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Abstract

The expansion of the Brazilian agricultural frontier in the Amazon has generated profound changes in the ways of life of traditional peoples and communities' and in their relations with natural resources. The major infrastructure projects implemented in the Amazon, in the wake of developmentalism, promoted unequal and unsustainable land use, making vulnerable indigenous populations and their territories. In this text we seek to analyze the transformations in the conception and use of forest resources by the Paiter Suruí indigenous people, in the Sete de Setembro Indigenous Land. The study was based on the documentary method and the analyses were conducted based on Ecosocialism (LÖWY, 2013; 2014). The results point to a growing understanding by the Paiter Suruí people of the value of the forest in "standing" for income generation, mainly through the use of forest biomass for carbon sequestration; also indicate the introduction of this ethnic group into the international debate on the environmental crisis and global warming.

Keywords: Border. Development. Resources. Sustainability.

O valor da floresta: trajetória histórica dos Paiter Suruí no uso dos recursos florestais na Terra Indígena Sete de Setembro

Resumo

A expansão da fronteira agrícola brasileira na Amazônia gerou profundas mudanças nos modos de vida de povos e comunidades tradicionais e em suas relações com os recursos



naturais. Os grandes projetos de infraestrutura implementados na Amazônia, na esteira do desenvolvimentismo, promoveram usos desiguais e insustentáveis do solo, tornando vulneráveis as populações indígenas e seus territórios. Neste artigo buscamos analisar as transformações na concepção e uso dos recursos florestais pelo povo indígena Paiter Suruí, na Terra Indígena Sete de Setembro. O estudo baseou-se no método documental e as análises foram conduzidas com base no Ecossocialismo (LÖWY, 2013; 2014). Os resultados apontam para uma compreensão crescente, por parte do povo Paiter Suruí, do valor da floresta em "pé" para geração de renda, principalmente por meio do uso da biomassa florestal para sequestro de carbono; indicam também a introdução dessa etnia no debate internacional sobre a crise ambiental e o aquecimento global.

Palavras-chave: Fronteira. Desenvolvimento. Recursos. Sustentabilidade.

El valor del bosque: trayectoria histórica de los Paiter Suruí en el uso de los recursos forestales en la Tierra Indígena Sete de Setembro

Resumen

La expansión de la frontera agrícola brasileña en la Amazonía ha generado profundos cambios en las formas de vida de los pueblos y comunidades tradicionales y en su relación con los recursos naturales. Los grandes proyectos de infraestructura implementados en la Amazonía, a raíz del desarrollismo, promovieron usos de la tierra desiguales e insostenibles, volviendo vulnerables a las poblaciones indígenas y sus territorios. En este artículo buscamos analizar las transformaciones en la concepción y uso de los recursos forestales por parte del pueblo indígena Paiter Suruí, en la Tierra Indígena Sete de Setembro. El estudio se basó en el método documental y los análisis se realizaron en base al Ecosocialismo (LÖWY, 2013; 2014). Los resultados apuntan a una comprensión cada vez mayor, por parte del pueblo Paiter Suruí, del valor del bosque "en pie" para la generación de ingresos, principalmente a través del uso de biomasa forestal para la captura de carbono; también indican la introducción de esta etnia en el debate internacional sobre la crisis ambiental y el calentamiento global.

Palabras-clave: Frontera. Desarrollo. Recursos. Sustentabilidad.

1 Introduction

Climate change of anthropogenic profile is one of the most pressing agendas of the contemporary environmental agenda, according to the Convention of the Parties 2015, which resulted in the so-called "Paris Agreement". Such changes pose an urgent and potentially irreversible threat to human societies and the planet, demanding effective responsibility and collaboration of states in global governance to reduce greenhouse gas emissions (VEIGA, 2017). Mitigating / reducing measures of global warming are necessary, without prejudice to structural changes in policy, economy and lifestyles.

Looking at the national scenario, full of contradictions, advances and obstacles, Favareto (2019) warns that in order for the idea of ecological transition to be applied it is necessary to go beyond the reissue of measures taken previously. "It is necessary to discuss the position of this theme in the most general milestones of the strategies and priorities of the Brazilian development model, which, in order to be truly new, will need to overcome the terms of the experience already lived" (FAVARETO, 2019, p. 52). Thus, it is essential to think about a new model of socioeconomic development and reconfigure the relations of production and



consumption. In this process, the good practices of traditional peoples and communities expressed territorially can be a beacon for both reflection and action.

