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**The Recent Agrarian Dynamic in Brazilian
Amazon: Commodities Production and Space
Reorganization**

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The Recent Agrarian Dynamic in Brazilian Amazon: Commodities Production and Space Reorganization

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Abstract

This paper highlights some impacts of soybean monoculture on food production in the Brazilian Amazon, analyzing information from official agencies in Brazil (CONAB and IBGE). The Amazon region corresponds to over half of the Brazilian territory. Particularly in the 1990s, the government strengthened some economic policies in the interests of the big corporations and international organizations (IMF, World Bank and WTO). The concentration of land needed for the expansion of agribusiness harmfully impacts family farming and traditional forms of forest use by local people, changing the agrarian dynamics of the region. Between 1996 and 2006 there was a reduction of 253.644 small rice farmers in the Amazon, only in the Maranhão state were less 137.482 farmers. Probably, these families have moved to the cities, which means there has been changes in the use of space, both countryside and urban areas. That may be increasing the risk of regional food and nutrition insecurity and bounding the problems to be faced, paradoxically, in a historical moment in which the country has made significant international commitments to reduce poverty and ensure better living conditions on earth, such as the Millennium Development Goals.

Keywords: Agrarian dynamics, Agribusiness, Amazon, Family farming, Food production.

Introduction

Brazil has a long tradition in the production and export of commodities. Although, there were one or two products earlier, nowadays there are plenty of goods of agricultural and mineral origin. This reality is a reflection of an international division of labor that also operates internally in each country, according to Silva (2008).

A growing international demand for agricultural commodities marked the early 21st century. Generally, and specially in Brazil, the undeveloped countries responded to this demand continuing an economic policy of free trade, which has been prevalent from the last decade of the last century. In order to respond, positively to the increased demand, activities that produce raw-material for the food industry, in particular the feed industry for animals that supplies the European Union and part of Asian market, have expanded over extensive areas in those undeveloped countries, such as the Brazilian Amazon.

The word "Amazon" has several meanings. However, for the purposes of this paper, we will establish the difference between three of its uses. First, the "International Amazon" corresponds to a large region of about seven million square kilometers, which is much more than forest and covers areas in nine of the thirteen South American countries (Bolivia, Brazil, Colombia, Ecuador, Guyana, French Guyana, Peru, Suriname and Venezuela). According to Santos (2014), "Amazon" is also used to refer to North Brazil, in the context of official political and administrative organization of Brazilian territory. The seven states (Amazonas, Pará, Acre, Rondônia, Roraima, Amapá and Tocantins) members of this administrative region represent a land area of 3.8 million square kilometers. "Legal Amazon" is an administrative term created by the federal government in the 1950s for planning purposes and tax incentives in a large area (5.2 million square kilometers), which besides the seven states of the North, covers also two states, Mato Grosso and part of Maranhão, in other words the north-west area of the 44th meridian, conforming to Santos (2014).

The "Legal Amazon" covers over half of the 8.5 million square kilometers of Brazilian territory. In this large geographical area are invaluable sources of minerals, such as iron ore, gold, copper, zinc, manganese, silver, bauxite, nickel, chromium, tin and tungsten. Part of the economic potential of these mineral resources is still unknown or is kept in secret. However, by public knowledge it is known that the world's richest iron ore reserves can be found there in the Carajás mountains. The region is also home of one of the greatest biodiversity on Earth and one of the greatest freshwater springs.

Not surprisingly, the region is target of multinational corporations' greed. For decades, the link between these foreign interests and national political and economic elites has contributed to maintain economic models, in which there is a predatory exploitation of the regional natural resources without raising the population quality of life. Thus, the Legal Amazon development indicators are among the worst in the country.

In this paper, the authors show some impacts that the expansion of agribusiness activities has caused to the traditional agricultural production system in Brazilian Legal Amazon. In other words, we highlight some of the impacts of cattle farming, mining and soy and eucalyptus monocultures on deforestation and food production in the Legal Amazon, from the last decade of the twentieth century and early twenty-first century. We analyze information from official agencies in Brazil, as CONAB and IBGE.

