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Interference of the capitalist geographic area expansion via agrobusiness and hydroelectric power plants in the environment and culture of the *Enawene Nawe* people

Interferências do alargamento do espaço geográfico capitalista via agronegócio e usinas hidrelétricas no ambiente e cultura do povo *Enawene Nawe*

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Content

ABSTRACT:
The purpose of this study is to investigate the expansion of capitalist space surrounding the *Enawene Nawe* (E.N.) Indigenous Land (I.L.) and the consequences of this approach to the life of these people. This descriptive research consists in a qualitative methodology carried out through literature review and participatory activities in the field. The most intense interaction with non-indigenous occurred when the occupation of the northwestern State of Mato Grosso, Brazil, in the late 1990. The I.L. surroundings were affected by agribusiness and by hydroelectric power plants, which brought both immediate and long-term consequences to the people, leading to the disintegration of their culture and way of life.
Keywords: Agricultural frontier. Sociocultural changes. *Enawene Nawe* indigenous community.

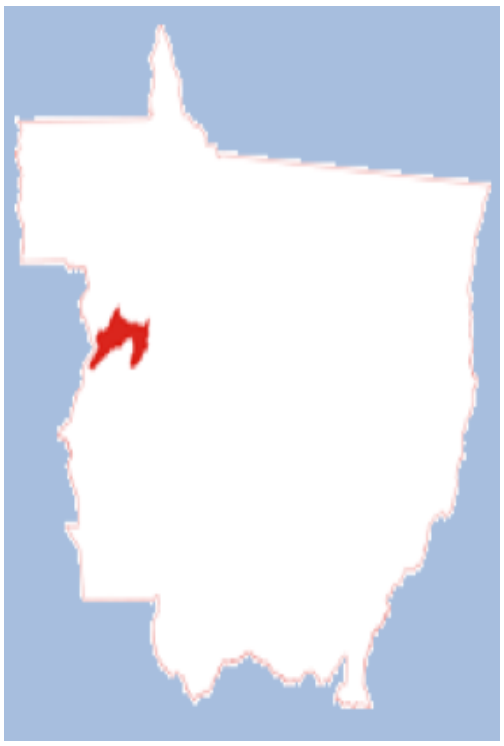
RESUMO:
O estudo trata do alargamento do espaço capitalista no entorno da Terra Indígena (T.I) Enawene Nawe (E.N) e as consequências dessa aproximação à vida desse povo. Trata-se de pesquisa descritiva, metodologia qualitativa por meio da revisão de literatura e atividades participativas a campo. A interação mais intensa com não indígenas ocorreu quando da ocupação do noroeste do Estado do Mato Grosso, Brasil, no fim da década de 1990. O entorno da T.I. foi afetada pelo agronegócio e por usinas hidrelétricas e as consequências ao povo tanto foram imediatas, quanto de longo prazo na desestruturação cultural e do modo de vida.
Palavras-chave: Fronteira agrícola. Mudanças socioculturais. Povo indígena Enawene Nawe.

1. Introduction

The *Enawene Nawe* (*E.N.)* Indigenous Land (I.L.) is located in the cities of Juína, Comodoro and Sapezal, in Mato Grosso, Brazil. It has a surface of 742,089 hectares, being a flat terrain with some elevations in the western and southern boundary. The predominant vegetation is the savannah, and riparian forests, as typical characteristic of the Cerrado (tropical savanna woodlands). In the southern region the I.L. areas of seasonal forests are found in red latosol stains with good fertility, where the indigenous community plant a vegetal species of great nutritional importance: the native corn (soft corn). It is also present in the I.L. in contact with the tropical seasonal forest (RADAMBRASIL, 1982) where the village Halataikwa is located.

Figure 1: The I.L. location in Mato Grosso / Brazil

Ethnicity	*Enawene-Nawe (Salumã)*
Hectares.	742,088.6783
Population (year)	+600 habitants (2010)IBGE
Counties	Sapezal, Comodoro e Juína
Legal land status	Approved by the Union **Dec. s/n of 02.10.96**



The I.L. extends in the Mato Grosso to the border with the State of Rondonia, near the city of Vilhena, making limit with the *Nambikwara* I.L. They also make limit with the *E.N.*I.L. the *Pyrenees de Souza* and *Myky* Indigenous Lands. There is also a portion of I.L. overlying the Iquê Ecological Station, administered by the Chico Mendes Institute for Biodiversity Conservation, the agency responsible for carrying out the actions of the national policy for nature conservation units (BRAZIL, 2010). The region where it operates is inserted to I.L. that houses two major biomes, the Cerrado and the Amazon Rainforest, and transition areas (Ecotones) among these.

The I.L. has been preserved, but has vulnerabilities produced by invasions and illegal exploitation of natural resources, particularly in remote locations of difficult access. Diamond is highly coveted. In the 1990s prospectors entered causing degradation of springs and streams. After the operation was removed, the gold mining was abandoned and there were no more notified invasions. Wood is also a coveted resource, especially in the region near the border of *Pyrenees de Souza* I.L. habited by the *Nambikwara / Sabanê,* which features the single spot of this forest in *E.N.*I.L. Smallholders that respect the limits, with few cases of illegal extraction, occupy this I.L neighboring region.

2. Contact and history of occupation of the I.L. surroundings

In 1907 Rondon Construction Commission of Cuiaba Telegraph to the Amazon, arrived in the region. It was the first reference of contact and interaction of indigenous with non-Indians who

settled in the region. This also worked as a pioneer front. The work provided an opportunity to create the Indian Protection Service and National Workers Location (SPILTN) in 1910. According to Busatto (2003) the SPILTN report's content in 1917 shows the state policy pursued in relation to the Indians, seen as nomads and barbarians who should be transformed into national workers.

