Good for whom? Reactions to oil palm contract farming in the Amazonian state of Pará, Brazil

Bom para quem? As reações à dendeicultura por contrato na Amazônia paraense

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ABSTRACT

This article analyzes the acceptance of and resistance to contract oil palm cultivation in Irituia, Pará, Brazil. Research was based on an analysis of documents and secondary data sources, and included 33 interviews with family farmers, one member of the rural workers union and representatives from municipal institutions. Research findings show that initial differences regarding the activity remain until the present. Those who defend oil palm cultivation point to its potential for improving the quality of life for regional residents. Defenders include a specific group of farmers and state government agents. Critics, those from municipal institutions, argue that oil palm cultivation is not in keeping with the local reality. A distinct group of farmers shares these criticisms and show apprehension toward oil palm cultivation.

Keywords: Oil palm cultivation. Perception. Integrated farmers. Reactions. Irituia.

RESUMO

O artigo analisa as reações de aceitação e resistência à dendeicultura por contrato em Irituia. A pesquisa contou com a revisão de documentos e de dados secundários, e com a realização de 33 entrevistas com agricultores familiares produtores de dendê, um sindicalista e dois representantes de órgãos municipais. As principais conclusões mostram que as divergências persistem até os dias atuais. Os defensores a têm como uma opção para a melhoria de vida dos habitantes da região, sendo estes os agentes do governo estadual e um grupo de agricultores. Os críticos - interlocutores de órgãos municipais - e um grupo de agricultores, argumentam que a dendeicultura não se adequa à realidade local. Outro grupo de agricultores absorveu as críticas dos representantes dos órgãos locais e têm medo de aderir a uma nova atividade.

Palavras-chave: Dendê. Percepção. Agricultores integrados. Reações. Irituia.

1 INTRODUCTION

Oil extracted from the fruit of the oil palm (*Elaeis guineensis* Jacq.) is an important commodity traded on international markets, having the highest trade and consumption levels among all comestible oils (FOSTER et al., 2011). Indonesia and Malaysia are the largest producers and together account for 85% of the world's production, which is predominantly destined for the food industry (ABRAPALMA, 2018; BORGES; COLLICCHIO; CAMPOS, 2016; FOSTER et al., 2011).

In Brazil, under the incentive of public policies, oil palm production has tripled over the last ten years. Today, Brazil is the 5th largest producer in the world - with a total of 236,000 hectares (ABRAPALMA, 2018). Pará state leads the nation in area under oil palm cultivation, with 207,000 hectares dedicated to this crop, mainly in the Northeastern region of Pará (NEP) in the Amazon (ABRAPALMA, 2018; BRANDÃO; SCHONEVELD; PACHECO, 2018).

Based on a literature review and secondary data, Mota et al. (2019) explains that the expansion of oil palm cultivation in Pará occurred over three different phases: i) an initial experimentation period, from 1988 to 1994 when crop adaption initiatives occurred in the greater Belém metropolitan area, promoted by funding agencies and private enterprises; ii) a consolidation phase between 1995 and 2009, when plantations were established in the NEP characterized by increased production levels; and iii) an expansion period that began in 2010, marked by strong federal government support (through financial resources and research) and justified by social-environmental and inclusion arguments.

From 2015 onward, the expansion oil palm cultivation slowed due to political instability in Brazil, unfavorable economic and market conditions, and the inefficiency of agrofuel policies, which generated concerns over the competitiveness of the Brazilian oil palm industry and its future prospects (BRANDÃO; SCHONEVELD; PACHECO, 2018).

Scholars optimistic about oil palm production in Amazonia point to several positive factors, including: natural conditions that favor the edaphoclimatic needs of the palm (JÚNIOR et al., 2004; KOHLHEP, 2010), its potential for the production of agrofuels (LEVERMANN; SOUZA, 2014), and the robust experiences accrued in recent decades though public and private initiatives supported by federal government programming[1]. Researchers also argue that the price of palm oil is lower compared to other oilseeds due to the amount of oil produced per hectare. They also point to the potential for generating employment and stimulating the local economy (ALVES, 2011; BECKER, 2010). Thus, programs aimed at occupying deforested areas, and with the objective of social inclusion, seek to consolidate Brazil's position as an agroexporting and energy power (ALMEIDA, 2010; BACKHOUSE, 2013; FERREIRA et al., 2016; MDA, 2014).

On the other hand, researchers indicate trends of land concentration, conflicts in rural areas, environmental risk to water bodies, intensive use of herbicides, fungicides and fertilizers (NAHUM; SANTOS, 2013) and the biodiversity loss (LEES et al., 2015). Some also claim that public policies based on socio-environmental arguments are used to support the integration of new lands into international commodity markets, and are thus associated with land grabbing and green grabbing (BACKHOUSE, 2013).