In the face of challenges of this order, we aim to communicate, in this text, aspects of the experience of the Paiter Suruí indigenous people (also known as suruí and suruí of Rondônia) in relation to the management and use of the forest resources available in the Indigenous Land (IT) that inhabit.

The Suruí reside in the Sete de Setembro Indigenous Land, a territory of 248,146ha, located in areas of the states of Rondônia and Mato Grosso, in the Legal Amazon/Brazil. They are spread over 28 villages, each led by a chieftain. They have their own parliament and a chief who exercises political leadership over the others. They communicate mostly in Portuguese and in the native language known as Suruí of Rondônia, this language of the Tupi group and the Mondé linguistic family.

The contact of this ethnic group with Brazilian national society began to occur from the 1960s, in the context of the expansion of the country's agricultural frontier and the new geopolitics to the Amazon, established by the military governments that took power in 1964.

During that period, several developmental projects were directed to the Brazilian Amazon, including the Polamazônia in 1974, the Polonoroeste in 1981 and, in the meantime, the opening of the BR-364 highway. These projects have boosted the population displacement of a large contingent of peasants from the centersouth of the country to the part of the Amazon rainforest that currently corresponds to the State of Rondônia, thus starting interethnic relations marked by conflicts, negotiations and multiple influences.

In this process, the demand for agricultural soils in the Amazon multiplied, while the structure of NICAR - National Institute of Colonization and Agrarian Reform remained unable to effect all the required settlements and subsidize them. Moreover, the low presence of the State (or its omitted attitude) favored the invasion of territories traditionally inhabited by the indigenous. From the domination of these territories, these peasants from the south-central part of the country undertook economic activities of medium and high socio-environmental impact in traditional indigenous territories, including agriculture, livestock and timber trade. Most of these activities were performed without technical guidance, configuring themselves unrelated to sustainability parameters.

Deterritorialized, the Suruí retreated more and more in the forest and were only contacted by FUNAI on September 7, 1969, under the command of the from the backlands Francisco Meireles (MINDLIN, 1985). FUNAI's assistance, although precarious, was fundamental to avoid the decimation of this indigenous people, because, in contact with migrants, a large number of indigenous people died due to endemic infections such as measles, influenza and pneumonia, or due to the destructive power of firearms carried by outsiders. The Suruí population has undergone a drastic demographic reduction, from approximately 5,000 people to just over 250, according to teacher Gasodá Suruí (oral information).

One of the most critical points of this process, through the prism of ethnicity considered here, was the loss of territory, since it represents for traditional peoples and communities the material support for the reproduction of life and culture (VILLARES, 2013), which transcends its economic value. For these indigenous peoples, the land has special symbolic value, because it is from it that they remove



the food that nourishes the group; the fruits brought by the seasons are celebrated and shared. The work with the land and the forest organizes the life of the group in its varied rites and daily gestures. The land is no longer simply soil, space, but dimensioned territory: physical-territorial, socioeconomic, political-organizational and symbolic-cultural (SURUI, 2018; MUNDURUKU, 2018; KOLLING, SILVESTRI, 2019).

When they were eroded from this territory and became pawns on cattle and coffee farms many indigenous people succumbed, because they no longer had the elements that supported the sensitive web of their existence. And even when the interethnic conflicts were minimized, from 1983, when the approval of the Sete de Setembro IT was approved, the Suruí found it difficult to resume demographic growth, due to diseases and nutritional deficiencies caused, mainly, by the new consumption habits acquired from the experience of contact with non-indigenous society.

Even with the demarcation of IT, the challenges remain intense, either due to the cultural transformations that have occurred with the interethnic process, or because of the lack of social and legal security experienced by the indigenous peoples – recurrent expressions of colonialism that marked and still marks the relations between indigenous peoples and hegemonic society and the neoliberal agenda on the Amazon, currently supported by the Ministry of the Environment itself, which acts as one of the agents of the interests of loggers and prospectors.

In their processes of resistance, confrontation, adaptation and social rearrangements in the wake of capitalism, the Paiter Suruí people have been open to new collectives (LATOUR, 2004) and to new socioeconomic and environmental experiences, as demonstrated by the project "Carbono Florestal Suruí".

The Suruí Forest Carbon project has earned the ethnic group indigenous pioneering in the use of a Clean Development Mechanism (CDM), based on the Reduction of Emissions from Deforestation and Forest Degradation (REDD). This is a carbon sequestration project carried out through reforestation and discontinuity of illegal timber trade practices, which had been occurring due to the economic pressures experienced by the indigenous and the limited survival alternatives that they had left.