The Second World War and the consequent international demand for Indian rubber promoted the resumption of seringalistas (tappers or rubber owners) economy. The activity reached the equatorial forests of the basins of rivers Papagaio, Sacre, Sangue, Arinos, Juruena, Aripuaña, and Roosevelt. Tribal territories, that were previously only marginal, were sporadically reached. There was tension and clashes with the Indians, spread of lethal diseases, intensification of intertribal conflicts, as the increasing invasions tended to move groups from their territories to other territories (Arruda, 2002).

The *E.N.* suffered the first effects of the expansion fronts when their neighbors, the *Cintas Larga* and *Rikabaktsa*, by being forced to leave their territory to escape the attacks of non-Indians, invaded the *E.N.* territory. The conflict forced displacement, situation that Nahum (2012) denominates as the butterfly border effect. At that time, there were also the first contacts with non-Indians. They report that rubber owners' fields were invaded to steal tools and utensils. Consequently, they responded by shooting and killing.

In 1956, the Mission Anchieta was created and carried out actions of great importance involving contact and reduction of the Indians, functioning as a "leading catechesis center." This was an appropriate moment, as it occurred when the Indians of the region were too weakened by epidemics and conflict, developing the right conditions for bringing the missionaries to indigenous groups.

It was in the 1960s when the regional occupation deepened through agribusinesses, mining, logging, and colonization projects, possible due to the opening of new roads. The main one, BR 364, also called Cuiaba to Porto Velho, completed in 1968.

With the ongoing occupation in 1968, the federal government set aside some lands for the Indians of the region, determined to take forward the expansion and colonization of the Amazon, which would become the National Integration Plan (PIN).Then the current *Paresi* and *Nambikwara* Indigenous Lands were created.

The new regional occupation process was accelerated in the 1970s and 1980s with the paving of the BR 364 and the opening of new roads; the implementation of colonization cores; the expansion of mining and the development of large projects, such as Polonoroeste, transformed the region into a mineral and agricultural pole, promoting the definitive occupation with severe environmental devastation.

In the 1970s, it was completed most of the boundaries of indigenous lands relocated in the Brazilian Midwest. These locations have come to realize more directly the impact of the siege to which they were subjected as the rest of the lands traditionally occupied by indigenous people was seen as "liberated area" for any and all private investment (BUSATTO, 2003).

In 1974 the Mission Anchieta, through Vicente Cañas and Thomaz de Aquino Lisboa, Jesuit priests, became the first recorded contact with *E.N.*, that were among the Brazilian indigenous peoples that had recent contact with non-indigenous society. Subsequently, contact was established through OPAN for knowledge of their cultural and economic forms, and organizations to relate with national society in a way that does not bring them social, economic and cultural losses.

Despite the political significance and the assertion of a right, the demarcation of indigenous lands in the *Chapada dos Parecis* (hydrographic formation) brought consequences previously disregarded: an immense extension to agricultural use was released with an immediate implementation of a new way of using and occupying the land, reducing the old Indian territory to the present demarcated restricted space. Busatto (2003) records that in the middle of the surrounding population a stigma was produced by the statement: "Indians are privileged

landowners, who may lease their lands to rural entrepreneurs and live of such income."

The Cerrado was not very attractive for large investors at the beginning of the last century, due to its very acidic and less productive soils; however, with the development of technology, agricultural mechanization and soil correction, was later seen with productive potential. In the 1970s it started to catch the investors' attention from the livestock industry and mechanized agriculture, establishing in an embryonic way the modern agribusiness linked to international corporations in the region, which would benefit from large estates. Since this happened, the Cerrado was taken and agriculture was introducing strong transformations, affecting indigenous communities directly and indirectly.

Factors such as flat topography (easy for mechanization), a low vegetation form (easily removed by machines), cheap land and proper texture soils, facilitated the occupation and transformation of the biome. The modification and adaptation of plant species such as corn and soybeans, adapting them to the soil and climatic reality, also contributed to the process. At the same time, the logistics structure of communication and regional markets, based on the structure of urban centers, advanced consistently.