This process involves transforming access to land and resources traditionally used by family farmers to sustain their livelihoods (GOMES; SILVA; MACEDO, 2016; GOMES; MAGALHÃES, 2016) and can thus threaten food security. The purchase, lease, concession, and contract of lands leads corporate investors to invest in crops, traded on national and global markets, which yield more favorable returns

1 | The National Program for Biodiesel Production and Use (PNPB, Law No. 11. 097/05) launched in 2004. Its main objective was the insertion of biodiesel in the Brazilian energy matrix and posits sub-objectives focused on environmental and social issues (AZEVEDO, 2010; GEISBRECHT, 2013); the National Program for Sustainable Production of Palm Oil (PSOP, PLC 119/2013) launched in 2010 in the city of Tomé-Açu-PA; finally, the Social Fuel Seal (member of the PNPB) is coordinated by the Ministry of Agrarian Development (MDA), with policies and incentives for palm oil production through rural financing and technical assistance, which thus seeks to ensure the social inclusion of family farmers (ANDRADE; MICCOLIS, 2011).

on investments. This is an old practice that also allows farmers to access heavily state-subsidized rural credit programs (NIEDERLE; WESZ JUNIOR, 2018).

As previously stated, oil palm expansion in the NEP is permeated with controversies, stemming from different views on its potential contributions and objectives. Some groups argue that the crop is unsuitable to the ecosystem and does not serve family farmers' needs. Others argue that the activity offers a chance to improve farmers' lives. In this sense, this article analyses reactions to oil palm cultivation through contract farming and the acceptance of and resistance to this activity in municipality of Irituia, Pará, specifically related to the arrival of Archer Daniels Midland Company (ADM) in 2010[2].

2 METHODOLOGY

Research was conducted in 2018 using a qualitative approach, characterized as a case study (BECKER, 1994). Methods of observation and primary and secondary data collection were also included. The initial stage consisted of a literature review and the analysis of public policy documents and data from the Brazilian Institute of Geography and Statistics (*Instituto Brasileiro de Geografia e Estatística*-IBGE). The second stage consisted of field research, during which thirty-three interviews with smallholders who have contracts with oil palm companies were conducted (representing 36% of all farmers integrated into the oil palm agroindustry in Irituia). Further interviews were held with the following individuals: two representatives from the Municipal Environmental Secretary (*Secretaria Municipal de Meio Ambiente* - Semma), one representative from the Secretary of Agriculture (*Secretaria de Agricultura* - Semagri), one member of the Rural Workers Union (*Sindicato dos Trabalhadores e Trabalhadoras Rurais* - STTR) of Irituia and two representatives of Associations[3] for family farmers integrated into the oil palm agroindustry.

A framework was built to organize data and enable the analysis of collected information, specifically allowing us to compare the content of all interviews and identify the most repetitive discourses. Data interpretation was conducted through the content analysis of interviews in both horizontal and vertical manners (MICHELAT, 1987).

Research was conducted in the municipality of Irituia, located in the physiographic area of Guajarina, in the NEP (Map 1), the center of palm oil production[4], which encompasses 37 municipalities in Pará state (CARDOSO; TOLEDO, 2014), including Irituia.

In terms of production value, oil palm production is the second most important agricultural activity in the NEP. In 2018, it yielded R$ 377,640,000 in revenues, following açaí production (*Euterpe oleracea* Mart.) which brought in R$ 1,750,806,000 (IBGE, 2018).

