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Family Farmers, Social Inclusion and Biofuels: In Search of an Intersetorial Action Policy

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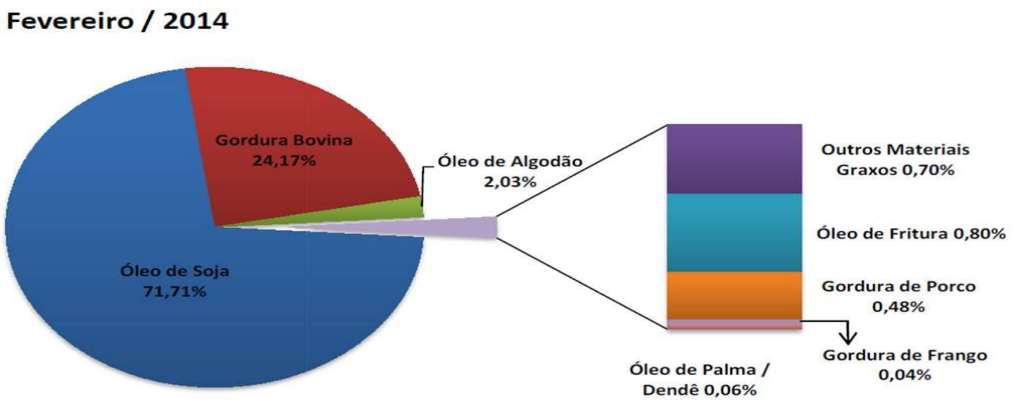
Abstract: This article presents a reflection on the production of biofuel as an economic practice capable of promoting the social inclusion of the family farmer from the development of social entrepreneurship. An analysis of an article and other authors dealing with intersectoriality will be made as an essential element for the strengthening of the individual in society. In the texts consulted we find authors who present a theoretical background on the Brazilian energy matrix, the production of biofuels, Brazilian legislation, intersectoriality and examples that favor the family farmer in the search for their social inclusion through a support network.
Keywords: Biofuel, Family farmer, Social inclusion, Intersectoriality

INTRODUCTION

Discussing the issue of biofuels and sustainable development should be based on the assumption that the two major purposes of biofuel investment are based on the environmental need to minimize the emission of greenhouse gases (GHG) and the search for alternative solutions to reduce Dependence on fossil fuels, in particular oil. However, it is not possible to visualize the economic market's concern with the labor that deals with the production of biofuels. The main concern is focused on the application of Law 11,097 / 05 (dealing with the National Biodiesel Production Program), which seeks to favor the small producer from Family Agriculture, based on exemption of some taxes and incentives in production.

The great governmental interest in biodiesel production was initially with the castor bean crop, but the raw material is not efficient and expected for the market, being surpassed by the soybean crop that is currently the main raw material in biodiesel production [1].



Source: www.anp.gov.br/boletimmensal

Given the soybean crop and the need for land for its production, it is visible in between lines that family farming will face challenges to be able to dominate this production. For the farmer can not use his property only in the production of raw material for biodiesel, he must allocate part of the land to the production of food. Then, one of the great debates in the incentive of the planting of raw material for the biofuel: to guarantee the production of foods.

THE FAMILY FARMER AND THE PRODUCTION OF BIOFUEL

For biofuel eligibility it is important to realize that there are two responsibilities that must be fulfilled: reducing greenhouse gases and replacing oil. The first responsibility stands out the ability of these energy alternatives to absorb carbon (CO2), which guarantees an excellent environmental balance against highly polluting fossil fuels, and the second responsibility allows us to predict long-term non-dependence on oil, despite Brazil has a large oil reserve and a good infrastructure for the production, distribution and trade of oil.

> [...] the peak of world oil production may already be occurring since 2006 or will occur by 2010. This does not mean that supply will decrease immediately but that if it stays at current levels or if it grows as much as expansion of demand, existing reserves will be depleted more quickly [2].

In view of the possibility of the exhaustion of fossil fuel production due to its exploitation, it is necessary to invest in another energy matrix that guarantees solidity in the international market. At the moment, biofuel is highlighted by both the experience gained in the Proálcool program (1975) and the environmental appeal propagated by the UN (through international agreements) and existing environmental entities.

The great challenge lies in the social inclusion of the family farmer in the development of this new energy matrix associated to the social and economic empowerment of low income communities living in agriculture, especially in the North and Northeast of Brazil.