2 Materials and Methods

This research was developed in a qualitative approach. It is classified, as nature, as Basic Research; objectives, such as Exploratory Research; and in relation to the procedures used, it is configured as Documentary Research. With regard to the field of knowledge, this study is located in the domains of the History of the Present Time, a challenging field of historiographic studies in that it is the "history of a past that is not dead, of a past that still serves the word and experience of living individuals" (ROUSSO, 1998, p. 63).

As for the concept of "present time" it is appropriate to note that

The concept refers in its extensive meaning to what is of the past and is still contemporary to us, or even presents a sense for us of the non-contemporary contemporary. The notion of 'present time' becomes in



this context a means of revisiting the past and its possible certainties, as well as possible uncertainties (DOSSE, 2012, p. 11).

Also according to the author, the history of the present time is a field of knowledge whose singularity lies "in the contemporaneity of the noncontemporary, in the temporal thickness of the space of experience and in the present of the incorporated past" (DOSSE, 2012, p. 6). Among the main challenges that permeate him can be mentioned: (1) the existence of living witnesses who can challenge the version elaborated by the historian; (2) documents not yet hierarchical, often unpublished and "sensitive", which interact with emotions and,(3) does not allow to highlight regularities, continuities and unfolding; (4) inevitably lets show the place of speech of the historian, its political and ideological ades and (5) the fact that the context of the elaboration of the narrative is the same social, political and economic context in which the phenomenon takes place. These challenges impose new demands on the historiographical operation, which should contribute to the formation of historical consciousness and to the construction of a common, dialogical and multicultural culture.

The notion of a document that supported the study was that advocated by the Annales School, which conceives it in an expanded perspective: as any and all vestiges of human activity, which can be written, imagery, sound and occupy varied supports. It is understood that the document is the product of a choice made, either by the forces operating in the temporal development of the world, or by the historians themselves (LE GOFF, 1996).

The environmental crisis, the central category of this study, was addressed as a problem of the present time capable of compromising the reproduction of life in its various forms. As a problem of the present time, it is part of the political sphere in an urgent way, demanding new practices, because,

A few years ago, when we talked about the dangers of ecological catastrophes, the authors were referring to the future of our grandchildren or great-grandchildren, something that would be in the distant future, within a hundred years. Now, however, the process of nature devastation, environmental deterioration and climate change has accelerated to such an extent that we are no longer discussing a long-term future. We are discussing processes that are already underway – the catastrophe is already beginning, this is the reality (LÖWY, 2013, p. 80).

And contrary to what the denialists might say, it is not alarmism or mere rhetoric, but scientific evidence (UNMÜBIG, 2016).

The documentary corpus of the study was composed of the Sete de Setembro Indigenous Land Ethno environmental Management Plan (ECAM, 2008), which presents the Paiterey Program, the Suruí Forest Carbon project (IDESAN, 2011), the research report "Reforestation of the Sete de Setembro Indigenous Land: a change in the perception and conduct of the Paiter Suruí people of Rondônia?" (SURUÍ, 2013), the Kyoto Protocol to the Convention on Climate Change (UNFCCC, 1997), the Paris Agreement (UNFCCC, 2015) and the document "Transforming Our World: the 2030 Agenda for Sustainable Development" (UN, 2015).



The data acquisition was carried out electronically from the Google search engine and in the collection of the Kanindé Ethno environmental Defense Association, in Porto Velho.

The analyses of the collected data were carried out in the light of the criticisms provided by Ecosocialism (LÖWY, 2014), which seeks to provide an alternative of civilization based on an economic policy that puts social needs and the imperative of restoring ecological balance, promoting the overcoming of capitalism with a view to a more equitable society, solidarity and sustainable in its actions.

3 Results and Discussion

The Military Dictatorship implemented in Brazil in 1964 began a new phase of expansion of the country's geographical and economic borders. Under the aegis of the doctrine of national security, developmentalism and the slogan "integrate not to deliver" projects of broad socio-environmental impact were implemented in the Brazilian Amazon, such as POLAMAZÔNIA, POLONOROESTE and the construction of BR-364. These projects, under the motto of promoting the integration and economic development of the country resulted in controversy and environmental degradation, promoting an exclusionary development and harmful to the culture of the traditional peoples and communities that inhabited the region since ancient times.

These macro-projects have opportunistized the displacement of thousands of people from the south-central part of the country to where the State of Rondônia is currently located. The BR-364 highway alone in 1968 opened about 240,000 km2 of land in Rondônia and began a migration process that brought about 65,000 people a year between 1980-1983, rising to more than 160,000 migrants annually in the period between 1984-1986 (MAHAR, 1989).