Material and Methods

The purpose of this paper is to identify and highlight negative consequences that commodity production in the Amazon may have on small-scale food farming. Therefore, on the one hand, the authors chose to analyze soybeans production, as a significant example of agribusiness, and as a consequence, of the production of commodities in the region. On the other hand, they analyzed the production of two main products traditionally used as food by the Brazilian population: rice and beans.

The period defined for the analysis covers a decade, between 1996 and 2006, mainly because the official information is available for that period. Thus, information published by the National Supply Company (Conab) and the Brazilian Institute of Geography and Statistics (IBGE) were used as fundamental sources of research.

Results and Discussion

As already highlighted, Brazil is a country whose history is closely linked to commodities export, which are agricultural or mineral. In the spatial economy configuration, some regions within the country specialize in activities and products, matching the dominant economic interests in the world.

Considering a recent period, it can be said that at the beginning of the 1990s, the importance of the Amazon was little. However, this scenario is changing with the increase in commodity prices internationally, driven by the emerging economies. Therefore, the Amazon is now inserted more intensely in the international trade, and becomes the target of interest of the great exporting groups and oligopolies linked to the complex of grain, beef, iron ore and aluminum. Undoubtedly, the so-called capitalist agriculture has grown in the Amazon over the decades 1990 and 2000.

This expansion stands out, especially when compared to food production, extraction and small livestock. This activity becomes the dynamic core of the agricultural sector in the Amazon, assuming an important role in the generation of international currencies, employment and dissemination of technological packages of the old green revolution.

Nonetheless, it all just happened by government policy, the global economic environment and, surely, by the large supply of land in the region.

During the last decade of the 21st century, the economic policy actions of the Brazilian government were clear in further liberalizing measures towards the recommendations of supranational organizations (IMF, World Bank and WTO), expressed in the Washington Consensus: more open trade, deregulation, privatization, and reduction of state interference in market dynamics. Even when the Brazilian government reduced its intervention in regional development expansion and agriculture modernization in the Amazon, it continued to grow differently and selectively. Since the 1990s, the region's economy is no longer fundamentally supported by public funding agencies, it is being linked more strongly to the logic of the free market, based on the dynamic world of commodities. Thus, from the 1990s, livestock and grain production will stand out and make a difference in terms of growth rate, and incorporate changes from other activities, especially those based on family production.

The impact of neoliberal policies in Brazil was unfavorable to family farming, but very suitable for the expansion of grains production, livestock and mining, according to Mesquita (2008). The increase in the soybean field occupied area is a good example of this process.

The Expansion of Soybean Agribusiness in the Amazon

Historically, soybean production in Brazil was developed in the states of the south and southeast, and then moved to the areas in the *Cerrado*. But, at the end of the century, there has been a remarkable advance of this activity towards the Amazon. This expansion can be best observed when looking at the process from the 1970s. At that moment, between the Amazon states, just in Mato Grosso there was soy production. In the middle of the following decade, this activity emerged in the Maranhão (1984/1985 harvest) and Rondônia states (1985/1986 harvest). However, in the last one, it covered a modest extension area for monoculture standards and, in the first one, it occupied a region of the state where there was still a predominance of the *Cerrado* biome (Figure 1).

Figure 1. *Cerrado Landscape and Soybean Crop in Maranhão, Brazil*



In 1988, the Brazilian government created a new state, Tocantins, which appeared in official statistics soybean production that took place in that area, that was previously part of Goiás state, where the activity was developing since

the 1970s. In the season of 1997/1998, the first data on soybean planting that appeared in Pará and the other states of the North region were issued.

According to the National Supply Company - CONAB, currently the soybean crops occupies an area of about 24.5 million hectares in Brazil. As seen in Table 1, it is over the last decade of the 20th century and the first decade of the 21st century, that spreads the area used for planting soybeans in the states of the North and Legal Amazon was expanded. In the middle of the 1990s, this area summed up 2.4 million hectares.