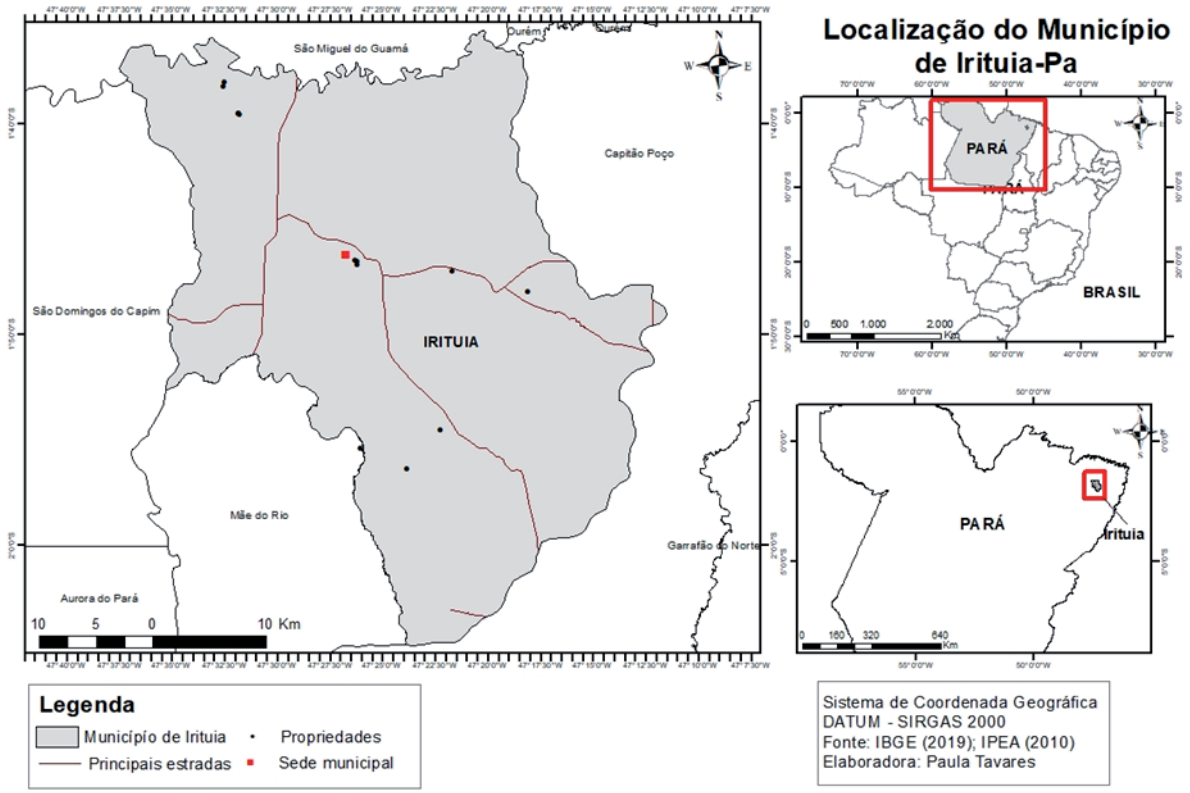
In the terms of overall oil palm production, in 2019, Irituia ranked 12th in the nation and 11th in the state ranking (IBGE, 2019). In 2018, 23,205 tons were produced in an area of 1,547 hectares (IBGE, 2018a), involving 85 family farms and 4 ranches.

2 | The Archer Daniels Midland Company began its operations in Brazil in 1997. In Pará, the multinational company has a port terminal in the city of Barcarena and deals with the processing and sale of grain crops, along with the manufacturing of vegetable oils, ingredients and inputs for the food and animal feed industries and biodiesels (ADM, 2018). The company took advantage of the expansion of PNBP to integrate family farmers and recover its Social Fuel Seal (GOMES; MAGALHÃES, 2016).

3 | According to Oliveira (2020) five associations were founded to mediate the relationship between integrated farmers and the ADM company: the Association of Small Family Farmers of Vila Bangu; the Association of Family Palm Producers of Galilee Region, the Association of Small Rural Producers of the Nossa Senhora do Perpétuo Socorro Region; and the Association of Residents and Family Farmers of Igarapé-Açu de Baixo. According to Balieiro (2019), in 2015, a unified social organization called the Central das Organizações Sociais entre os Rios Guamá e Capim (Consergc) was formed in the region.

4 | The Northeastern Pará mesoregion was considered the area with the most potential for oil palm expansion due to its favorable characteristics, related to climate, soil, land availability, and logistic feasibility. Furthermore, its productive supply chain was also fairly well-constructed, contributing to its potential (SIQUEIRA, 2018).

Map 1 | Figure showing the location of Irituia and properties where interviews were conducted



Source: IBGE (2019); IPEA (2010). Elaboration: Tavares (2020)

Irituia extends over an area of 1,379.362 km² and has an estimated population of 32,504 residents, 80% of whom live in rural areas (IBGE, 2018b). The economy is based on diversified agriculture, marked by the cultivation of food products (manioc, rice, corn, cowpea), semi-perennial and perennial crops (black pepper, coconuts, oranges, bananas, *açaí, cupuaçu, graviola, taperebá*, pineapple, peach palms, and more recently oil palm).

Shifting agriculture, locally called "*corte e queima*" for the production of annual crops in so-called "*roças*" or swiddens is expressive in Irituia, together with forest recuperation initiatives (CAPANEMA, 2006; CARNEIRO, 2018).

In addition to agriculture, forest collection and timber processing activities are also present in Irutuia and all involve family farmers (MORAES, 2017; OLIVEIRA, 2006). Families combine such activities according to labor organization patterns to ensure social reproduction. Attention has been drawn to debates surrounding the notion of family farming (*agricultura familiar*), recognized as a social and political category in both academic debates and public policies (NEVES, 2002).

