

REVIEW ARTICLE

DIAS, Deusira Nunes Di Lauro ^[1]

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SUMMARY

Because it has favorable conditions for the development of eucalyptus culture, the extreme southern region of Bahia has attracted, in the last three decades, large companies that have seen here an opportunity to cultivate and benefit this essential raw material in manufacturing pulp and paper. However, with the arrival of these companies, there were many transformations in the rural landscape that directly influenced the structure of urban life of the communities located here. Even after so long in the region, the culture of this vegetable still causes many discussions about its effects on the organization of space, on the generation of work and income, as well as in the natural space. Like other products benefited in the region, eucalyptus is the result of the transformations of spaces open to development, widely supported by the Brazilian government since 1974. For these reasons, it is intended here to discuss and understand this dialectical relationship between eucalyptus and the environment in the perspective of thinking alternatives that reduce the impacts caused.

Keywords: Eucalyptus culture, transformations in the landscape, environment.

INTRODUCTION

By historically analyzing the presence of eucalyptus not only in the extreme southern region, but throughout the Brazilian territory, it is found that this vegetable has been part of our economy since 1904, when agronomist *Edmundo Navarro de Andrade* presented eucalyptus to the Brazilian lands, with the aim of guaranteeing the Paulista Railway company. Later, between 1975 and 1979, through the *Second National Development Plan*, the government promoted investments in paper and paper. Thus, eucalyptus, in addition to finding climatic conditions favorable to its development, conceived a plan to develop its officially supported crop.

It is known that eucalyptus influences various sectors of life in a society; however, in addition to environmental issues, what stands out in the frequency of these multinationals that benefit this product included in a territory is the determination of their ability to generate admissions in the workplace. It is common to expect an abundant supply of jobs according to the emergence of a large company. This expectation is affirmed by Dias. (2001, p.324) with the following explanation: "in the evaluation of the population, there is a favorable expectation regarding the implementation of these enterprises, since, according to the population consulted: they will generate jobs, improve infrastructure, encourage activities related to trade and services, etc." Communities, in general, still claim the scope of scope that can be generated with the company's installation has the possibility to influence production within the region, and not limited only to the employment opportunities it provides.

The participation of the Northeast Region in the production and processing of eucalyptus, in which the Extreme South of Bahia is included, actually had its introduction in national industrialization during the early 1970s. This gave a great breath to the pulp and paper market, and in the 1980s the Extreme South of Bahia became too attractive in the eyes of the reproduction of eucalyptus forests.

Thus, in an increasingly intense way, a transformation of the natural space of the region is perceived, and this is due to the high investment of national and multinational companies that observed in eucalyptus a possibility of obtaining profits and generating more jobs. It is also worth mentioning that the Region of Extreme South Bahia has a privileged geographical position because it is inserted in one of the most important passages of BR 101, tasked with making the transition between the southeast and northeast of Brazil.

The goal of whatever business group is, is the profitable income of its production. In the scenario of eucalyptus multinationals, productivity has direct link with the edaphoclimatic cohes located in the Extreme South of Bahia, as well as its strategic geographical positioning. Consequently, dependence on factors outside its solution range results in decision-making blockage - productivity success depends not only on building or a body of workers, but also on nature. Exactly why the relevance of technical staff

(municipal or state) is conjectured to carry out the negotiations of the conditions of installation of the company in the municipality in view, or to ruminating a planning for the entire region. Nevertheless, a quality of openness of the territory in favour of this activity happened without considering the socio-environmental repercussions, which was somewhat articulated – that is, it was not happened by chance; the region is treated as prepared for the receipt of eucalyptus. Pedreira (2004, p.1010) dissertations on the union of elements: such as the permanence of areas suitable for reforestation, major edaphoclimatic conditions and tax incentives, in addition to the competition pattern of the pulp and paper segment – factors that conditioned in a mutual way for the Extreme South of Bahia to become an area favored for the growth and development of forest activity and pulp agroindustry. It is also noted that these companies prioritize the natural conditions of the region, in addition to the tax incentives provided. The geography of the environment has favoritism the production perimeter and the flow of its products, and for this reason, companies aim to “the search for the desired added value, value locations differently. It is not anywhere that matters to such or which firm” (SANTOS, 2000, p.33). In this case, there is no adequate justification for the exemption of taxes for an extensive period of activity of the company in the region, considering the profits that can be generated for the municipalities of the Extreme South Of Bahia.