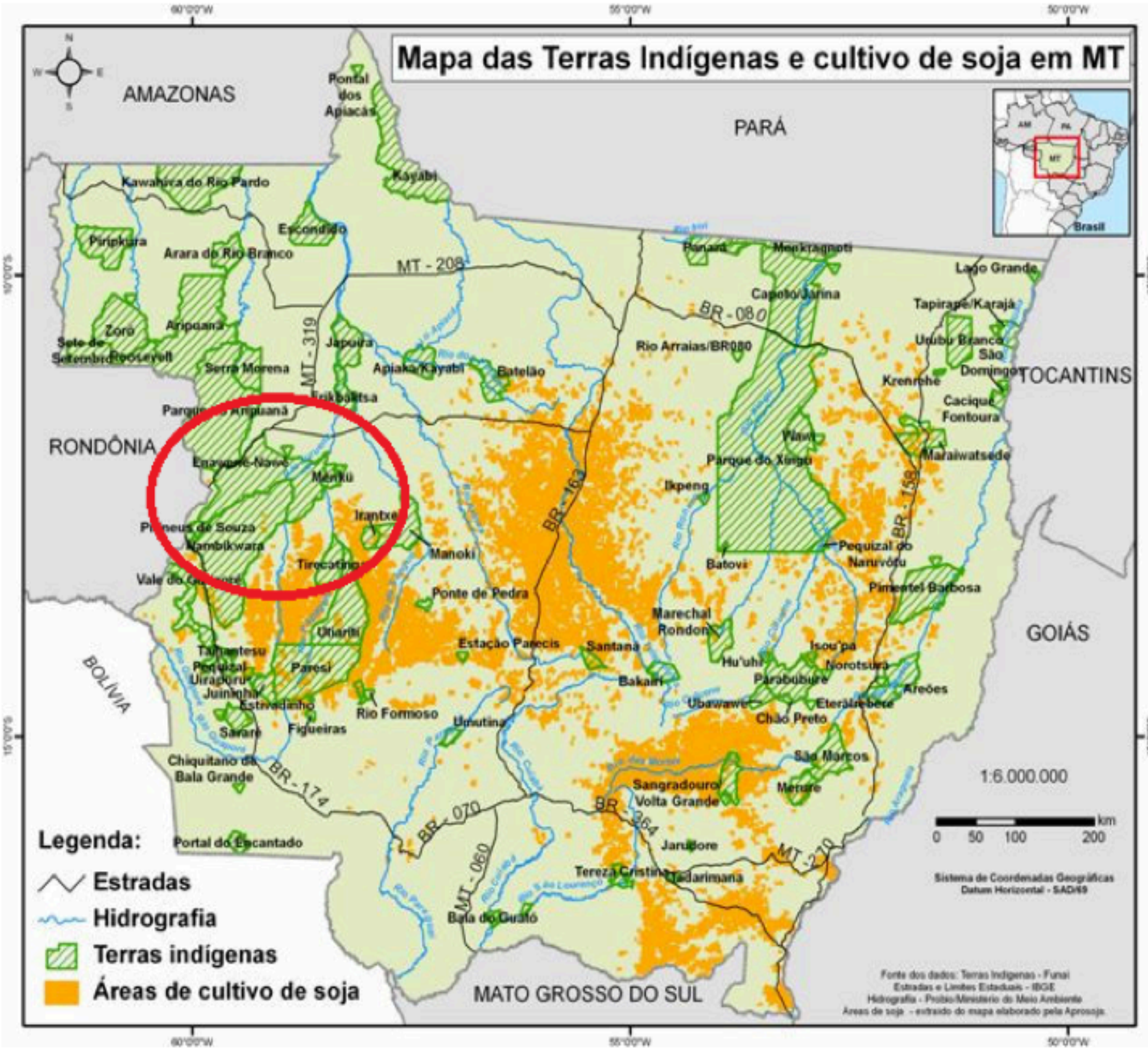
In transition regions or even Amazon forest there was a vegetal extractive potential, where the forest offered a huge diversity of native species for timber, the subsoil was rich in minerals and the hydrography favorable to hydroelectric development. All these factors caused the northwest region of Mato Grosso arouse interest in exploration.

The occupation of the region intensified with the implementation of large cattle properties and mechanized agriculture with annual crops such as soybeans, corn, cotton, rice, and sugarcane. To a lesser extent there are small farms and settlement areas.

Thus we see different moments for each economic interests involving the region: the first occurred in the rivers Arinos, Juruena and its branches, through the extraction of rubber and mining (gold and diamonds) which lasted until the mid-twentieth century; the second induced by agro-pastoral colonization, called March to the West (1940/50/60),and the third most significant, held by the National Integration Program – PIN, during the military dictatorship in the 1970s that entered through the colonization of populations in the region.

In the context of the third moment, especially since the 1990s, Mato Grosso sought to connect more intensively to the national and international economy through a commodity production model on an industrial scale: beef, soy, cotton and corn. The goal was to achieve regional development followed by economic integration with the country; however, although the crop reach lucrative levels of productivity and profitability, its success is intrinsically linked to the conditions of the climate and the availability of capital in the financial market. It was observed that without such guarantees, the effective grain production would not develop. Facing such evidence, since the beginning of 2000, traditional grain producers have formed financial consortia and migrated to power generation forms(HPP – hydroelectric power plants - and SHP – small hydroelectric power plants), in accordance with the state and federal infrastructure projects (construction and asphalting of roads, and installation of transmission lines and distribution).

Figure 2: Location of *E.N.* I.L.



Source: Biofuel Watch Centre and NGO Reporter Brazil, 2010.

Investments in power generation are based on the implementation of complementary projects that allow the operation of the production chain, transmission and distribution of energy. This infrastructure aims to support the necessary activities for the functioning and development of agribusiness, and the resulting regional development of this process, which involves a feedback loop between town and country-city by the dynamics of capitalist growth. Similarly, the federal and state roads were built and later paved (BR 364 and MT 235) for the flow of grain production in the region to consumer centers.

In that way, when you think of the impacts caused on indigenous lands, the synergistic and cumulative effects of all the projects installed in the region should be carefully evaluated. The consequences, acting together and adding weight one to the other, affect the natural resources used by indigenous peoples, influence their daily life, and affect the social and cosmological life of the people.

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3. Modification interferences of the surroundings in the

E.N. ethnic culture and environment.

3.1 Effects of the contact, delimitation of the territory and introduction of new goods and consumption.

The fronts of agricultural expansion caused effects on indigenous communities even before the direct contact. The *E.N.* were less accessible to contact with non-Indians and somehow protected by indigenous communities around them. But when confronted with the expansion fronts, ethnicities as *Rikbaktsa* and *Cinta largas*, they intensify attacks on *E.N.,* traveling out of their traditional territory and invading the lands of *Nambikwaras* neighbors.