Ten years later, it was increased to 7 million hectares, totaling currently to 10.8 million hectares. This means at least 8.4 million hectares were added to soybean production activity in the Amazon since the mid-1990s to the present day, while the activity was expanded to over 11.4 million hectares in the other Brazilian states in this period. If we look to the 1970s, this increment was about 10.6 million hectares in the Amazon and 14 million hectares in the other states of the country.

Table 1. *Increased Soybean Area in Brazil (1976-2015)*

(Figures in Thousands of Hectares)

| STATE/REGION | 1976/77 | 1984/85 | 1994/95 | 2004/05 | 2014/15 | 1976-2015 |
|--------------|---------|----------|----------|----------|----------|-----------|
| Roraima | - | - | - | 20,0 | 18,0 | 18,0 |
| Rondônia | - | - | 4.8 | 74.4 | 228.5 | 228.5 |
| Acre | - | - | - | - | - | - |
| Amazonas | - | - | - | 2.8 | - | - |
| Amapá | - | - | - | - | - | - |
| Pará | - | - | - | 69.0 | 243.1 | 243.1 |
| Tocantins | - | - | 16.6 | 355.7 | 825.6 | 825.6 |
| Maranhão | - | 10.0 | 91.7 | 375.0 | 683.7 | 683.7 |
| Mato Grosso | 310.0 | 795.0 | 2,295.4 | 6,105.2 | 8,805.20 | 8,495.2 |
| LEGAL AMAZON | 310.0 | 805.0 | 2,408.5 | 7,002.1 | 10,804.1 | 10,494.1 |
| OTHER STATES | 6,639.0 | 9,269.0 | 9,270.2 | 16,299.0 | 20,700.1 | 14,061.1 |
| BRAZIL | 6,949.0 | 10,074.0 | 11,678.7 | 23,301.1 | 31,504.2 | 24,555.2 |

Source: Conab (www.conab.gov.br)

Thinking about the evolution of the soybean crops percentage. It is notable that their growth rate in the Legal Amazon is much higher than in other Brazilian regions. By comparison with the 1970s, in the 1980s, the area had increased 159.7% in the Legal Amazon and only 39.6% in the other states. Comparing the 1990s with the 1980s, there was no expansion of the area in the rest of the country, but in the Amazon it raised 199.2%, highlighting Maranhão state, where the percentage of the increased area was 817%. In the 2000s, this growth in area compared to the previous decade was 75.8% in the other states, while in the Legal Amazon it was 190.7%.

During this period, in Maranhão, the area rose 308.9%. Nevertheless draws attention the case of the Tocantins state, which grew by 2,042.8%, i.e., the area used for soybean crops was expanded the equivalent of 20 times the previous area. In the current decade, there was a lower percentage of soy area growth. In the other states, the increment compared to the previous decade was 27% and in the Legal Amazon was 54.3%, but as noted, this is twice the percentage of the rest of Brazil. In addition, the largest rises were recorded in two states of the Amazon: Tocantins (132.1%) and Pará (252.3%). Considering the accumulated values, today the area used for soybean crop in the Legal Amazon increased 3,285.2% compared to the 1970s, while at the same period it grew only 111.8% in the other states of Brazil.

Since it is a commodity, which is an economic good traded in the international market, the soybean production requires several factors to result in a profitable business and to expand. One of those factors is undoubtedly the supply of extensive land areas. Therefore, even taking the large property as a starting point, the activity moves towards greater concentration among producers.

In Brazil, the latest available official data about the size of agricultural properties are the Census of Agriculture 2006. Thus, it is not possible to see if there was a greater concentration of ownership among soybean producers in current decade. However, it is possible to observe the changes that occurred during the period that interests us in this paper: the last decade of the 20th century and the first decade of the 21st century, as it is highlighted below.