In 2001, “export of pulp by Bahia occupied third place in the state’s export agenda” (SILVA, 2001, p. 70), which makes it questionable not to reduce regional and local underdevelopment even with the suggested economic activity, proving the fact that that no business body (or economic activity) is able, in isolation, to end the poverty of a place or region. According to Cerqueira Neto (2008, p. 106), the inability to seek alternatives that insert the unemployed population into the economy results in the accommodation of political leaders with speeches of business bringing to the citizen, ignoring the negative consequences of social, environmental, cultural and economic areas to be generated. Thus, dominant in the tibieza of public administration, companies establish their own rules through politically fragile territories, creating new regions that in turn frame regional development for the responsibility of the groups companies in question.

The entry of large eucalyptus companies in the Extreme South of Bahia did not result in the emergence of any new municipality, however, a significant change in the dynamics of certain districts that caught routines of small towns was noted. There is then a catastrophic surplus in considering that these same districts, which once enjoyed quiet environments, suffer to meet the expectations of corporations greater than them.

MAIN IMPACTS OF EUCALYPTUS CULTURE

For Dias, N. (2001, p. 322) there is a deep provocation of transformations in his sociocultural organization, since these projects instigate the population, and consequently different customs and routines in relation to those foreseen in the region. Thus, it is possible to show that, in all its resorts, the government becomes

omisso of the process of eucalyptization of the region. The expansion of eucalyptus production in the Extreme South of Bahia is correported with political-economic ricketization, which is subject to questioning, considering mainly the citizens. According to Dias, N. (2001, p. 322), the impact of such programmes on the precarious recognized infrastructure suggests a significant wear and tear of services made available to the population, specifically those that have not been included in the new activities related to the planting and processing of eucalyptus. The interference cited by the author is not exclusive to the eucalyptus enterprise, being a problem proper to territorial disorganization, whether on a local or global scale. There are no projects in the Extreme South of Bahia aimed at surveying cities, being part of a network of places that have been shaken since the first economic activities.

The eucalyptization of the Extreme South stems from several historical factors related to territorial occupation in Brazil. Among the adversities caused by the implantation of eucalyptus in the region, high consideration is taken: the growth of prostitution and crime; the deterritorialisation of part of rural society; and finally, the increase in real estate and disruption in the ecological environment. It is necessary to consider that eucalyptus began its activities in a culturally and politically despised and environmentally debilitated region, corresponding to the exploitation of the Atlantic Forest too much. Therefore, it is in the Extreme South of Bahia that eucalyptus thrives on fertile land and with good conditions for expansion, provided for several reasons, such as: the financing of economic activity through the Federal Government, through the release of funds from the BNDES; the obstacles of obtaining credit by the small farmer, who in turn does not obtain reasonable conditions to improve his production, remaining with the tendency to dispose of the land, becoming unemployed; the swelling of the cities and; decreased rural production. Until the activities in question appeared, others were also in the regions responsible for rural urbanization and also for damage to the environment and the men who exploited the local nature.

Therefore, these facts prove that these transformations, despite having driven local trade, also generated environmental problems hitherto considered small proportions such as rural exodus, environmental degradation, among others. In addition, many municipalities have obtained their urban structure modified by social problems such as disorderly growth in cities, lack of infrastructure, increased crime, etc., causing the region much more problems than solutions.

It is identified as soon as cities are not ready to receive the new economic cycle that, even bringing qualified professionals, capable of consolidating part of the Extreme South of Bahia in the world economy, also provided the arrival of people with low or no degree of study, swelling the periphery of cities or promoting the emergence of new neighborhoods in the invasion model. Thus, in view of the flaws in spatial planning neglected by politicians, as well as in the proximity of eucalyptus industries to the communities surrounding their territory.