3 THE ARRIVAL OF THE NEW: WHO WAS AGAINST AND WHO WAS IN FAVOR OF OIL PALM PRODUCTION IN IRITUIA

In tracing the history of oil palm production in Irituia, the first stage, beginning around 2008-2009, can be clearly identified. The first activities included field research to verify the economic, social and environmental viability for crop implementation in the Polo Mãe do Rio[5] region (GOMES; MAGALHÃES,

5 | Refers to the set of municipalities integrated into the company. The polo Mãe do Rio includes the municipalities of Mãe do Rio, São Domingos do Capim, Aurora do Pará and Irituia with ADM (Archer Daniels Midland Company) (GOMES; MAGALHÃES, 2016).

2016). The agricultural research and extension institution of Pará state (*Empresa de Assistência* Técnica e *Extensão Rural do Estado do Pará* -Emater) was responsible for carrying out these tasks (FAPESPA, 2011).

In 2011, we observe the consolidation of partnerships between municipal and state agencies, institutions and oil palm companies in the municipalities of São Domingos do Capim, Aurora do Pará, Irituia and Mãe do Rio (GOMES; MAGALHÃES, 2016). Emater, for example, signed a technical cooperation agreement with the São Domingos do municipality, with the objective of "[...] expanding and strengthening the execution of technical assistance activities to [...] smallholders who are beneficiaries of the National Biodiesel Production and Use Program (PNBP)" (Fundação Amazônia de Amparo a Estudos e Pesquisa, 2011, n.p).

The subsequent stage, occurring in March 2012, consisted of presenting the Polo Mãe do Rio Plan for oil palm cultivation in the municipalities of Mãe do Rio, São Miguel do Guamá and Irituia to family farmer communities. The goal was to present the oil palm cultivation plan to local communities in these municipalities.

By this point, the project had all its negotiation procedures in place, such as field research and agreements and partnerships - including accords related to leasing areas on Irituia properties. The only missing component was the inclusion of farmers. This was of particular importance given the value of the Social Fuel Seal (*Selo Combustível Soc*ial - SCS) and the prestige awarded to companies who prioritized social inclusion. Companies that signed contracts with smallholder families and bought their production would receive a SCS and would be awarded differential tax treatment and access to financing with reduced PIS/Pasep fees (ALMEIDA, 2011).

In May of the same year, and as part of the last stage, the ADM company's oil palm plantations were established on rented lands across the different municipalities of the NEP region (AGENCIA PARÁ DE NOTÍCIAS, 2012; BIODIESEL BR, 2012; FAPESPA, 2011).

3.1 OIL PALM: A GOOD OPPORTUNITY?

The expansion of oil palm cultivation has become a state policy, and through government actions, several institutions have been involved in programs to encourage crop expansion (FERREIRA et al., 2016). Main initiatives were supported by the Ministry of Agriculture, Livestock and Provisioning (*Ministério da Agricultura, Pecuária e Abastecimento* - Mapa), the Ministry of Agrarian Development (*Ministério do Desenvolvimento Agrário* - MDA), and a specific credit line (*Pronaf Eco Dendê*) with special interest rates for family farmers.

This institutional apparatus provoked surprises and different reactions to the arrival oil palm in the region. Nahum and Santos (2016) reported that in the Tomé-Açu microregion, the mere rumor of the arrival of oil palm in the Moju, Acará, Thailand, Tomé-Açu, and Concórdia do Pará municipalities was enough to foster real estate speculation and capital and labor influxes. According to these authors, even before plantations were established, hotels, supermarkets, garages and stores were opened, and new services became available. These changes preceded the search for anthropized areas for oil palm cultivation.

In Irituia, a group of representatives from state agencies delivered a speech in favor of oil palm cultivation. The group included representatives from: the Pará government, the ADM Company, Emater, the Pará State Federation of Agricultural Workers (Fetagri), the National Institute of Colonization and Agrarian Reform (Incra), Basa and some STTR members. All these actors argued that the activity was important for: improving the quality of life in the region; providing family farmers with work and income opportunities; and consolidating a production supply chain to foster economic development in the state. Moreover, public policy investments would contribute to the emergence of private sector interest

in oil palm cultivation. The success of Agropalma, one of the largest and most modern agroindustrial palm complexes in Pará state, also caught the attention of this group (REBELLO, 2012).

For representatives of public institutions, oil palm cultivation would represent the dynamization of local economies "[...] with the acquisition of inputs, fuels, seedlings, agricultural mechanization services, wages, etc., which would reflect in the improvement of people's quality of life" (Luiz E. Barros Feio, regional superintendent of Basa no Pará, 2012, n.p.); such that:

> The importance of the arrival of palm oil projects in Pará speaks to the desires of family farmers who seek a better quality of life; and it brings economic development to the state, integrating permanent activities into the rural environment. (Emater, 2012, n.p.).