The contact of *E.N*. with the national society, even when peaceful and with the care that had the Jesuits initially and OPAN later, protecting them from epidemics, population lows, land security and respect for their traditions, did not fail to impact the society's dynamics. The introduction of tools and means of locomotion, in a way, interfered in the internal politics of the community.

The demarcation of the territory, even ensuring the gratification of the land, eventually confined them to a space that was once surrounded by a preserved biodiversity. With the lands division, the surrounding areas were available for the exploration of small biodiversity activities using the bare ground. Thus, the available resources have become limited, such as hunting, fishing, collection areas and land for agriculture.

Despite the introduction of some consumer goods and other attractive techniques to their culture, *E.N*. kept their traditions with a modest external dependence until 1998. Meanwhile, in that year, Sapezal municipal landowners tempted the *E.N.* with the objective of building a road that would link Sapezal to Juina, dividing the *E.N.* I.L.as well as hiring some of them to work farm activities.

The illegal road was reported to the Federal Public Ministry and was later destroyed, but those responsible for the work were not punished. Camilo Carlos Óbice was accused as the main responsible for the work, but he was assassinated before finalizing the legal process and André Maggi, the project sponsor, was never investigated. The effects caused to the *E.N.* society were very serious and irreversible.

According to Detogni (2007), from the offered gifts, aluminum boats and outboard motors were especially valued because they no longer had to spend so much physical effort for their shifts, that have now become more agile. Since then were the boats and engines fleet increasing gradually, and as a result, it also increased the frequency of trips to the nearby cities in order to get fuel and maintenance for vessels.

The resources required to ensure the fleet and travel came to 2,005 from the pensions received by the elderly, and the allowance paid by parents of children under four months of age. Added to this, crafts trading and eventually surplus production of honey or fish. Another source was the tax on circulation of goods (ecological ICMS) for the municipalities that have natural areas preserved.

The intensifying contact of the *E.N.* with the surrounding society, a process that was accelerated by the opening of Sapezal-Juína road, inserted the mercantilist relationship ways in the daily life. At this point you can see that the financial resources caused immediate dependence.

Until then, these people did not know money and marketed their products on an exchange basis. Once in contact with the money, they began to realize the possibilities that it offers. From then on, everything in the village began to have price and became merchandise.

During this period the OPAN developed activities in order to manage the exchange fund, with the purpose of providing external products that were incorporated in the *E.N.* society. The products were mainly tools (ax, hoe, sickle, machete) and fishing gears (hook, sinker and line), which were exchanged for objects produced by *E.N.,* which were mostly crafts.

In addition to supply the need for industrial products, the exchange fund also had an educational nature. So there was a relationship that compared the value of their crafts with the main desired products. Ensuring the access to these products in a sustainable way and without paternalism. The craft was taken from the village and marketed by the OPAN team; with money from the sale, were bought them the products they ordered and brought them to the village. This way they knew the value of the product without the need for commercialization.

However, with the intensification of contact with the capitalist society, the commercialization of craft was no longer made on the basis of exchange, so they sold because they preferred to receive money to spend in the cities. In addition to crafts, other products are now marketed as the fish and honey. These events reveal the strength of capital when there is monetization of trade and the elimination of production forms and consumption alternatives.

The introduction of aluminum boats with outboard engines, received from Sapezal farmers, produced the introduction and establishment of the capital in that society and the destabilization of its domestic economy. The economy of *E.N.* decreased its level of sustainability and cooperation from the moment that the wooden canoes were changed by motorized boats, which needed gasoline and periodic maintenance, requiring an amount of financial resources that could no longer be supported by the crafts sale.

This situation generated social inequalities, causing families who did not have motorized boats feel inferior to the ones that already had them. There was a loss of cultural practices, since they stopped building wooden canoes and wooden paddles, facing the new technology and raw materials accessible to all; the effect of increased pollution of rivers by pouring gasoline and lubricating oil in the water and the emission of toxic gases in the air, adding to the noise pollution caused by sound produced by outboard motors.

With increasing frequency of population movements (mainly adult males) to the nearby towns, and with the knowledge and use of money, different processed foods were introduced in everyday life. According to Detogni (2007), the consumption of these products by the community is still relatively small but has been growing in recent years by changing the degree of their own production and ecological sustainability.

Environmental sustainability is defined by Lima Pozzobon (2005) as the ability of a population of occupying a certain area and exploring its resources without jeopardizing, over time, the integrity of the environment. The authors classify human occupation in terms of use of pressure and their impact on the environment. In this way they define environmental categories taking into account classification criteria based on the orientation of economic output, degree of involvement with the market and ecological culture. Comparing the current situation of *E.N*., according to this classification, it is observed that the surrounding of the I.L. was occupied by environmental categories with distinct behavior related to how they relate to nature.

Among the environmental categories that occupy the surrounding area, there are large estates, migrants, major projects and traveling explorers. Farmers of southern Brazil mainly form the estates, because of their interest in land; they occupy large areas of the Amazon.

With the large estates, it came the installation of greedy capitalist ways and a capitalist rationality that ordered the social groups according to their degree of development and market. There was an increased pressure exerted on the environment, causing the largest deforestation rates with the installation of cultivated agriculture and pastures. This scenario has influenced the behavior of *E.N.* society and caused changes in their ecological sustainability and economic orientation and its partial integration in the market economy.

According to Lima and Pozzobon (2005), the involvement with the capitalist market implicates environmental changes followed by significant changes in the pattern of consumption group. Thus, *E.N*. leave the category of indigenous peoples of sporadic trade, which is a characteristic of an autochthonous economic orientation, regardless of the market and a high ecological sustainability, with low environmental impact and a limited demand on natural resources. They passed to the category of recurrent trade in people, which has an average ecological

sustainability and has a consumptive economic orientation (consumption), even facing the home group, the consumer searches market items he considers indispensable.