But, after all, what is biodiesel? It is a fuel that is currently added to diesel and marketed at fueling stations for automotive supply. This product is made from the transesterification of vegetable oil and can favor the economic development as soon as it exploits the specific raw material of each region; It is worth mentioning that it is a renewable energy, low pollutant and little emitter of CO2.

Discussing biofuels makes it possible to allow spaces for the insertion of the rural worker in the policy disseminated by the PNPB (National Biodiesel Production Program) regarding the rules of adhesion of the family farmer in this production. However, we must briefly consider that in this category of biofuel what we have in international use are ethanol and biodiesel, where the former has more experiments and uses than the latter that despite the advances in research, still can not compete In production with the first.

Soon after the oil crisis in 1973, Proálcool was created in 1975 with the premise of reducing the import of oil and encouraging the production of sugarcane. In the 1980s, the State of São Paulo consolidated its leadership in developing technologies and, with the government subsidy, started exporting ethanol in 1978. However, with the stabilization of oil prices (1986), there was a Reduction in investments and stagnation of production occurred; Without mentioning that between 1980 and 1990 there was a shortage of fuel alcohol and Brazil had to import to supply its fleet of vehicles, in front of it, the automakers reduced the production of cars to alcohol and at the same time, the mill owners began to destine their production to the sugar manufacturing that for the market was more profitable and was in high [3].

With the study of the trajectory of ethanol in Brazil, it is perceived that the production of biofuel suffered an initial frustration: the replacement of the fossil fuel. However, it was possible to identify that despite the crises, Brazil was able to develop technologies to strengthen ethanol, which now allows its 25% addition of gasoline at gas stations. Certainly, there is a lower incidence of CO2 emissions when this addition, but the dependence of oil for its use is also clear; even with the advent of cars with Flex engine in 2002.

The technological advance in the production of ethanol in Brazil is consolidated, allowing gains in the industrial area and agricultural productivity; with the support of genetic engineering we have the genetically modified cane that guarantees reduction in production costs.

The need to discuss ethanol is to signal that new technological advances have been adhered to since Proálcool as well as the exploration of new crops to enrich the country's energy matrix. In this study we have biodiesel, which despite initial failures to replace diesel, its apogee emerged in Germany when it became an alternative to strengthen family farming and social inclusion. For Brazil, this was perfect, since it suited the goals of the government of Luis Inácio Lula

da Silva. With this guidance we have in 2004 the official launch of the National Biodiesel Production Program and its regulation by Law 11097/05.

> The social inclusion component of the program was established through the tax model, in order to favor the participation of family agriculture and to develop the North, Northeast and semi-arid regions (Law 116-116). The exemption from federal taxes is total for biodiesel produced and for any oleaginous from family agriculture in these areas, and partial if it is produced from any raw material obtained from family farming to other regions of the country. Access to the federal tax exemption is, however, conditional on the concession of the Social Fuel Seal to biodiesel companies [...].

When tax benefits are stated, it is important to point out that they will only be granted from PNPB regulations to industrial biodiesel producers that have the Social Fuel Seal. In order to acquire this seal, these producers will have to buy their raw material from family farmers, guaranteeing them technical support with the establishment of a contract. Even the financing is tied to the receipt of this seal. It is believed that this provides a guarantee to the family farmer that the industrial producer will consume his raw material which prevents the sensation of insecurity in the acquisition of the products coming from this agricultural practice.

The Ministry of Agrarian Development (MDA) in November 2015 made changes to the acquisition of the Social Fuel Seal in the Official Gazette of the 27th when it lowered the ordinance applying new calculations to encourage the acquisition of raw materials from the Semiarid region, West and Southeast regions and in the use of alternatives to soybean in the production of biodiesel. According to André Grossi Machado, MDA's Biofuels General Coordinator, "the ordinance does not require the regional purchase of oilseeds, but the proposal is to encourage companies to work with local family farmers and increase the purchase of other oilseeds such as canola, sunflower, Macaúba, castor, etc."

According to data from the MDA, currently, 42 companies producing biodiesel have the concession of the Social Fuel Seal, together they commercialize approximately 99% of the national production. In total, about 85 thousand family farmers and 77 cooperatives are benefited by the Program.