In addition to the economy, the merits of the activity were related to the use of areas already considered degraded (CARDOSO; TOLEDO; VIEIRA, 2014). During the presentation of the Polo Mãe do Rio Plan for oil palm cultivation, mayors and municipal secretaries were encouraged by acting state environmental secretary to urge family farmers to adopt oil palm. He argued that it was a viable way to improve families' living conditions. The same statement can be found in interviews granted by the secretary:

> From an economic point of view, it is very interesting - being one of the best productive activities to earn money from the land, aside from using a lot of labor, both in planting and during the harvest season [...]. We believe that Pará state has an enormous potential for the dissemination of this crop in a sustainable and profitable way. (AGENCIA PARÁ DE NOTÍCIAS, 2012, n.p).

The companies, in turn, motivated by state incentives, used different strategies to guarantee the raw material, public resources and labor needed for production processes, benefiting from agroindustrial integration.

During a meeting with family farmers, the company presented oil palm cultivation as an opportunity to make a good economic return and possibly expend less labor in relation to working the land. For one farmer it was clear, "so, (oil palm) is just planted once and then it is taken care of". Oil palm advocates delivered speeches that motivated family farmers, who were already dissatisfied with manioc farming (their traditional crop) and eager to earn more income, to sign contracts with the company - as observed in the following statement: "They said [Emater and Eco Dendê] that it was a very good thing. That it came to help a lot. My children had already seen oil palm plantings in other places and said it was very beautiful and was good. (G.P., 68, farmer from Irituia, 2018).

At the time, the director of STTR of Irituia was in favor of oil palm cultivation and encouraged farmers to attend a meeting promoted by Emater and Eco Dendê at his residence. In the end, 25 to 30 farmers interested in signing contracts with ADM attended. Under the optimism displayed by these actors, oil palm became synonymous with hope and prospects of improving one's life; promises included development and social inclusion, employment opportunities, and increased income for rural communities (BRAZIL, 2010; RAMALHO FILHO et al., 2010). And thus, oil palm was established on family farmers' landholdings.

3.2 OPPONENTS OF OIL PALM CULTIVATION CONFIRM: OIL PALM IS NOT GOOD!

During the establishment of the first oil palm areas in 2013, disagreements between state and municipal government representatives and members of the Catholic Church emerged. Interviewees stated that municipal institutions and family farmers who opposed oil palm never had the opportunity to voice their demands – and thus shape policies to better meet farmers' current needs (related to local agricultural problems). For members of this group, oil palm was yet another project that "arrived ready", conceived as "top down" and designed to meet government and company objectives, generating discontent and resistance from the population.

> There was a meeting in São Miguel [of Guamá]. ADM, Faepa, City Hall, Sagri were there with me. The state secretary at the time said that oil palm was the solution and advised mayors to encourage the secretaries to agree [to planting] and send farmers to plant [oil palm] [...]. At the meeting, ADM arrived and said they would plant! That they had already acquired land [through leasing] and were going to plant! (Semma technician)

Municipal representatives stated that they knew the population's reality better and that oil palm was not a project designed to meet local needs and thus would not succeed. Silva and Navegantes-Alves (2017) also indicate that the process of expanding oil palm in Irituia was quite conflictive, since ADM was not in dialogue with local institutions and social organizations.

The arrival of something new always brings concern. One way to protect oneself from the unknown is to resist and there are several ways to do this – one of which is to talk among acquaintances. This form of every-day resistance (SCOTT, 2002) was exercised in the study site, where there was no direct confrontation with the oppressor. Groups of family farmers, however, refused to participate in meetings and join in establishing plantations, which was not in their interest.

According to interviewees, news spread among the representatives of the Church and municipal agencies that oil palm cultivation was not appropriate for the local reality. This reinforced feelings of fear and mistrust in the company and of oil palm cultivation in general. At stake was what was potentially good or bad for local development. Family farmers were also afraid of losing their lands and not being able to pay back financing agreements.

Marise Reis (2005) studied the effect of rumors on opponents' strategies to disarticulate and weaken a project. Regarding oil palm cultivation, opponents presented themselves as interested in the welfare of the community and sought to discourage those who might sign contracts:

> There was a lot of resistance from the farmers themselves. Those who did not want to plant were critical of the project. It was necessary to make a farmers' association only for those who were involved in oil palm, as [during general meetings of] the association that already existed, members [the majority of whom did not sign contracts] did not let others deal with oil palm issues. There was resistance from the neighbors because they didn't know the palm and if it would affect their land. (E. J. C. P., 39, farmer and president of the Galilean Community Association, 2018).