In this context, the craft was no longer sufficient to meet the fuel requirements. They tried other sources of income, such as selling fish and honey, which also did not yield satisfactory return. Often, the amount derived from the sale of fish was less than the amount spent on fuel in the fishery and displacement to the point of sale, causing further damage. Some groups returned to the municipality of Sapezal in an attempt to receive donations from farmers, which was denied after the interdicted road. They also came to experience the physical labor on farms in Sapezal, but concluded that the financial return was not worth the time and effort spent on the job. It is also noteworthy that the occupation with work on farms entered the perception of the commodification of the workforce.

In this situation the community no longer knew how to get more fuel. Gasoline, fuel for boats engines, now has high value in the village and visitors were at risk of theft and lack of fuel for the return. The *E.N.* people claimed they could no longer fish because they had no fuel and they also could not perform their fishing rituals, refusing to return to rowing. They came to think about the possibility of lease of the land for mining or selling wood from forests, as some neighboring ethnic groups did on their territory, a practice that always condemned.

Given this situation, the OPAN held an internal workshop to discuss the actions that the field team would have to develop to meet this new demand from *E.N*. The first action proposed and executed was to appeal the INSS for the elders' retirement of the village, which at the time were 28 elders; and then to the motherhood aid for mothers who had infants. This action would help a lot, but definitely not solve the problem.

At the time, the law of the ecological ICMS was put into practice, which went over an increase of municipalities with conservation areas in their territories. The OPAN presented a funding request for the project using the ecological ICMS to the three municipalities covering the *E.N*.I.L. (Sapezal, Commodore and Juína). Only the city of Juina agreed to finance the project through an agreement with the OPAN. Years later, the *E.N.* will personally claim this resources, making visits to the municipalities and some public manifestations, preventing the entry and exit of employees when their solicitudes were not attended.

With the installation of the Special Indigenous District health care, institutions providing care in the villages began to hire indigenous and non-indigenous health workers, dentists' aids, boat riders and drivers. More recently they start receiving from other programs of the Federal Government, such as *Bolsa Família* (family bag) and *Panela Cheia* (full pan).With this aids the income of *E.N.* was increasing in the same proportion that increased consumption and financial dependence.

In this situation, the consumer no longer was restricted to tools, to fishing materials and fuel. Other consumer goods were introduced, the huge clay pots were replaced by aluminum pans, they started buying industrialized threads, replacing the threads used by women with native cotton, corn bags of rising grain mechanized farms, instead of their native corn from their gardens, clothes, shoes, flashlights, batteries, recorders, DVD players, televisions, cell phones, bicycles, soaps, processed foods (rice, noodles, soybean oil, sugar, biscuits, etc.). Anyways, *E.N*. community was connecting to the consumer society.

Indigenous lands emerge as a new space to absorb the surplus generated by the surrounding municipalities. Resources come in and are exchanged for goods and merchandise; however, there is no corresponding investment in infrastructure and in the social area, and reduced capital reserves are stored to be used in times of need. On the contrary, often the resources that enter are used to pay previous debts arising from the purchase of goods and / or services. Inequality, instability and dependence emerge. In the *E.N.* society, capital inflows led to internal crises: radical changes in production and consumption, the abandonment of sustainable practices and new dependent relations.

3.2 Consequences of the surroundings environmental changes.

Regional development ordered by capitalism via employment in urban and rural areas contribute to the dynamics of change in landscape and environmental degradation of natural areas, increasing pressure on indigenous lands, which represent the last areas with outstanding natural preservation.

The occupation by crops and livestock are made through deforestation and fires with intense modification of land use by mechanization and use of pesticides to monocultures maintenance purpose. This leads to degradation and pollution of soil and water resources. Busbars for power generation and overfishing lead to inevitable environmental degradation. Such transformations separately or as a whole, affect adversely the quality of life of indigenous communities in their I.L. In relation to pesticides, it can still occur the wildlife poisoning in the territory that feeds the indigenous communities and, consequently, cause health problems on such populations.

It appears that the surrounding occupation with the expansion of urban areas, agriculture and livestock and hydroelectric developments cause severe environmental effects to indigenous lands, decreasing biodiversity, changing the natural landscape, polluting the soil, air and water. Urban and agriculture expansion affect regional water resources, according to Costa et al. (2012).

Mechanized crops represent the activity that contributes the most to environmental changes from the agricultural expansion. Soybean occupies large areas in regions formerly covered by savannah and forest. Large amount of pesticide is released for the maintenance of monocultures of soybean, corn, cotton, etc., polluting the soil, air, water, animals, vegetation and the local population. There is a decrease of biodiversity, loss of products such as fibers, resins, extracts and fruit, a reduction of the space for the natural fauna, influencing indigenous communities in a visible way that impacts the transformation of the savanna and forest, giving way to crops and pastures.

This type of production in the indigenous lands environment cause negative effects for the communities who live there. They constitute environmental impacts, such as pollution by pesticides in the water table and springs that run through much of the indigenous settlements, caused by the breakdown of the traditional economy. The pressure also extends into the indigenous lands, with the increasing presence of exploiters of natural resources such as timber and minerals existing in these lands, as well as tenants and illegal fishing.

