; 
- IV - 40% (forty percent) in the agricultural year 2019/2020; 
- And, V - 50% (fifty percent) in the agricultural year 2020/2021.

(NR). [56]

The producers of the Recôncavo Baiano interviewed in the research meet the above requirements, since 93.3% of these diversify production, even though it is reported that tobacco is the main income of rural property. Among the diversified products in the property we have: lemon (36%), orange (26%), cassava (10%), corn (10%), beans (6%), cattle (6%), sorghum (3%), and Peanut (6%).

The credit destined to the tobacco had great effectiveness in the South of Brazil, region that produces tobacco destined mainly to the production of cigarettes. In the investigation of the BACEN data, it was verified that:

- the total costing concession for tobacco producers and cooperatives in 2011 was R$ 434.2 million and a slight increase in 2012 (R$ 442.3 million), with approximately 129 thousand contracts and area financed of 338.5 thousand hectares. [57]
- dividing the area financed by the number of contracts shows that the average area (ha) financed from tobacco estates in the South Region is small, varying from 2.4 to 2.7 hectares, forming a small area of production. [57] This information corroborates report made by SINDITABACO, which states that "tobacco cultivation in Brazil is based on small farms, on average with 15.2 hectares." [40]
- based on data from the BACEN reports, the South region had a small share of financing through
PRONAF, highlighting only the year 2011 with 126 contracts and had no records in the years from 2006 to 2008. The state of Alagoas presented higher values than Rio Grande do Sul, as in 2007, 381 contracts were awarded, and in 2012, 180. [57] Different these, Bahia did not obtain the incentive for tobacco production through PRONAF credit. Since there is no record of contracts with the Central Bank of Brazil during this period, thus showing that the competitive conditions between the states are not being egalitarian.

- it was observed that the average amount of financing for concession contracts for tobacco through PRONAF, in Alagoas, has been increasing each year and in 2012 reached R$ 5548.04, [57] that is, more incentives for the production of tobacco in this state, favoring its competitiveness in the Northeast and Brazil.
- in the period from 2006 to 2012, production incentives also occurred with the granting of funding for tobacco to producers and cooperatives in Alagoas, having in 2012 the amount of 182 contracts worth R$ 1 million, average financing (R$ ) per contract of R$ 5513.63, total financed area of 332.96 hectares and average of 1.8 hectares per contract. It was found that PRONAF's average contractual financing in 2012 (R$ 5548.04) had similar value to the costing concession for producers and cooperatives. [57] This state has been presenting a large number of financing agreements, both PRONAF and costing for producers and cooperatives, favoring tobacco production, balance of trade and the competitiveness of the chain.
- among the tobacco producers reported, Bahia was the one that obtained the least amount of financing for tobacco production in the years from 2006 to 2012. It can be verified that in 2012, only one contract of costing concession for tobacco was financed to producers and/or cooperatives in the amount of R$ 5541.79 with an area corresponding to 29 hectares. [57] Despite the incentives made by the federal and state governments to the production chain, the agricultural policy of access and stimulation to tobacco Rural credit was not efficient in Bahia, since the state did not show strength and competitiveness in relation to the other producing states, nor did it show good results in terms of credit concessions.
- adding up the amounts of financing granted for funding and PRONAF in 2012, it is perceived that there is a very great inequality of competitiveness among the producing states, since Rio Grande do Sul arises with the amount of R$ 254.7 Million, Alagoas with R$ 2 million, and Bahia with the smallest amount of R$ 5541.79. [57] Rural credit, an agricultural policy favorable to the sector, has proved more effective in other states than in Bahia. However, this state should be more encouraged because it is traditionally the producer of dark tobacco and Brazilian cigars.

Using a scale of 1 to 5 (1 = Very Bad, 2 = Bad, 3 = Regular, 4 = Good, and 5 = Very Good), farmers were asked regardless of their future vision of their perception of the scenario for tobacco and cigar producing region, resulting in an average of 2.5 in the scale, getting between bad and regular. This demonstrates the producer's awareness of the scenario and calls for action to promote the sector. In addition, 80% of producers say that tobacco production is not increasing in the region of the Recôncavo Baiano.

Urgent actions must be taken at the governmental level to remedy the problem and initiate actions that actually promote the activity, contributing to the trade balance of the municipalities involved and to the state. The regional economy and tobacco need deeper, more forceful and effective actions, as it is necessary that corrective actions be taken urgently by the secretariats and organs of the government of the state of Bahia, articulated with the Ministry of Agriculture and official banks, for the Solution of the problem and promotion of the competitiveness of the sector.