This network of actors who opposed oil palm emboldened the sentiments of farmers were suspicious of oil palm cultivation. They thus encouraged them to make other demands, as a way to solving existing problems in municipality, such as problems with manioc root rotting, which affects 80% of interviewed farmers. The rotting of manioc roots interferes with production, causes losses to the farmers, and weakens the municipal economy. As a technician from the Semma explained: "We have several farmers who complain about not being able to plant manioc as they did before because it rots [...]" (Semma technician, 2017).

According to technicians, investing in initiatives to solve existing problems and in the expansion of Agroforestry Systems (SAFs) is more viable, as areas of home gardens (called *quintais,* a local form of SAFs) are both important to provisioning a diversity of goods for household consumption and sale and for recovering degraded areas. A Semagri technician reported, "I think I need to invest in SAFs because I have to consider that this is something farmers know how to do, they can produce their own foods and sell them (Semagri technician, 2018).

The Catholic Church also manifested itself against oil palm cultivation. This instigated fear among farmers, dividing them and their opinions in relation to this activity. The parish priest's vocalizations contrary to oil palm cultivation were based on his experiences in other municipalities. According to the union director:

> The priest at the time did not let meetings occur here in the church. I had to hold them in my house. When the company came here, calling for people, the priest had already instilled fear in everybody, saying that this [oil palm] was not good. If it wasn't for him, the oil palm situation here in Irituia would have been much better. (Director of rural workers union, 2018).

Thus, statements made against oil palm cultivation are related to it not being viable for the following reasons: first, due to its use of a production model different from what family farmers are used to; second, because many family farmers did not participate in the discussions regarding the establishment of plantations; and lastly because there are projects more well-suited to the municipality and its population.

4 THE DENDEICULTURE UNDER INTEGRATION IN IRITUIA

Integration consists of a system established through a contract between the agribusiness (integrator) and the farmer (integrated), in which integrated farmers commit themselves to produce certain raw materials to be acquired and processed by the agribusiness (AQUINO, 2013; PAYÉS, 1993; ZIEBERT; SHIKIDA, 2004). As a system, integration became relevant in the 1960s and 1970s when three major processes related to Brazilian agribusinesses took place: the onset of the establishment of monocultures as a specific type of production system, establishment of the agribusiness model as a political discourse, and the integration of family farmers into production systems based in monocultures as a social relationship; this process is characterized by the consistent supply of raw material by farmers and the establishment of prices by industry (DELGADO; CONCEIÇÃO, 2012).

Oliveira (1980) states the subordination of family farmers is inherent to integration projects. Farmers become dependent on businesses for production inputs and to market products. Paulilo (1990) showed that an asymmetric relationship is established between the contracting parties, in which one of them (the farmer) is critically aware and accepts his/her position. However, being without visible alternatives, integration responds to farmers' desire for guaranteed markets, access to technical assistance and credit lines, unavailable for other crops (outside of integration projects).

This relationship is commonly criticized by authors who state that family farmers are negatively affected by integration. In the case of oil palm cultivation, companies have obligations to farmers; they must sign contracts, provide technical assistance and training to farmer, and purchase farmers' goods. However, studies point out the negative socioeconomic and environmental impacts of oil palm cultivation, including an intense workload, contamination of waterways and loss of farmer sovereignty (GOMES; SILVA; MACEDO ,2015; CASTRO; CASTRO, 2915; FERREIRA, 2016). Vieira (2015) also highlights how family farmers become indebted to financial agents.

4.1 "CO-OPTATION" AND INTEGRATION OF SMALLHOLDERS INTO AGRO-INDUSTRIES

The integration process in Irituia started with an action called farmer "co-optation", which consisted in mapping out farmers apt for integration. ADM relied on Eco Dendê and Emater as intermediates to host meetings in different localities. Due to local resistance to the activity, farmers in favor of oil palm cultivation met at the home of one union member in the Itabocal community. The meeting included 25 to 30 farmers interested in signing contracts with ADM to guarantee cultivation.

To be apt for signing, farmers had to meet a series of prerequisites, including conditions for credit access from Pronaf- Eco Dendê (i.e. without bank restrictions) and having access to a 25-hectare of land, of which about 10 hectares would be dedicated to oil palm cultivation (BRANDÃO; SCHONEVELD; PACHECO, 2018). Visits were then made to farmers' residences to assess their social conditions and

the characteristics of their landholdings. On such occasions the following aspects were observed: the existence of legal (forest) reserves, crops present and their yields, access to roads and distance from the company's plant, the possibility of forming clusters with other farmers, labor availability, age of the farmer wishing to sign the contract, number of children and adult family members living on the property and financial capacity for management and cultivation (BRANDÃO; SCHONEVELD; PACHECO, 2018; GUEDES, 2014).