During this period (1996-2006), landowners increased from 92% to 93.87%, while small farmers reduced from 3% to 0.37% their participation in the total soybean producers, as can be analyzed from Table 2 below:

Table 2. Soybean Producers in Legal Amazon Region, According to the Size of the Property (1996-2006)

| | 1996 | | | | 2006 | | | |
|-----------|---------|--------------|---------------|--------------|---------|--------------|---------------|--------------|
| | Total | Small farmer | Medium farmer | Large farmer | Total | Small farmer | Medium farmer | Large farmer |
| BRAZIL | 242,991 | 57,203 | 136,533 | 49,255 | 215,742 | 38,748 | 118,708 | 58,286 |
| AMAZON | 3,251 | 93 | 180 | 2,978 | 4,632 | 17 | 267 | 4,348 |
| Acre | 14 | 0 | 5 | 9 | 2 | 0 | 0 | 2 |
| Amapá | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 |
| Amazonas | 21 | 14 | 6 | 1 | 1 | 0 | 1 | 0 |
| Maranhão | 184 | 36 | 15 | 133 | 253 | 0 | 3 | 250 |
| M. Grosso | 2,746 | 8 | 64 | 2,674 | 3,698 | 3 | 188 | 3,507 |
| Pará | 138 | 15 | 60 | 63 | 88 | 2 | 6 | 80 |
| Rondônia | 68 | 16 | 26 | 26 | 251 | 12 | 66 | 173 |
| Roraima | 25 | 0 | 0 | 0 | 9 | 0 | 0 | 9 |
| Tocantins | 55 | 4 | 47 | 47 | 327 | 0 | 3 | 324 |

Source: IBGE. *Census of Agriculture 1996 and 2006.*

In both considered moments, the highest concentration of soy farms in the Legal Amazon is in the Mato Grosso state (84.5% in 1996 and 79.8% in 2006).

Compared with the whole country, the number of soybean farmers in the Amazon corresponded to 1.3% in 1996, rising to 2.1% in 2006. Considering only the large farms, this percentage increases from 6% to 7.5%. The numerical evolution of the large soybean farms in Brazil was 18.3% (taking the total number decreased 11.2%), while in the Amazon was 46%, with the total number increasing 42.5%. In the Mato Grosso state are also located 80.6% of large farm in the region. Although, in the Rondônia state the highest change in this segment happened (589.4%), and in Maranhão it was 88%. The most significant absolute rise in the segment occurred in Mato Grosso (31.2%), 833 emerged new large soybean farms.

The number of small farms, in turn, has significantly decreased. In some states, they do not exist at the beginning of the period, and they reduced heavily in all states where it existed before and disappeared in the Amazonas, Tocantins and Maranhão states.

Now, look again at the area of soybean crops, emphasizing the changes between the middle of the last decade of the 20th century and the first decade of the 21st century. Compared to the rest of the country, it is notable that in 1995 the Amazon soybean area was 20.6% of the total area in the country. This percentage rose at 30% in the middle of the next decade. During this period, the expansion of the total area in Brazil was 99.5%, while in the Amazon was 190.7%, both showed an additional area. The first one presented an addition of 11.6 million hectares and the second one 4.6 million hectares.

If the production obtained is taken as a parameter, it will be noticed that the Amazon produced 22% of the total national production at the beginning of that period. According to Table 3, ten years later, this share was 39.3%, registering an increase of 253% in the region, while the total production in the country increased by 99.3%.

Table 3. Soybean Harvest in Brazil and Legal Amazon Region (1995-2005)

| | Total | | Change (%) |
|-------------|------------|------------|------------|
| | 1995 | 2005 | |
| BRAZIL | 25,682,637 | 51,182,074 | 99.3 |
| AMAZON | 5,701,072 | 20,142,914 | 253.3 |
| Acre | - | 14 | - |
| Amapá | - | - | - |
| Amazonas | - | 5 | - |
| Maranhão | 162,375 | 996,909 | 513.9 |
| Mato Grosso | 5,491,428 | 17,761,444 | 223.4 |
| Pará | - | 204,302 | - |
| Rondônia | 10,800 | 233,281 | 2,060 |
| Roraima | - | 36,400 | - |
| Tocantins | 36,471 | 905,328 | 2,382.30 |

Source: IBGE - Municipal Agricultural Production 1995 and 2005.