Second Steps (2005), the amount of fish in *E.N*. I.L. varies from year to year, there is a natural seasonality in relation to the fish population; however, *E.N*., for at least a decade, say the number of fish decreases year after year. Several springs forming the rivers of the I.L. are located outside the demarcated territory. They are within farms, ranches, and even cities. With the advance of soy and livestock, these springs are being polluted with pesticides, waste and sewage.

Some neighboring ethnic groups have already converted to this type of production within their lands. The *Parecis*, *Nambikwara* and *Manoki* leased part of their land for planting soybeans in a partnership scheme with farmers; the *Cinta-largas*, *Myky* and *Nabikwara* have sold much of its hardwood forests. The *E.N*. have not yet become fans of this type of production, preferring to look for other ways to acquire the necessary resources to their new demands.

3.3 Effects caused by the presence of hydroelectric projects

The Growth Acceleration Plan (PAC) has invested heavily in Brazil's hydroelectric sector, encouraging the establishment of projects in several river basins of the country. Small hydropower plants (SHP) were presented as alternatives to large hydroelectric plants, with the argument that it causes less environmental impact; it entails a lower installation cost and less time for the works.

The hydroelectric projects, seeking to use the natural force, cause land dispute. The positioning of the projects also generates an agricultural disorder of the land, especially when it has a set of dams on a particular stretch of the river. The Juruena complex, for example, where nine power plants and two hydroelectric plants were designed in a stretch of 100 km on high Juruena River, located upstream of the *E.N*. I.L.

The installation of projects opens the door for the entry of new activities in the vicinity of the busbars, making it the main focus of trade and regional employment. There is the land relocation for the installation of the construction site, opening roads, the exploitation of harvesting areas for timber, sand, stone and "boot out", the removal of vegetation and easement for power lines. Hydroelectric power plants introduce new commodification values for the land and labor, configuring new social relations, temporarily inflating the regional market since the construction process conveys a concentration of people. After the workers leave, cooling the regional market, only a few workers remain for the permanent staff, which will monitor the operation of the enterprise.

Being an oligopoly market, the hydroelectric projects work with fixed capital from the state and private investment. In the historical process of capitalism, the accumulation of capital always leads to unequal negotiations, benefiting the powerful and causing expropriation of material and symbolic goods to the poor. This mechanism is explained by the concept of environmental injustice (ACSELRAD, 2009), when unequal societies, from an economic and social point of view, destine the greatest burden of environmental developmental damage to low-income populations, discriminated ethnic groups, and marginalized and vulnerable communities.

In the relation between the *E.N*. with the Juruena complex, the Indians had to accept unwillingly the installation of the project upstream of the main river that flows through their territory. The business, the government and even other indigenous groups pressured them to agree on the execution of a work full of technical and social risks, knowing that it would weaken the supply of natural resources and the basis of their spiritual beliefs. In return they received financial compensation for the impacts caused. They followed the theory of "fait accompli" because they felt that they could not prevent the installation of dams. Therefore, capitalist hegemony is established, in which their own financial interests supersede all others.

In 2003, the *E.N*. had the first contact with the Juruena complex when a consultant hired by the company visited the village, accompanied by a FUNAI official and a technician from the OPAN to inform the *E.N.* on the project, as part of the process licensing. At that point, *E.N*. showed much concern and uncertainty on this fact that emerged in the vicinity of its territory and decided to expose their worries to the consultants, in a tense meeting.

Several members of the community clearly expressed their reservations to the consultants. The case of a desperate lady was reported, who began to speak in their own language and gestures, showing them that she had many children and grandchildren and that she was afraid to die drowned, as there is a myth in the culture of *E.N*. about a flood that took place in a very distant past, where many people died. She feared that with the hydroelectric power plants this flood could happen again and easily reach the village. The consultants did not understand. Just gave smiles and continued their trip.

In 2006, the anthropological and environmental complementary studies started to issue the license for the installation of five SHPs of the Juruena complex. The possible impacts that could cause the installation, as well as the compensation the communities would receive for these impacts were explained. In these explanations, it was guaranteed that the project would not end with the fish of their territory and that, even so, they would receive compensation. Despite misgivings, they decided not to oppose at the time and wait for the completion of studies to continue negotiations.

Figures 3, 4, 5 and 6: Images of the meetings held for the presentation of the project to the communities.

Source: Acervo de Fabricio Moura, 2006 (Fig. 3 e 4).
Source: Acervo de Guilherme Fantin and Sandra Maia, 2006 (Fig. 5 e 6).

The presentations and discussions on the establishment of the project, either in the village or in the cities, disrupted the daily traditional activities of the members of the ethnic groups. Long meetings generated expectation of financial compensation, making them dazzle with the possibility of acquiring material goods, diverting attention from the negative impacts generated by these changes.

With the completion of studies in 2007, FUNAI issued a favorable opinion on the project installation and immediately began the work. During a tour on the Juruena River, a group came to the point where the power plants of the *PCH Telegráfica* would be built and found that the works were already proceeding. This verification stunned the group, because they believed that the negotiations had not been completed, so the work should not have started. They felt aggrieved to find the construction on its way without the consent of ethnic groups so they returned to the village to inform the news. At a meeting in a courtyard of the village they decided to make a public manifestation to paralyze the work of power plants, moving to the location of the enterprise. They closed the road that provided access to the construction site, preventing the entry and exit of employees. During the manifestation they would write a formal letter demanding the immediate stoppage of works, the production of new studies and negotiations of compensation.