Also according to the Institute of the Environment of Bahia, a series of socio-environmental conflicts in the region have already occurred because of land issues, problems related to coal production, timber theft,

deforestation, degradation of water resources, not compliance with environmental constraints of permits related to legal reserves and areas of permanent preservation, use of chemical inputs in plantations, migrations and rural exodus.

Another impediment motivated by eucalyptus monoculture is the mitigation of agricultural areas, agricultural production and jobs. The situation affects more than 24 municipalities, such as Nova Viçosa, Alcobaça, Caravelas, Mucuri, Eunápolis and Santa Cruz de Cabrália.

Despite the official structure and economic vigor of the sector, the agro-industrial expansion linked to large-scale monoculture is an open field of criticism proposed by social movements, non-governmental organizations and also by authorities – such as prosecutors federal prosecutors. Several civil society entities, such as the Alerta Network, however, produce social discourses, advocating the advancement of monoculture on territories occupied by indigenous peoples, quilombolas and peasants; also ideas with negative impacts on the environment, such as reducing biodiversity and depletion of water resources in areas where eucalyptus plantations thrive – directing support that goes against the Green Desert and the defense of the discourse of environmental sustainability and social responsibility, very usual in the business and governmental environment under the codename of “reforestation”.

Eucalyptus is considered an exotic tree because it is not native to Brazil, that is, it is not part of the biomes hitherto planted, because it comes from Australia. There is much controversy involved in the sector related to the environmental impacts resulting from eucalyptus planting and, above all, to the assessments that this exotic tree consumes a lot of water and contributes to the reduction of the flow of rivers and streams, and may in turn achieve the complete drought. The business sector advocates the activity of “planted forests”, as an environmentally correct resource, enumerating positive factors such as the reduction of carbon dioxide and the restoration of areas destroyed by pastures; also denies the degradation of water sources, arguing that eucalyptus plantations do not consume much water.

Environmentalists and land-fighting entities call the Green Desert plantations, and argue that monoculture cannot be considered as “forest” according to the little biodiversity in their environment. These entities seek to protect traditional communities and small holder by following ideas that plantations can contribute to hydrological impacts. The term monoculture eucalyptus is used by reputing a forest as a sinus of immense diversity of fauna and flora, different from what occurs in the plantations of such forests. The intense use of pesticides to get rid of grasses and other plants contaminates the soil, and nothing else fertilizes the earth – thus becoming the popular “*green desert*”.

The expression green desert began to be used by environmentalists to attribute the monoculture of large-scale trees to pulp production, and fit the effects caused by it to the environment. Eucalyptus, pine and acacia are the most planted trees for this type of cultivation. (MEIRELLES, 2006).

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In addition, the growth of eucalyptus monoculture in Brazil is accompanied by the prolongation of complaints and the undeniable violations of labor legislation and human rights.

Eucalyptus trees grown in Brazil are of a rapidly growing lineage, that is, they produce more biomass per year. Excessive water use, when compared to native vegetation, is necessary for its planting, resulting in a significant decrease in water resources from the basins in which they are installed. Inadequate administration of plantations can also contribute to the emergence of erosions and loss of soil nutrients. Large-scale monoculture cultivation is pastoral in nature, soybean farming or a sugarcane plantation, cooperates for an imminent wear of natural resources essential to the preservation of the physical fullness of water sources. Eucalyptus planting is located in environments with a vast history of disobedience to environmental legislation, in which there has been damage gathered for decades, provided by the imperfect use of agricultural space. Water sources and soil are even more deteriorated due to the extent and concentration of trees growing rapidly. The size of the plantations becomes a factor of extreme importance, considering a study conducted by the Luiz de Queiroz School of Agriculture of the University of São Paulo (ESALQ/USP), which supports the lack of significant impacts from the beginning where forest plantations occupy up to 20% of the area of the watershed in which it is located. However, eucalyptus plantations occupy immense areas, and disrespect to the predicted limit causes environmental changes.