This evolution of soybean crops in the Amazon has occurred mainly through the incorporation of large land areas. This makes us believe that even if the starting point is already a large farm; the need to survive on demands of the international market could lead this activity to a double movement in the control of the land. On one hand, it puts further pressure on the concentration of land ownership among specialized producers or, on the other hand, given the need for flexibility of costs and risk reduction, it temporarily incorporates small areas of land in the form of lease or partnership. In both cases, there may be also implications with labor relations and other local economy activities, particularly related to food production for the domestic market. In the next section, we will observe what has been the evolution of these two activities during the selected period.

Family Farmers in the Amazon: The Situation of Rice and Bean Crops

As we saw in the case of soy, agribusiness has grown significantly, featuring a strong front of economic expansion in the Amazon. On the opposite side, with the result so diverse and with little financial support, is the family farm, here understood by considering the size of the area (four fiscal modules), the labor of family members and its income from agricultural activities performed by itself. Family farming in Brazil consists of a set of producers and very heterogeneous, differentiated and diverse situations. In the Amazon, family farmers are very numerous and are dedicated to a wide range of economic activities due to the dispersion in territory and the diversified nature of its production.

Differently from soybean crops, rice and beans are produced mainly for the purpose of supplying the domestic consumer market. In case of rice, although there are some typically capitalist ventures, bringing together the elements ensuring the achievement of profit, wage labor, private ownership of means of production and the allocation of production to the market. Actually, in the Amazon and elsewhere in the country, the vast majority of rice farmers are working with the aim of ensuring the reproduction of their material conditions of existence. Nevertheless, it does not mean that the production of these family farmers do not have a commercial character.

Based on Table 4, it is possible to see in detail on period (1996-2006) and in a direction opposite to soybeans case, the figure of large farms producing rice decreased from 28% to 26% and groups of small farms presented a further decline, from 51% to 45%, while the mid-size segment increased its share from 21% to 29% of all producers.

Table 4. Rice Producers in Legal Amazon Region, According to the Size of the Property (1996-2006)

| | 1996 | | | | 2006 | | | |
|-------------|---------|--------------|---------------|--------------|---------|--------------|---------------|--------------|
| | Total | Small farmer | Medium farmer | Large farmer | Total | Small farmer | Medium farmer | Large farmer |
| BRAZIL | 927,536 | 437,633 | 281,446 | 208,457 | 357,813 | 176,594 | 106,033 | 75,186 |
| AMAZON | 430,199 | 220,879 | 89,611 | 119,709 | 186,655 | 84,400 | 53,171 | 49,084 |
| Acre | 11,653 | 810 | 2,699 | 8,144 | 6,752 | 813 | 1,620 | 4,319 |
| Amapá | 132 | 11 | 26 | 95 | 129 | 5 | 7 | 117 |
| Amazonas | 2,877 | 1,112 | 834 | 931 | 895 | 122 | 250 | 523 |
| Maranhão | 258,482 | 198,436 | 31,474 | 28,572 | 121,000 | 76,460 | 25,773 | 18,767 |
| Mato Grosso | 24,753 | 3,037 | 8,284 | 13,432 | 5,882 | 421 | 2,051 | 3,410 |
| Pará | 67,987 | 7,197 | 26,281 | 34,509 | 24,515 | 2,835 | 11,457 | 10,223 |
| Rondônia | 37,855 | 8,506 | 13,712 | 15,637 | 12,013 | 2,280 | 5,614 | 4,119 |
| Roraima | 2,767 | 69 | 110 | 2,588 | 1,411 | 66 | 68 | 1,277 |
| Tocantins | 23,693 | 1,701 | 6,191 | 15,801 | 14,058 | 1,398 | 6,331 | 6,329 |