3.3. Industrialization Segment: The Production of Cigar

This segment is made up of companies that are responsible for the process of modifying raw materials into final products that will subsequently be offered to the final consumer. This sector can be organized in a handcrafted, capitalist, or cooperative way.[7]

Industrialization begins with tobacco processing, where the processes of selection, fermentation, and classification of tobacco occur through methods established by each company in order to obtain different quality standards for the marketing of the benefited leaf and for the production of the cigar. The next step is the confection of the cigar that begins with the separation of the tobacco in leaves for filling, binder and wrapper with later assembly phase, ending with the packaging of the product.

In data collection in the Federation of Industries of the State of Bahia, [58] in the Federal Revenue of Brazil, [59] in the Tobacco Industry Union of the State of Bahia [60] and in the Brazilian Companies [61], there are currently four Tobacco companies and twelve cigar producers in the state of Bahia. Part of them is associated with a class entity called the Union of Tobacco Industry of the State of Bahia (SINDITABACO-BA) with headquarters in Cruz das Almas. Of the four tobacco companies in Bahia, two are located in municipalities in the territory of the Recôncavo Baiano and of twelve cigar producers, nine are also located in that territory.

The total number of employees in these four companies in Bahia is 1473 people, of which 1250 are from the two companies based in Recôncavo Baiano, [58] demonstrating the economic and social importance of the activity for Cruz das Almas and Governador Mangabeira, headquarters municipalities of the companies.

The companies of industrial processing of the tobacco carry out various activities of beneficiation, such as: selection, handling, fermentation, classification, stripping of leaves, among others.

Within the industrialization segment, the next step, after the processing of tobacco, is the cigar production process, and several steps are taken until the final product is obtained.
The companies producers of cigar employ a total of 150 people in Bahia, being 62 in the Recôncavo Baiano, demonstrating also economic and social importance through the generation of employment and income for the municipalities of the companies.

The industrialization sector (tobacco processing and cigar production) employs a total of 1623 people in Bahia and 1312 in the Recôncavo. Besides these, there are still the indirect jobs generated in the companies producing boxes for cigars, transportation, graphics, commerce, among others.

During the research process, in consultation with SINDITABACO-BA, it was obtained that the production of tobacco benefited in Bahia fell from seven tons in 2012 to 2.1 tons in 2015, registering a drop of 70% in this period, as well as production of cigarettes that reduced from 15.5 million units in 2012 to 14 million in 2015, dropping 9.7%. Therefore, the promotion policies for the sector, occurring before and during this period, seem to have had no effect to the satisfaction.

In the production of cigar, at the state level, affects 28% rate for the Tax on the Circulation of Goods and Services (ICMS / BA) on the operations of cigarillos, cigars, and industrialized tobacco. [62] Taxes levied on cigar production make it a major fundraiser for the federal and state governments and ends up becoming a major blocker to the activity, for example when the 30% of Tax on Industrialized Products (IPI) rate is added.

Participants reported that in addition to ICMS, INSS, FGTS, PIS, COFINS, IPI and others, the obligation to pay ICMS Tax Replacement (ICMS-ST) has rendered the small company in the sector unfeasible. The cigar-producing company collects this tax from the marketing segment (tobacco shops, stores etc.) in advance without being sure of the sale to the final consumer. The risk of this business lies with the cigar company, which is a barrier for small companies in the sector, because they do not support financially until the actual sale to the final consumer.

Using the scale of 1 to 5 (1 = Very Bad, 2 = Bad, 3 = Regular, 4 = Good and 5 = Very Good), representatives of this segment were asked about the future vision, that is, about their perception of the scenario for tobacco producing region and the cigar, and as a result it also obtained an average of 2.5 in the scale, getting between bad and regular. This corroborates with the vision and the yearnings of the raw material production segment confirming the need for promotional and corrective actions for the activity. In addition, 100% of respondents in this segment say that tobacco production is not increasing in the Recôncavo Baiano region.