The Extreme South of Bahia is not an exception, being part of other regions that are also affected by the great development of projects and also with large and sensitive commutations in the middle. The urbanization of the Extreme South of Bahia grew without planning, adding to the historical accumulation of investments in Salvador and adjacencies, as Silva quotes; Silva (2003, p.104): “the urban issue in Bahia is no longer limited to Salvador and a few cities, as in the 1960s; today it practically manifests itself throughout state territory (...) even at the ends of the territory”.

Many companies make uses of arguments in favor of the use of monoculture in their own defense, supporting the discourse of social responsibility and the practice of harmonic action with the environment and contribution to environmental protection. It is inevitable to ignore negative criticism, since it is clear that eucalyptus culture produces various social losses – the generation of few jobs; obstacles in agrarian reform – for demanding a large planting area, resulting in large population voids. There is also the damage resulting from the mismanagement of crop producers, generating degrading impacts on soil and water consumption, negatively affecting biodiversity. Considering the current increase in eucalyptus plantations in the country, the aforementioned social and environmental losses are promptly noticed to the point of the “green desert” becoming a characteristic effect of Brazil.

These impacts already mentioned can have irreversible consequences for communities if there are no public policies that ensure continuity of progress, as well as the maintenance of biodiversity in the region.

POSSIBLE SOLUTIONS

Much has been questioned about the possibilities of harmonic coexistence between eucalyptus cultivation and environmental preservation, as it is understood that this raw material is already part of life in society and that there are no other alternatives for the production of paper and that have such a great use. However, it is urgent and necessary to find solutions, viable alternatives so that their impacts are not as aggressive and decisive for future generations.

An improvement in the relationship between municipalities and industries is needed, aiming at joint production of information, opting for the foundation of study centers, encouraging knowledge in order to reduce conflicts and find practical solutions to end deforestation, the stocking of the areas and preserve the region's water resources. When Lefebvre (1999, p.51) cites that "currently the urban phenomenon surprises by its enormity; complexity goes beyond the means of knowledge and the instruments of practical action", refers to the need for engagement by various paths of the process, seeking to understand the dynamics, even if the transition of the environment occurs daily by the Planet. Santos (1996, p.67) justifies that the means of human work becomes more complex with time and innovations coming with it, demanding changes, and through them, a new means is made, a new technique, and thus we see the replacement of one means of work with another, a territorial adjustment on the other.

The following actions are suggested in an attempt to minimize the impacts of eucalyptus culture in the extreme southern region:

- Creation of stricter laws that include greater supervision and control in production areas, as well as stricter punishments to those who violate agreements with local governments;
- Creation, on the part of companies, of technological centers working in the development of research and actions that contribute to the preservation and maintenance of natural resources;
- Projects in partnership with communities that promote awareness in schools, local trade and companies in the region;
- Public policies that promote tax incentives to companies that commit to environmental preservation;
- Management of cultivated land so that the soil can resettle without harm to the environment; Etc.

For this, the most important thing is that everyone, entrepreneurs, government and community maintain a permanent dialogue to together build strategies, public policies and direct actions aimed at preserving the environment and maintaining human life.

CONCLUSION

There is no hesitation that the activity in question arouses much interest from the Extreme South of Bahia. Considering all dimensions, this is the one that uses the transformation of cellulose as the main means of trade. Eucalyptus revolutionized the field and city of the regions about its plantations and industries, as well as caused contentment and challenges in different social areas, and its production refers to a new economic cycle of the Extreme South of Bahia, presenting controversies as well as any cycle that settles in a new region. There is no prediction of how long the eucalyptus cycle will last in the Extreme South of Bahia, however it is necessary to consolidate new policies aimed at effectively integrating between companies and municipalities.

In the research conducted by the IMA, for example, the rectification of the environmental licensing system (state and municipal) for planting, the development of a standardization program to guide the state and municipalities to a performance the establishment of a development program related to the pulp, pulp and wood production chain in the south and extreme state. In addition to presenting companies with a fairer way of sharing, with society, of the benefits obtained by the use of biodiversity in the region.

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^[1] Master of Educational Sciences (Grendal University), postgraduate in Portuguese Language (Faculdade Vale do Cricaré), graduated in Portuguese Language and Literature (State University of Bahia – UNEB).

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