In this context, the first contacts of the Paiter Suruí people with non-indigenous society occurred in the 1960s, resulting in invasion of their territories, loss of biodiversity and establishment of complex and often conflicting intercultural relations. The invasion of its traditional territories caused direct impacts on the environment and its culture, affecting from its most basic form of social organization, "the system of halves", to the development of new economic rationalities, as attest to the Suruí Forest Carbon project, in the wake of the so-called "green economy".

The Paiter Suruí society is divided into two halves, that of the swidden (íwai) and that of the bush (metare). The members of each half have their own internal obligations, in addition to collaborating with the other half, according to the demands presented by it. The íwai are responsible for agriculture, harvesting and the preparation of food and beverages. The representatives of the ideals of organization are those who stay in the village, characterized by a more sedentary profile in relation to their other half, the metare. The metare act as hunters and gatherers, celebrating nomadic life in the forest. They are connected with ideas of movement, adventure and adaptability.

The two groups meet once a year, in a party called mapimaí, and then those who were as íwai go to the floreta to act as metare, and who was as metare takes



the place of the íwai until the next mapimaí. This cultural rotation is structuring the life of the Paiter Suruí, however, from the contact with non-indigenous society this form of organization was shaken. First, the forest was destroyed by the action of loggers, in order to make it impractical for the metare group to remain in their target environment.

With the forest compromised it was no longer possible to extract enough food for survival or natural resources for those present (the handicrafts with which they should present those who stayed in the village). On the other hand, the íwai, by observing the settlers in their territory or in nearby areas, learned that it is possible to produce certain agricultural genera of significant commercial value, to market them and with the money to buy the consumer goods they desire. In this intercultural process, reciprocity, care in receiving metare and celebrating mapimaí gave way to individualistic and capitalist concerns. The gift and care of the other were, at least in part, supplanted by the power of capital, requiring new dynamics of conservation and adaptation from this ethnicgroup. According to Silva and Ferreira Neto (2015), it cannot be said that this is a unilateral process in which the market advances on indigenous culture, because it is also possible to notice certain movements of approximation on their part. The Suruí, in this way, have triggered both mechanisms of change and stability and cultural resistance.

In this half-century of contact they monetized themselves, learned western farming and livestock techniques and, in the process, the felling of trees and the illicit trade of timber - an activity prior to the formation of pastures and fields of cultivation - proved advantageous from the economic point. The money obtained from the timber trade symbolized, in addition to material comfort, possibilities for inclusion and social acceptance in the surrounding society. With money in their pockets and expensive trucks, the indigenous believed it was possible to overcome structural racism in Brazilian society and be better accepted in local society.

The first three decades after the surui's contact with non-indigenous society were marked by exacerbated exploitation of natural resources. Exploration carried out, to a large extent, with the connivance of the indigenous peoples themselves, who were guided by a utilitarian vision and centered on the satisfaction of personal interests and needs, relativized the symbolic value of the forest, its importance for the maintenance of life and surui culture and the Amazon ian ecosystem.

Individual and collective choices and diverse pressures (not only economic, but also political), as well as the violence and coerction of loggers, farmers and gunmen shaped unsustainable uses of the environmental resources of the Sete de Setembro IT, uses that would later be rethought.

In the 2000s, the Suruí indigenous peoples began a systematic evaluation of their way of life, promoting critical reflections about their culture, society and the environment in which they live (SURUÍ, 2018). The relationship established with the environment and the loss of natural resources occurred in this process began to be perceived as triggering factors of socioeconomic inequalities internal to the group, in addition to conflict and maximization of violence. This reflexive experience culminated, in 2003, with the Pamine Project, which consisted of a collective reforestation action carried out by the Suruí, with a view to recomriding the IT environment, degraded by anthropic actions. According to Chicoepab Suruí:



The Pamine Project began in 2003 with the objective of reforesting degraded areas and enriching areas of native forest of the Sete de Setembro Indigenous Land, on the border of the states of Rondônia and Mato Grosso. Pamine means, in the Paiter Suruí language, to be reborn, the act of redoing something by the action of man. The name was chosen to represent the process of rebirth of the forest with human help. A rebirth not only of the trees planted by the project, but also of hunting, fruit, the environment, as it was known by the Paiter Suruí, before deforestation.