3.4. Trade Segment

In this macrosegment companies that are directly linked to the final consumer of the production chain make it possible to consume and trade the final product. Companies responsible only for the logistics of product distribution may be included in the marketing. This can be organized in a handcrafted, capitalist, cooperative, or public way. [7]

The use of intermediaries increases the efficiency of the distribution of goods by making them widely available to the target markets and gives the manufacturing company much more than it can achieve with its own efforts. These intermediaries can be: retailers, wholesalers, and logistics organizations. [63]

Tobacco companies and cigar producers, besides carrying out their industrialization activities, also carry out commercialization both in the domestic and foreign market. By evaluating the data searched, [58,59,60,61] of the total of the 15 tobacco companies and tobacco producers in Bahia, 12 are registered as exporters, with 11 located in the Recôncavo Baiano. Besides those, there are 5 other companies that only sell tobacco and/or other tobacco products, all located in the municipality of Cruz das Almas in the Recôncavo Baiano.

According to the companies researched on the national market, the state of São Paulo is a priority market for the cigars produced by the Recôncavo industries, followed in second place by Rio de Janeiro. The gauge of cigar more marketed nationally is robusto and second, corona. Where these gauges produced, 70% of the cigars marketed are premium products, cigars produced with whole leaves (long filler) destined to a more demanding clientele and with greater income.

Regarding the foreign market, respondents reported that Germany (66.7%) and the United States (33.3%) were the main cigar importers. Other important destinations, in descending order, for the product are Argentina, Slovakia, and France. Robusto gauge is the most exported and corona comes next. Of exported cigars, 91.7% consisted of premium products (long filler) and 8.3% of cigars constructed with medium-sized pieces of chopped leaves, called medium filler.

For the companies, the differentiation of the Bahian cigar in relation to the others is in the particularities of tobacco produced in Recôncavo Baiano, in particular the singularity of Brazil-Bahia variety, associated to climate and soil that provide differentiated flavor and aroma. Besides this differentiation, there are other competitive advantages in the production of cigar in this territory, which are: tradition of production (centenary) and the skilled labor available in the market.

In addition to Brazilian high tax rates for production of cigars, the Bahian product still has to compete with the Cuban cigars that enter the country without paying import tax. These imports were stimulated by the Economic Complementation Agreement No. 62 signed between Mercosur and Cuba (07/21/2006) and by the bilateral agreement BRAZIL-CUBA (Decree nº 6.068 of 03/26/2007). The document and Annexes I and III of Economic Complementation Agreement No. 62 inform that the Cuban cigar is exempt from tariffs in the trade established with Brazil. [64] In this way, it is difficult to compete in the domestic market with Cuban cigar under the terms imposed by the Brazilian government and Mercosur. This condition interferes in the competitiveness of the BCPC, because without protection, it can generate serious consequences, and it is possible that this situation contributed to the crisis of the sector in the Recôncavo Baiano.

Considering a historically established production chain, with quality product, with 1623 people employed in the
industrialization segment, not counting the number of direct jobs in other segments and the indirect ones, it becomes essential to establish restrictive measures to import the Cuban cigar. Such measures could begin with the establishment of import taxes as a recourse of defending the BCPC, the local economy, and the social environment.

Analyzing the data of the Foreign Trade Information Analysis System, in 2015, 5.4 tons of cigars and cigarillos of Cuban origin imported into Brazil, without any tariff, with the value of approximately US$ 1.3 million (FOB), while Bahia exported to other countries of the world the equivalent of US$ 365 thousand (FOB), closing in deficit of approximately US$ 956 thousand. [49] Considering the period from 1997 to 2015, in the years of 1997 and 2006 the value of exports of cigars and cigarillos from Bahia was greater than Brazil imported from Cuba. However, in the other 17 years the balance was negative due to the prevalence of imports of cigars and cigarillos from Cuba to the detriment of the products of Bahia. During this period Brazil imported the cumulative total of 119.3 tons of cigars and cigarillos, making an annual average of 6.3 tons. [49]

Bahia exported US$ 5.4 million (FOB) of tobacco to the Dominican Republic in 2015 and Brazil imported from this country the equivalent of US$ 24.9 million (FOB) in cigars and cigarillos. In the same way, with the Netherlands, Bahia exported US$ 2.7 million (FOB) of tobacco and Brazil imported US$ 2.5 billion (FOB) of cigars and cigarillos. Germany appears, respectively, with values of US$ 1.8 million (FOB) and US$ 10.4 billion (FOB). [49] Brazil and Bahia continue to be major exporters of raw materials, because instead of promoting value aggregation by stimulating the Bahian cigar industries to export the finished product, they prioritize tobacco exports.