Source: IBGE. *Census of Agriculture 1996 and 2006.*

In the case of Maranhão, it is clear that the state stands out such as the amount of rice producers. At the beginning of the period, the number of Maranhão producers accounted for 60% of the rice farms in the Amazon and 27.8% of the whole country. At the end of the period, this share had increased respectively to 64.5% and 33.8%. However, this relative increase does not come from a growth in the amount of rice producers. Both in the Legal Amazon as in the rest of the country, there was a significant decrease in the number of producers: in Brazil the decline was 61.2%, in the Amazon it was 56.6%, and in Maranhão was 53.2%. Although it fell at a slower rate than the region and the country, in Maranhão the reduction in absolute numbers was alarming, corresponding to less 137,500 production units. The greatest impact of this devaluation is recorded between the segment of small farms (61.5%), while the mid-sized were reduced by 18.1% and 34.3% on large farms. This means that approximately 122,000 small rice farmers ceased to exist only in the Maranhão state between the late 20st century and early 21st century.

Considering the area of crops at the beginning of the period, it is observed that the 783 700 rice farms located in Maranhão accounted for 43.2% of the Legal Amazon, and in the state of Mato Grosso were 23, 3% of the area. However, concerning about the total harvest, this difference decreases, thus Maranhão produced 33.5% and Mato Grosso produced 26.8% of the region. At the end of the period, the situation of the crop area reverses, with Mato Grosso representing 41.7%, and Maranhão 26.1%. Thereby, production in Mato Grosso accounted for 51.2% of output, while Maranhão contributed only with 15.2%.

Note the downward movement in the area of rice crops in the Maranhão state for the whole Amazon, reflecting the sharp drop in the number of producers as indicated in the table above.

Perhaps more extensive than the rice crop, beans are produced by family farmers aimed at supplying the domestic consumer market. These producers

work to ensure their reproduction, intended for marketing what they produce in addition to the direct consumption needs, but generally, the "surplus" is the means to purchase other items to the livelihood for family group.

Over the period 1996/2006, in the same way as rice producers, the large bean farms decreased their representation from 27% to 24%. Furthermore, the group of small producers enrolled, it showed a smoother declined, from 47% to 46%. At the same time, the average of producers segment grew from 26% to 30%, in a move similar to what happened with rice producers in this segment.

As occurred in the case of rice producers, the number of bean farmers in Maranhão state was also reduced. According to the data of Table 5 below, at the beginning of the reporting period, they were 43.9% of total bean farmers in the Amazon, and at the end of the period were 66.2%. Once again, the relative increase did not result from a climb in the producer numbers, but from the reduction of these occurred in other states, both in the country and in the Legal Amazon.

Table 5. *Beans Producers in Legal Amazon Region, According to Property Size (1996-2006)*

| | 1996 | | | | 2006 | | | |
|-------------|-----------|--------------|---------------|--------------|-----------|--------------|---------------|--------------|
| | Total | Small farmer | Medium farmer | Large farmer | Total | Small farmer | Medium farmer | Large farmer |
| BRAZIL | 2,177,120 | 1,199,739 | 711,361 | 266,020 | 1,638,519 | 1,015,771 | 469,711 | 153,037 |
| AMAZON | 187,502 | 88,889 | 48,508 | 50,105 | 100,125 | 46,313 | 29,866 | 23,946 |
| Acre | 8,480 | 728 | 2,218 | 5,534 | 5,084 | 871 | 1,341 | 2,872 |
| Amapá | 161 | 36 | 75 | 50 | 104 | 18 | 39 | 47 |
| Amazonas | 5,499 | 3,002 | 1,828 | 669 | 2,747 | 1,849 | 422 | 476 |
| Maranhão | 82,370 | 61,461 | 10,572 | 10,337 | 49,247 | 30,662 | 10,424 | 8,161 |
| Mato Grosso | 8,630 | 1,584 | 3921 | 3125 | 2,642 | 413 | 1,090 | 1,139 |
| Pará | 41,466 | 10,954 | 15,132 | 15,380 | 21,519 | 7,962 | 7,833 | 5,724 |
| Rondônia | 35,466 | 10,434 | 13,170 | 11,862 | 13,797 | 3,672 | 6,349 | 3,776 |
| Roraima | 936 | 250 | 55 | 631 | 490 | 108 | 45 | 337 |
| Tocantins | 4,494 | 440 | 1,537 | 2,517 | 4,495 | 758 | 2,323 | 1,414 |

Source: IBGE. *Census of Agriculture 1996 and 2006.*

The drop in all cases was significant, corresponding to 24.7% in Brazil, 46.6% in the Amazon and 40.2% in Maranhão. The fall in absolute numbers in Maranhão was 33 000 farmers, the vast majority (30,800 farmers) being in the small producers segment, where the reduction amounted to more than half the existing number in the mid-1990s.