The following step dealt with the documentation of the property. Farmers needed to have a legal land title, be in possession of the purchase, sale or lending document, have a Declaration of Aptitude issued by Pronaf (*Declaração de Aptidão ao Pronaf* - DAP), have an annual income exceeding R$ 20,000, and be registered in the Rural Environmental Register (*Cadastro Ambiental Rural* - CAR) with ZAE-Palma. Family farmers do not generally have all these documents, which is why the company, coordinating with responsible organizations, quickly made their emission possible (BRANDÃO; SCHONEVELD, PACHECO, 2018; GUEDES, 2014).

As part of their recruiting strategy, company representatives took famers to properties where oil palm plantations were established on family farmers' properties in Tomé-Açu – as part of Agropalma contracts. Denis Araki, biologist of Eco Dendê stated that meetings with several rural associations were held to present the oil palm establishment project to farmers. Some farmers were chosen to visit oil palm areas and learn how about the production chain in Tomé-Açu (FAPESPA, 2011).

In Irituia, 91 farmers signed contracts in 2013. At the time of this survey, according to information from Semma, there were 85 integrated farmers. This decrease stems from the abandonment of the activity by some families unable to keep up with the demands of the crop and the contractual relationship.

Of the integrated farmers interviewed, 97% are male and only 3% female. Forty-three percent are between 60 and 70 years old, 40% are between 40 and 50 years old and 17%, 30 years or younger. Families are composed of an average of four household members. In terms of landholdings, 75% of farmers are owners and 25% work on land ceded by relatives, such a parent or sibling. The average size of landholdings is 44 hectares; areas cultivated with oil palm vary from 2.5 to 10 hectares (12% have 3.3 ha, 38% have 5 ha, 17% have 6 ha to 8.5 ha and 33% have 10 ha). Despite the company's initial requirement of 10 hectares dedicated to oil palm, during the screening phase, the company allowed for smaller areas. According to one interviewee, this change occurred because few farmers initially showed interest in oil palm contracts (N.R.A., 59).

4.2. NEW DIVISIONS BETWEEN INTEGRATED FARMERS: (DIS)SATISFIED

Six years after the signing of oil palm integration contracts, new perceptions were constructed according to farmer experiences. Among these, two groups are privileged in this discussion

SATISFIED AND HOPEFUL

The assessment of the first group of farmers (34%) corresponds to the main arguments made by the company and its promoters during the "co-option" phase. Results thus show how the company's discourse influenced farmers' decisions at the time of signing. One must also consider farmers' social vulnerability, their dissatisfaction with manioc cultivation, and the low price of manioc flour. According to one farmer: "For me, oil palm was a salvation. I am very satisfied because otherwise we would still be struggling with manioc! It's good, but you have to do everything right [...]" (R. M. L., 29, farmer, 2018). For another:

> I say it wasn't me who found the oil palm, it was the oil palm that found me [...]. I embraced the palm as if it were my salvation. I was disappointed with manioc [due how it rots and the low market

> price]; there was the oil palm passing by and I embraced it, it was the only option I had. (A. M., 45, farmer, 2018).

Similar reports were found in Silva and Navegantes-Alves (2017). Farmers stated that they chose oil palm because of the contract – where the sale of goods is guaranteed, and they have the support of the company's technical assistance. These conditions do not exist for other crops since public policies are lacking.

Studies from Bungo, Indonesia reported similar findings; here farmers' great interest in the establishment of oil palm plantations was the prospect of a regular income source that would guarantee health and education and a greater purchasing power in relation to material goods (RIST; FEINTRENIE; LEVANG, 2010).

In sum, analyzing the interviewees' testimonies and related studies, oil palm cultivation emerges as a sort of salvation. The group of farmers (34%) who maintain planting regimes according to the company's technical criteria, defends the activity, and is reporting their first earnings. They claim that when their plantings are well-cared for, following all the recommendations, harvests are good. In addition, the guaranteed sale of products, something that met their expectations, gives them satisfaction.

> We are still not adjusted to it [the oil palm]; we have to leave everything to be able to focus only on it, but yes [...]. Because you go out to harvest, do the *brocada* there, and give [the palms] to the company. Look, the oldest oil palm plantation in the region is already seven years old, and the bunches are already yielding 25 kg, bunches come out every day, but [they] can't keep up with the harvest. So, this much oil palm here means a retirement for my family. (A. B. C., 61, farmer from Irituia, 2018).

The testimony above demonstrates the farmer's satisfaction with oil palm and reinforces data found by Mota et al. (2019). These authors showed that 53% of those interviewed were satisfied as producers and with their economic earnings. Farmers' satisfaction is related to obtaining income, biweekly harvests, guaranteed markets, and access to services, such as credit and technical assistance.