Entrepreneurs negotiated with the protesters and held a meeting with the Indian community, representatives of the Government of Mato Grosso, FUNAI and the Federal Public Ministry - MPF. Entrepreneurs agreed to carry on new studies, but refused to strike. On the other hand, entrepreneurs accepted the request of *E.N.* and provided nine thousand liters of fuel (gasoline) and two tonnes of maize grain to give continuity to their *Yãkwa* ritual; consequently they returned to the village, allowing the continuation of the works. After these events, a group visited weekly the construction site of *PCH Telegráfica* and returned bringing fuel and foodstuff (rice, beans, oil, pasta and sugar) that were removed from the employees' cafeteria and donated to the Indians.

The financial resources acquired from retirement, maternity aid, ecological ICMS, wages and selling crafts have become insufficient to maintain the demand for fuel to carry out their productive and ceremonial activities. Given this situation, the resources offered by the entrepreneurs of the hydroelectric sector appeared as an alternative to purchase gasoline, which encouraged them to allow the continuity of the works, even if contradictory.

As the industrial capitalist economies retain the power to control the global financial institutions (IMF and WTO), local entrepreneurs have used the same strategies with the use of compensations. Once the Indians become dependent on financial capital from compensations, entrepreneurs lead such communities to accept the projects in the surroundings. It happened in the relationship of *E.N*. with the Juruena complex, because even the natives that were directly affected by the power plants accepted the work, despite all the risk they take as a result of the impact.

Entrepreneurs would oppose to lose profit for the benefit of indigenous peoples, as a politic redistribution or social improvement. Besides the prejudice against the indigenous, entrepreneurs argue that it is the State's duty to invest in indigenous lands. In the case of complex Juruena they argue that the project is located outside of indigenous lands and the impacts will be restricted to the location of the power plant, so it would not affect the community.

However, environmental impact studies on rivers that are dammed show the contrary. According to Bandeira (2005), power plants of any kind interrupt the natural route of sediments into the ocean, causing both the silting of the reservoir and stopping or decreasing the natural flow of these. The retention of sediments in the reservoir breaks the natural and environmental balance of the basin. The finer sediments such as silt, colloids and clay transport nutrients and organic matter, vital for the maintenance of aquatic biota. When there is a reduction of these nutrients, hence water flow rate decreases. The retention of coarser sediments, especially the sand produces a sediment imbalance in the currents flowing downstream, which together with the change of the flow causes changes in the route of the thalweg and erosion on the banks (SALIM et al., 2004).

The existence of a waterfall about 20 meters fall just above the *PCH Telegráfica* led the entrepreneurs to assert that the natural dam have prevented the migration of fishes, so the PCHs power plant does not affect the fish population; however, one should take into account other impacts caused by power plants affecting fish populations, as observed by Costa et al. (2012, p. 101), in a further study of the upper Juruena basin.

For *E.N.,* these changes in Juruena River threaten the quantity of fish for these people, resulting in food and cultural practices. Changes in the riverbed can also influence the flow, damaging the navigability, which is the main means of transportation on the territory of *E.N.*

The fishing reduction, for people who rely on fish, as the main source of protein and the center of social and cosmic relations, is a serious consequence of the installation of hydroelectric plants. Even if entrepreneurs and consultants demonstrate through studies that the impact will be insignificant to fish populations, there will be technical and symbolic divergence.

Pondering the *E.N.* situation, the dams were installed in a place full of rocks and rapids, considered mystical, because it was the place whence the fish that habit the rivers of their territory emerged originally. The changes in the riverbed, through detours and the construction of dams cause the *Yakairiti* spirits anger since they are holders of the fishing resources. If they get irritated, these spirits will release their anger in *E.N.* not only inciting the lack of fish, but also spreading illness and death.

Figures 7 and 8: Changes in the riverbed of Juruena River caused by the works of *PCH Telegráfica*.

Source: Acervo de Costa, M. P., 2014.

Source: Acervo de Fabrício Moura, 2014

Despite the palliative that *E.N.* received, such as gasoline and groceries, compensation for impacts were not defined and the works continued. In July of 2008, MPF granted an injunction stooping the work, alleging irregularities in the environmental licensing process, but then the president of the Supreme Court overturned the injunction, allowing the continuation of the works. Days later, at a meeting between the indigenous community, FUNAI and EPE was held to request indigenous authorization to conduct research within their land for an hydroelectric potential inventory; and it was presented a map with 66 hydroelectric construction proposals in the Juruena River basin.

With the advancement of the project, the effects of the SHP works reached the riverbed of the Juruena River, causing turbidity in the waters that are naturally clear and transparent, leaving them scared and apprehensive. The sum of factors such as water turbidity, the delay of the compensation payment and the threat of construction of new power plants in the basin of Juruena revolted the society. The *E.N.* took an unexpected attitude.

In October of 2008, a group of *E.N.* community went by boat up to Juruena River. They camped on the middle of their journey and arrived at dawn to the construction site of *PCH Telegráfica.* Painted for war and armed with bow and arrows in protest attitude, they expelled the employees of the works, confiscated radios and carried out an evacuation of the barracks, offices and cafeteria. They took everything they could carry; from the sacked items stand out: cellphones, laptops, computers, cameras, watches, wallets with money and documents, clothes, tools, pots, foodstuffs, gasoline and chairs. After the looting, they set fire at the construction site, burning dwellings, offices, the clinic, canteen, warehouse, trucks and vehicles. The demonstration lasted about three hours and there were no injuries.

Figures 9, 10, 11 and 12: Fire at the construction site of *PCH Telegráfica.*

Source: Acervo de Fabrício Moura, 2008.