The Pamine project underlies an ecological vision, which understands Suruí life as dependent on forest resources: without forest there is no hunting, fish are scarce, there are no fruits, there are no elements that enable the manufacture of handicrafts, that is, the Suruí culture as a whole is unfeasible.

The Pamine project was conceived by the Gamep clan, which sought funding from the Metareilá Association and the Kanindé Ethnoenvironmental Defense Association. These associations contributed to the donation of fruit seedlings and plant species such as mahogany, cherry, copaíba and tucumã, for planting. The planting was carried out in a task force system, involving men, women and children in the villages Of Lapetanha, Tikãn, Mawira, Rio Quente, Nova, Linha o9 and Line 10. Non-governmental organizations such as Aquaverde, Switzerland, supported the project, providing advice from forest engineers, as well as subsidizing the deployment of an on-site nursery.

The Pamine project is a milestone in the trajectory of the Suruí that indicates new directions of their territorial management and new uses of forest resources. With it it is clear that the forest has more value standing than when felled and converted into wooden. The value of the forest, in this perspective, transcends the monetary: it is the value of the conservation of life, of sociocultural reproduction, of the harmonization of men with the spirits that inhabit the place.

Upon perceiving a shared, connected and interdependent existence of the multiple elements of nature, the Suruí understood the need to elaborate their "plan of life", expressed in the Ethno environmental Management Plan of the Sete de Setembro Indigenous Land, also called the "Paiterey Program". The Paiterey Program is an expressive and guide document of this movement that, in our view, touches on a central issue to our survival as a species: the correction of our relationship with the earth.

There is among those who suru the understanding that not only the life of their ethnicity is threatened, but also life on the planet, if there is no reversal of the predatory way in which we have appropriated nature. It is recognised that,

Billions of years have passed of meticulous construction of nature to reach all the complexity, variety and splendor of living beings that today populate the Earth. It was a bumpy trajectory, full of ruptures and resumption. It was the dance of the evolution of the species configuring the biosphere in the bulge of the geosphere, along the geological ripening process of the planet. [...] As for us humans, having begun to emerge from the bovery of the biosphere about a million years ago, we have come this far – to what we call today's civilization – by building, undoing and rebuilding ways and lifestyles (HARDING, 2008, p. 11).



The Sete de Setembro Indigenous Land Ethno environmental Management Plan was a strategy of the indigenous to face the challenges related to ethno development, health, identity and culture. Since its implementation, positive results have been achieved, as shown by the group's own population growth, which now has 2,000 people, according to a census conducted by the ethnic group itself. The document expresses the desire for a more fair, democratic and equitable model of socioeconomic development. It, however, is a certain tension between the desire for economic advantage and sustainability, as can be seen in one of the projects developed under the aegis of the said plan/program:

On line 14 [reference to the village located in rural road 14] a project has been developed where a coffee plantation with 100,000 feet was recently deployed. This project is in the implementation phase, currently having difficulties related to irrigation, and for its planting the land was prepared with mechanization and chemical fertilizers were used, following the general rule for conventional commercial plantations. In this project of line 14, there is no consortium with other crops, nor was basic recommendations on soil conservation followed (ECAM, 2008, p. 22). [Author's brackets].

By relying on conventional agriculture, more than contradiction, the above-mentioned coffee industry informs about the challenges of effective sustainable projects from an environmental point of view and that are capable, simultaneously, of generating economic income beyond subsistence needs. The challenge at hand is to harmonize economic expansion, social justice and environmental conservation. According to Sachs (2002), only by observing these three axes can one touch the concept established for sustainable development, "because the ecological balance for this development is only sustained by the inaparting basis of the social, economic and environmental" (SACHS, 2002, p. 35).

The contradiction experienced by the Suruí and exemplified above is part of a broader context of ambiguities. According to Favareto, it is pertinent to note that

During the first decade and a half of the 21st century, an ambiguous situation occurred. There has undeniably been a reduction in the pace of deforestation; more innovation in the regulatory system, public policies and sectoral programs; and more actions to control environmental abuses and crimes. At the same time, there was the strengthening of the productive sectors intensive in natural resources; an agenda of major infrastructure works, many of them with considerable impact on traditional populations and nature; and an increase in dependence on fossil sources and energy pollutants (FAVARETO, 2019, p. 51-52).

In addition to its practical challenges, sustainability is a polysemic term, whose meaning is not yet a peaceful point. It is, however, a horizon to be pursued, a necessary utopia (VEIGA, 2017).