The total value, US$ (FOB) of exports of Bahian cigars and cigarillos to international markets dropped by 79% in the years from 1997 to 2015, corresponding to a very large loss of capital and interference in the balance of trade of Bahia, and in the traditional cigar-producing region, Recôncavo. Measures are needed to change this current framework with reviews of Brazilian public policies aimed at promoting and protecting the sector.

Even with the drop on exported value, the main market for Bahian cigars and cigarillos (retail or wholesale) in the period from 2012 to 2015 was the European Union, while the South American countries were the second, and the third was the North American Free Trade Agreement Trade (NAFTA). In 2015 the European Union imported the equivalent of US$ 218,4 thousand (FOB). [49] If the European market has been importing the Bahian cigar for quality recognition, governments need agreements that will further facilitate sales.

Therefore, there is a need for actions and measures to valorize the product, such as the Geographical Indication and international promotion, as strategies to increase the competitiveness of the product of Bahia in the world market. If Brazilian coffee is valued and promoted in the international market, it is time to value and publicize the centenary cigar from Bahia and Recôncavo, because it presents unique characteristics in the world.

4. Final Considerations

In the evaluation of BCPC, the maintenance of rural producers and companies to meet the internal and external market, given the differences in stimulus to competitiveness, will depend on a thorough evaluation of the public policies that are in force. Therefore, it is necessary to verify the obstacles and misconceptions existing in the policies established for the sector, which did not prove to be egalitarian, since for Bahia and consequently for the Recôncavo, the policies did not have positive effects that provided a better competitiveness, nor the Development.

The Bahia Recôncavo presents a well-structured and historical chain, composed by rural tobacco producers, most of whom are small producers and made up of several companies consolidated in the market that benefit tobacco, produce cigars, and market in Brazil and abroad. In addition, some of component companies of BCPC are part of a trade union organization that promotes and strengthens productive activity. This activity generates employment and income in the region from the consumption of inputs for tobacco production to the commercialization of the final product. The BCPC showed significant importance both for the balance of trade of Bahia and for the municipalities that produce in Recôncavo, with a reflection on the GDP of Agriculture.

The Agricultural Credit showed a clear difference between the states and regions of the country for the production of tobacco, leaving Bahia with very low rates of concession. Therefore, it is necessary to review the criteria, incentives and promotion of credit in the banks of the tobacco producing states and cigars, especially for PRONAF. The program must attend to family farming places that grow tobacco in Bahia, especially in the Recôncavo. It is necessary more commitment from governments, federal and Bahia, to solve the problems of the sector, since the governments of Alagoas and the states of the Southern region have been more efficient in promoting access to credit for the actors in the tobacco production chain.

The values of taxes collected on cigar production, with high rates and the obligation to pay ICMS Tax Replacement (ICMS-ST) has made the small company in the sector unfeasible due to business risk, a fact that contradicts the small company incentive policies in the country. Therefore, taxes for the sector are barriers to production and at the same time become a major source of revenue for governments. It is necessary for governments, especially Bahia, to evaluate measures to reduce rates to stimulate activity by allowing the product to remain in the market with longevity. Otherwise, it could destabilize the production chain with possibilities of economic agents' failure and consequent dismissals, causing damage to the social environment, changes in the regional economy, as well as interfering with local identity and culture.

Regarding trade agreements that exempt Cuban cigar imports from Brazil, it is necessary to revise the terms and establish a consistent tariff on the importation of this product in order to protect the economic agents of the BCPC and the social environment which is directly or indirectly linked to cigar production. For Bahia, it is
necessary to establish a fairer market for the national cigar with measures and protectionist vision, thus, avoiding the facilitation and the increasing entry of cigars imported from Cuba.

Brazil and Bahia need to promote and stimulate the export of finished products, that is, with added value, giving priority to the export of the Bahian cigar and not to their tobacco. For this, stimulus policies for the Recôncavo cigar industries are necessary, since it does not make sense to import cigars that use tobacco from Bahia in its composition.

The vision of the future from bad to regular, expressed by the chain actors about tobacco production and cigar in the region, highlights the need for promotional and corrective actions for the activity. It is up to the governments to analyze the obstacles of the activity in a joint way with the actors, institutions, sector associations, class entities, and others, with the objective of developing means and policies in an effective way that leverage the chain and territory of identity of the Recôncavo Baiano.

The creation of specific policies to valorize and promote the Bahian cigar in the foreign market is necessary and essential to reverse the decline in exports of the product. This action should be jointly orchestrated between the governments of Bahia and Brazil.

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