Silva and Marin [4] carried out a research on the socioeconomic impacts of the eucalyptus crop in the municipality of Aratiba-RS and found that there is an incentive for the family farmer of the Municipality and Cooperativa Tritícola Erechim Ltda. (COTREL) in this crop. In this municipality, the cultivation of eucalyptus is an important alternative of income and employment, although it is evident in the research, the substitution of other crops that favor food security, like corn. In the practice of eucalyptus cultivation in this municipality, social impacts were identified: creation of new jobs, conflicts between rural neighbors (because the shadow of the eucalyptus forests interfere with the agricultural culture and the decrease of the flow of water) and the rural exodus.

INCLUDE ... IS LIVING IN NETWORK

The article by PEIXOTO [5] discusses the question of the inclusion of the family farmer from the practice of biofuels cultivation and gives us an example of the possibility of articulating institutional competences for the development of sustainable agro-industrial technological practices in the field of Family Agriculture and Biodiesel production. Based on this author, in order to take social inclusion of the family farmer, a new partnership is necessary to ensure the full development of agricultural activities, from technical capacity to commercial logistics. In this way, the action must start from the creation of a Network that will promote the technological and agronomic development added to a social support based on the associativism and cooperativism, based on the National Program of Production and Use of Biodiesel (PNPB).

In Brazil there is a great appreciation of the Executive Power that, according to CARVALHO [6], is due to social rights having been implanted in dictatorial periods. Thus, the people are in search of a political messiah or "savior of the fatherland". This way of thinking weakens the legislature that has an auxiliary role in establishing democracy and building social rights, as well as making the empowerment of social movements unfeasible.

With the difficulty of understanding the "democratic making", the population needs localized and emerging actions of the public power regarding the resolution of problems related to health, education and security. The enactment of laws on the inclusion of the family farmer seeks to ensure compliance with the 1988 Citizen Constitution which states: "Everyone is equal before the law." However, for cultural and historical reasons, society needs to be guided to respect this norm and to direct that only through public policies that contemplate it, can people enjoy a democratic dawn and a defender of democracy that promotes equality of rights and Respect for human dignity; already guaranteed in the Universal Declaration of Human Rights [7].

When it comes to fundamental rights and guarantees it is necessary to understand that there are differences between rights and guarantees. The rights are optional and legally speaking, they are available to natural or legal persons; however, guarantees are instruments that are available to people to ensure the use, enjoyment and enjoyment of rights [8].

In this dialogue of guarantee of rights, it is important to highlight the characteristics of Art. 5 of the Federal Constitution: imprescritibility, inalienability, inalienability, inviolability, universality, effectiveness, interdependence and complementarity. In this study, will be provoked unremitting, this characteristic reveals that no person can relinquish rights and guarantees, although in some cases there may be withdrawal [8].

> Art. 5 Everyone is equal before the law, without distinction of any kind, guaranteeing to Brazilians and foreigners residing in Brazil the inviolability of the right to life, liberty, equality, security and property, as follows: [...]
> VIII - no one shall be deprived of rights by reason of religious belief or philosophical or political conviction, unless he invokes them to exonerate himself from a legal obligation imposed on everyone to withdraw from performing an alternative provision, fixed by law;
> XXI - the associative entities, when expressly authorized, have legitimacy to represent their judicial or extrajudicially affiliated members [8].

In order for public policies for the family farmer to be efficient and effective, it is necessary to think of intersectorality as an attitude that minimizes bureaucracy in the acquisition of public services. The individual must be seen in an integral way and his / her demand to be treated in the totality and not, in the fragment, then, it is suggested: the intersectoriality. To think of intersectoriality allows inferring that the individual will be understood in its totality, since, in order to solve some demands, it is necessary the support and commitment of several public sectors for the effective resolution of the presented problem. Networking is required. Since the worsening of poverty and social inequalities as a result of the fragility of the Brazilian social protection system, the emergence of intersectoriality as the protagonist of contemporary social policy [9].

> In effect, the concept of intersectorality is primarily related to the discussion of interdisciplinarity, which, being older and with greater bibliographical production, serves as reference. Hence the importance of the explication of the main features of interdisciplinarity as the epistemological paradigm most worked, although not exhausted, of the conciliation of knowledge with a view to the more dense and comprehensive knowledge of complex realities [10]..

The federal government currently presents some official programs with intersectoral design, such as the Family Health Program and the Bolsa Família Program. All these programs seek an intersectoral articulation between the different sectors responsible for promoting social and public policies in the states of the federation through political dialogue. Why not insert the PNPB in this intersectoral articulation? Probably the involvement of the public power in actions like this would take off projects such as the Araguaiana Biodiesel, quoted in this work

The MDA should have an intersectoral action through partnerships established with several social and institutional segments. The perception of the health problem due to the living conditions of individuals, family, community and work can be an intersectoral action between this and other ministries in fomenting the practice of family agriculture.