After these events, the works of *PCH Telegráfica* were paralyzed. However, the other four works in progress upstream continued. It created a climate of fear and insecurity among the *E.N.* and the number of employees of the works and security has been increased. The *E.N*. took no longer a negotiating position with the enterprise. This position lasted until February 2009, when a group of *E.N*. moved to Juína to seek resources for fuel that would be used in the *Yãkwa* ritual for fishing. After several attempts with FUNAI, OPAN and the City Hall, the amount of benefits they agreed on giving to the *E.N.* group was not enough. So they decided to ask for help to the Juruena complex entrepreneurs, who agreed to donate the fuel with the condition of the resumption of the negotiations on compensation for impacts. An agreement was closed.

As settled by the agreement, they scheduled a meeting for the end of March of 2009, along with other ethnic groups (*Paresi, Nambikwara, Myky* and *Rikbaktsa*) and signed the Basic Environmental Project for the compensation for impacts caused by the eight SHPs of the Juruena complex. The value to E. N. was reduced to one million five hundred thousand *reais* deposited to FUNAI, under the administration of the Center for Local Support (NAL) - Juina. With these resources, they purchased about 60 motorboats, a truck, a minibus, fuel and other items of interest for the *E.N.*

There was no socio-environmental program to mitigate the impacts. Only the financial compensation was used freely. After this, the effects were potentiated, intensifying the pressure on I.L. natural resources with an increased external dependence.

At the end of their fishing ritual in 2009 they claimed that the amount of fish taken by their traps from the river was not enough to carry out the *Yãkwa* ceremony. So they asked the FUNAI to buy fish reared by fish farmers in the region so that they could continue the ritual. FUNAI took care of their request by providing three tons of tambaqui. What was the exception became the rule and, from then on, the community started buying fish for the realization of their ceremony.

With the payment of the compensation and the purchase of more boats and motors, came the inevitable and continuous demand for fuel. They have demanded permanent compensation for the projects operation. They argued that the SHP work permanently, so the compensation should be permanent. Entrepreneurs resisted, but stated that they would wait for the completion of studies carried out by FUNAI, which would define the need for permanent

settlement. Due to the insistence entrepreneurs agreed to fund an emergency plan that would supply the most urgent demands of the indigenous community, while not conclude the additional study of the complex Juruena commissioned by FUNAI.

With the conclusion of the complementary studies, in 2012, entrepreneurs, FUNAI and the community agreed to a monthly payment to compensate the impact of the Juruena complex. With this, they earned financial resources that attend the demands needed to keep their new acquisitions. The *E.N.* organized an association and, through a democratically selected board they began to manage these resources.

Although the financial resources to carry out the productive and ceremonial activities were in part guaranteed, there was not the same certainty on the availability of natural resources. The *E.N.* say the fish is becoming increasingly scarce, and now they need to purchase it. With this, they are abandoning the construction of traditional fishing dams for the *Yãkwa* ceremony. Now they are camping near the road and there they wait for the arrival of the truck that brings the fish, which is then prepared in the traditional way and taken to the village to perform the ritual.

Figures 13 and 14: Enawene Nawe Portin 2002.

Source: Sergi Guiraud, 2002.

Figure 15 and 16: Enawene Nawe Portin 2010.

Source: Costa et al. (2012).

4. Considerations

The area where a little more than 600 habitants from indigenous communities live presents a good conservation state. Regarding the *E.N.* people stands out their first direct official contact with non-indigenous through the Anchieta Mission in 1974, and later with the OPAN (Native Amazon Operation). However, the most intense interaction of the people with non-indigenous occurred once the fronts of capitalist forces came to occupy the northwestern State of Mato Grosso, in the 1990s, especially since 1998, when the capitalist agricultural frontier process expanded.

The I.L. was surrounded by agribusiness (farming, agriculture and new cities) and recently it was affected by hydroelectric power plants. The changes of the surroundings are intense and significant, and are also causing interference to the indigenous culture and way of life.

The extension of the capitalist space, which appropriates the environment territory of the Cerrado and the Amazon, implicate consequences for indigenous peoples that are both immediate and long-term effects, leading to a breakdown of their culture and way of life.

In the case of *E.N.* people such experiences started in the 1990s decade, developing in three ways: 1 - Contact mode: entrepreneurs and farmers convinced Indians with gifts (boats, gasoline, food and money) for the construction of an irregular road within the I.L., in order to reduce the costs of transportation of grain, timber and livestock produced by agribusiness. Later they persuaded Indians to work on farms, a situation that caused the commodification of labor. Such circumstances served as an initiation process for the indigenous peoples to enter the capitalist ways where the relationships society-nature (space negotiation) and social relations (sale of labor power) prevail. The capital, using local agents, strategically developed an insertion in the territory and culture. 2 - Substantial surrounding changes: caused by the private appropriation of land and forest resources, establishing impactful monocultures, via extensive deforestation. The Indians observed that the community way of living, interacting with the forest, has a strong external contradiction. 3 Hydroelectric power plants: even if they were beyond the borders of I.L. the power plants construction directly impacted rivers and fish populations and consequently their economic ways (their alimentation relies on the fish as the main source of protein) and culture (the ordinary course of the community ritual was disturbed by scarce fish). They fought for compensation, but the benefit was exclusively financial, and the use of these retribution resources for the damages brought dependence on the capitalist

relationships that they had already experienced.

The new use of money untied internal changes as social inequalities, the incentive for capitalist consumption, the ingestion of industrialized alimentation, and the substantial modification of mobility forms, with the intensive use of motorboats. The three ways brought major disruption to the lives of *E.N.* people, who still seek to preserve their traditions. However they are in a dilemma of how to strengthen their own culture and way of life alongside the insertion of capitalist society values.

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