The situation found in Irituia was one where agriculture had many needs in terms of technical assistance. Farmers were unmotivated vis-a-vis their traditional crops, in particular manioc, and had difficulties marketing production, reporting low economic returns.

CONCERNED AND FEARFUL

Most farmers (66%) report dissatisfaction regarding their work with oil palm. They argue that they cannot keep up with the pace of work; this was especially true for couples without children. As a result, they are fearful and concerned about the loans they must pay back in the near future.

> What led you to plant oil palm? - A lot of talk from the technicians! They told a lot of lies. I told them, I only did it because they said one thing and now it's another. Oil palm is only good for the young when your family is large. Because when one is alone..., he can't stand it. And he has to have money, to have [the oil palm area] cleaned. (J. S. L., 41, farmer from Irituia, 2018).

Another farmer reported:

> [I am] only in the red and can't cover my needs [...] We worked with one thing and were pushed to work with another. The resources that come are not enough. People who were supposed to be at the front are petering out. It was supposed to have re-forestation. In the fraternity [Church] campaign they are debating resources. Many are using chemical inputs that are bad for the environment and for our health. (V. R. C., 64, farmer, 2018).

Based on in-field observation and testimonies collected, we found abandoned oil palms and those that are no longer being cared for. Additionally, six interviewees interrupted their oil palm harvests after fires from neighbors' manioc fields invaded their plantings (fire is used to establish manioc fields).

Mota et al. (2019) also report this dissatisfaction. In their study, 25% of farmers say they are dissatisfied as oil palm producers and with their earnings. Nineteen percent describe themselves as particularly dissatisfied as producers. In all cases analyzed, dissatisfaction with the volume of work, technical assistance, and income earned emerged as research findings. Interviewees also expressed dissatisfaction with the failed promises of improvements to community infrastructure. During "cooption" meetings companies promised improvements in education, health, roads and safety.

> If it were today, I wouldn't plant it [again}. At that time, I planted because the firm came with a very good promise and I signed it. The manager talked very nicely, promising worlds and funds [maintenance, tractor], so planted. But if it was today, I wouldn't have signed. (J. F., 52, farmer from Irituia, 2018).

Brandão; Schoneveld; Pacheco (2018) elaborated a typology according to production data from three companies that produce palm oil in Pará state. They concluded that a majority of farmers (54.8%) do not meet the companies' productivity expectations. The authors indicate that farmers are at risk of giving up the activity and thus possibly face defaulting on the loans made to finance their plantations.

Finally, one can see that from the beginning, oil palm cultivation has been accompanied by controversy. Different groups are divided into those opposing the activity and those in favor, resulting in both resistance to and acceptance of oil palm cultivation.

5 FINAL CONSIDERATIONS

In this article we analyzed the reactions to contract oil palm cultivation in Irituia-PA, characterized by acceptance and resistance. Oil palm cultivation is controversial, with divergences between different actors. The activity created contrasting opinions among agents from state entities (secretaries and unions) and members of local representative entities (churches and farmers' unions). There were also disagreements among farmers. Some were in favor of oil palm - moved by feelings of hope, wanting to increase their earnings. Others did not sign contracts due to fear of the unknown, among other factors. These differences show that, despite belonging to the category of family farmers and belonging the same union, perceptions and thus choices differ according to farmers' social conditions and their understandings and expectations.

The state, the oil palm company, and the rural workers union, through their representatives, were most interested in oil palm cultivation. Despite their particularities, they repeated the same discourses regarding job and income generation, improvement of farmers' quality of life and the dynamization of the local economy. These discourses was decisive in building farmers' expectations. These expectations were added to farmers' frustrations with their traditional crops and to the possibility of receiving technical assistance, bank credit, and having a guaranteed market for their products.

In the initial phase, farmers who signed integration contracts expressed the same expectations. Yet, after planting and the first harvests, opinions began to differ – even though they still hung on to hopes of improving their situations in the context of difficulties with manioc and other traditional crops. Thus, one third of respondents expressed satisfaction (i.e. the chance to work with a new crop, having a guaranteed income and improved harvest frequency), while two thirds did not have the same feeling (production is below expectations, work load is intense, and they lack labor power). Research also records the abandonment of oil palm plantings.

As a general conclusion, the reactions of acceptance and resistance to contract farming were dynamic and varied during the different stages presented here (from the promotion to production stages). Nevertheless, results allow us to conclude that there was disproportionality between initial discourses and later practices. Problematizing integration and production models based on large monocultures and a dependence on a single buyer is urgent – and should involve farmers' representative organizations.

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