According to Machado [11] working on the perspective of intersectoriality allows the opening of a space for dialogues and negotiations of conflicts. The world has undergone several transformations and more and more the need arises to work with articulated actions in favor of the resolution / routing of the social problems of the population.

It is important to note that this project developed in Pará presents a concern of the academic community that mobilized a group of partners that aim to develop local family agriculture with the diversification of cultures, markets and producer empowerment in the process of administering mini-plants to dynamize the Economy with the generation of income of a sustainable character.

This project started in June 2006 when a group of researchers from the Museu Paraense Emílio Goeldi (MPEG), in partnership with the Ministry of Agrarian Development (MDA), developed a project to study biodiesel in Pará, with the purpose of encouraging the production of Energy crops: sunflower (main), jatropha and castor bean from the perspective of family farming. Currently, this project is called Araguaiana Biodiesel, which, although it maintains a large part of the researchers and institutions that participated since the initial stage of the project, has not yet had the expected development, since they expect the practical activities to begin in order to achieve its real effectiveness.

The Araguaiana project has as premise to respect the cultural and environmental conditions of rural producers, which brings us to the idea of sustainable development. That is, man must explore the environment in a way that allows future generations to enjoy the local environmental contributions. In this project, the concept of social entrepreneurship is clearly perceived in this project, due to its search for change without altering the identity of the agricultural system, seeking to feed the family and promote the commercialization of surplus production.

In order to meet one of the PNPB's primary objectives of reducing GHG emissions, it is clear that in this example of Pará, one of the main concerns is sustainable development. Speaking about sustainability is easy, but practicing it depends on infrastructure and socio-environmental commitment. Thus, it is suggestive that the development of a network will enable the family farmer to have entrepreneurial status, since he will have all the technical training and legal contribution to the flow of his production and will at no time compromise the environment and food production.

Considering sustainable development and Agenda 21, as well as international environmental agreements, it is clear that combining development and conservation of resources is a major challenge for humanity. That is, to exploit resources in a planned, rational and limited way without destroying the resources necessary for the lives of future generations. However, from the example of Araguaiana Biodiesel it is verified how much is possible, but, the commitment of the entire Network must be to the end, because, in what was reported by the author studied, the project has not really taken off due to the some partners. So, in order to promote a structural change in environmental issues we must first make possible a cultural change capable of valuing the environment to the detriment of the profit exacerbated by industrial entrepreneurial actions that do not value sustainable development and perhaps Agenda 21.

CONSIDERATIONS

Working the issue of inclusion from the Brazilian energy matrix brings us the only possible path: biofuels. When we speak of new forms of energy generation we must articulate possibilities for sustainable development and strengthening of the rural man.

Throughout the text we discuss the need for environmental preservation as well as the Brazilian legislation that supports and encourages the family farmer to produce biodiesel. It is clear that it is necessary to develop new research in this area, which advances in particular from the Proálcool, to ensure the planting of new oil crops and other generations of fuels (algae, bagasse). However, one should not lose sight of the social inclusion of the family farmer, with a view to producing biofuel without compromising food production, and, moreover, stressing that for the farmer's success an entrepreneurial vision is needed with intersectoral support from the public Power.

Social entrepreneurship is an example of the Araguaiana Network, based on Peixoto's article [5], which indicates the need for a support group, known as Rede, to offer the family farmer the entire administrative infrastructure capable of promoting inclusion Desired. It is verified that from the instrumentalization directed by the Network, in an intersectorial view, the family farmer will be able to produce with autonomy and promote social inclusion.

In the research carried out by Silva and Marin [4] the support of the municipal power and a cooperative in the social inclusion of the family farmer in the region of Aratiba-RS was explicit, despite the conflicts developed among the neighbors of the rural area who need a new study and possible competent bodies.

At the moment that the family farmer is in the condition of entrepreneur and widely supported by an intersectorial project of public character, biodiesel production is the viable route for this social inclusion. It is important to emphasize that the Brazilian government has legislation that strengthens this social empowerment when it links the acquisition of the Social Seal to companies that buy products from family farmers and the constant search for renewable and non-polluting energy. For better efficiency, this legislation should be linked to other social policies existing in other ministries that would promote a broad social inclusion from food security to the health of the farmer and his family.

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