Thinking about the area occupied by bean crops in the mid-1990s, Rondônia (123 hectares) and Maranhão (118,000 hectares) accounted for over 60% of Legal Amazon. Ten years later, the concentration occurred between the Maranhão state (78,000 hectares) and Pará (72,800 hectares), which together were responsible for 51.4% of total region area. As the rise case, draws attention to reduction of bean crops in the Amazon, which occurred in 4 of the

9 states in the region. However, this slump seems to have been balanced by increases in productivity. Then at the end of the period, the amount of the harvest was stabilized.

Conclusions

Certainly here were several changes in the dynamics of occupation and land use in the Amazon between the last decade of the 20th century and the first decade of this century, particularly evidenced by the expansion of commodity production in the region. The driving force of this spatial distribution of agribusiness in the Amazon, exemplified by soybeans, which stands on the production of traditional foods, can be explained by several factors. On the one hand, we must point external aspects, as demand growth and structural problems and productivity faced by suppliers of competing commodities. However, the main and fundamental aspect is internally, that is the easy access to land in the Amazon, which is although cheap and has a small fiscal rigor of Brazilian state process. This process allows malicious companies and malicious individuals to appropriate to ownership of large tracts of land, transferring them from the public to private ownership. Official government agencies end up having little control over land ownership dynamics in the Amazon.

A clear change over the period refers to the weakening of the state role as promoter and inducer of development, before the rise of free market forces, according to Mesquita (2008). Some effects of this change can be seen when we look at the social and environmental indicators in the Amazon, which suggest that the logic of economic growth is able to include specific social segments, but doesn't generate significant improvements to most of the population. On the contrary, since very specific activities are encouraged (commodities), it is controlled by oligopolistic and connected to external market economic groups, further contributed to reproduce the old system of domination over land and labour exploitation. The industrial sector, for example, remained relatively the same size, though its profile has changed over the years.

The participation of the agricultural sector, despite the emphasis on agribusiness, decreased proportionally in the context of the regional economy. In this case, the cause is the inadequate support given to family farming by the Government and also the low level of organization that prevails in this segment in the Amazon. The soybean crop, livestock and eucalyptus plantations, in turn, have largely advanced, due to the link with external demand, as already mentioned above. Possibly, it was this demand that established the rate and extent of growth and, in a way, the dynamics of the industry as a whole in that period. Food production, however, remained stagnant in both productivity and volume of production.

This scenario has several implications, as it relates to critical issues such as food security, income distribution, access to land, employment, environmental

protection, among others. All very important, but it has financial and political costs that only a few political leaders have the courage to face. However, this lack of attitude cannot continue for a long time, as otherwise no efforts are being made in other areas toward the improvement of living conditions, especially of the rural population that still depends on the family farming.

Finally, it should be noted that the growth of mining, soybean and livestock is based on extensive production and low productivity, that is, to grow, it needs huge areas. This pattern is unsustainable. In other words, the success of these activities brings with it the germ of major problems for the Amazon, as the disproportionate deforestation, the concentration of land and income, lastly, the intensification of rural exodus. This type of development proves to be more inappropriate when looking at the socio-economic indicators of the Amazon region. For example, in the ranking of IDHM, published by UNDP (Pnud, 2013), among the 50 municipalities worse off in Brazil, 47 are part of this region. Thus, the advantages of Brazil becoming a major supplier of food for the rest of the world will not be able to compensate for disadvantages that may result from the expansion of a monoculture and an essentially exclusionary model.

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