The Suruí are clear that several indigenous societies have sought to implement ethnodevelopment based on short-term regional processes, merely economic, where the ethnotechnological issue and the use of natural resources are linked to concerns about the environmental impact generated by it (ECAM, 2008).

It is possible to notice that the Suruí have sought to develop economic activities that respect the environment, which does not mean that the set of their



practices is free of contradictions and possible misunderstandings. One of the controversial points concerning the group's economic choices refers to the "Suruí Forest Carbon Project", which marks the third and current phase of the trajectory of the Paiter suruí people regarding the use of forest resources.

The Pamine project and the Paiterey program were basic for the Suruí Forest Carbon Project, which is qualified to reduce greenhouse gas emissions by deforestation and degradation (REDD). REDD is an instrument of the Clean Development Mechanism (CDM) and a tool provided for in the Kyoto Protocol for Sustainable Development..

The idea expressed by the Kyoto Protocol to the United Nations Framework Convention on Climate Change is that there is a common responsibility for climate change, i.e. all countries must commit themselves to reducing greenhouse gas (GHG) emissions, with developed countries having a differentiated responsibility (obligation to reduce GHG emissions), in order to be the main responsible for global warming, due to its industrial development and exacerbated use of fossil fuels.

The Kyoto Protocol expresses its intention to curb greenhouse gas emissions - the main ones responsible for warming. Among the gases capable of contributing to the rise of temperatures on the planet are carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), chlorofluorocarbons (CFCs) and ozone (O3). In force since February 16, 2005 after ratification by Russia in 2004, the agreement establishes ways to convert into money the environmental benefits of reducing such gases, enabling the transfer of resources to developing countries.

The CDM provided for in the Kyoto Protocol enables developed countries to meet their emission limitation and reduction targets and for developing countries to receive investments to develop sustainably. Through this mechanism, it is expected to generate concrete socio-environmental benefits through negotiable financial assets.

Sabbag also clarifies that the CDM has as pillars: 1) voluntary participation approved by each party involved; 2) real, measurable and long-term benefits related to climate change mitigation; 3) emission reductions that are additional to those that would occur in the absence of the certified activity of projects, where the types of projects accepted should be considered (SABBAG, 2008).

It is important to consider the limits of the instrument. If on the one hand it can be attractive to developing countries, due to the economic possibilities it presents, on the other hand it generates the possibility that developed countries maintain their production processes without effective GHG reduction, only transferring resources to countries of peripheral capitalism to compensate for their environmentally incorrect practices. This is one of the main points of criticism of the document, which in this perspective would contribute to the maintenance of the framework of dependence and colonialism that third world countries have faced for a long time, besides not actually changing the model of production, development and consumption, which are at the root of the problem.

It is recognized that the problem of global warming is mainly of anthropic cause and dates back to the first experiences of production of goods in a technical and large-scale way (Industrial Revolution). With the development and use of means of transport and machinery operating using fossil fuels, the release of GHG



into the atmosphere was expanded, causing an increase in earth temperature (KERR, 2011).

The Suruí saw in the Kyoto Protocol the opportunity to earn income through carbon sequestration. They then began to rigorously curb timber trade within IT and intensify reforestation work, with a view to expanding forest biomass. Certified CO2 Emission Reductions (CERs) are now accounted for as a financial asset/credit asset, similar to a currency that enables transactions in the financial market.

With the Suruí Forest Carbon project, the Paiter Suruí people seem to have started a new phase of their environmental heritage management policy, configuring a modern use of forest resources, from the capture and storage of carbon in the forest ecosystem where they are inserted. The project presented itself as an alternative to the illegal logging activity, in the expectation that it would provide resources for a sustainable existence, capable of contributing to the achievement of the objectives of the Ethno environmental Management Plan of the Sete de Setembro Indigenous Land. The main challenge of the project was the fight against deforestation (the basis for the illegal timber trade), to which economic and security demands are connected.

The economic demand reports the need for alternatives to obtain income, considering a community that traditionally lives on extractivism, which has no industry, no education and technical training that allows them to obtain work and income in an environmental and cultural way. Through the prism of security, the challenge is to guarantee the sovereignty of the Suruí people in the domain of their territory, preventing the intrusions of loggers, prospectors and settlers. Faced with these issues, the Suruí Forest Carbon project was based on four axes of action: (1) supervision and environment; (2) food security and sustainable production; (3) institutional strengthening and development and (4) implementation of a financial mechanism – Suruí Fund (IDESAM, 2011).

The project aims to prevent 13,575.3 hectares of forests from being deforested within the Sete de Setembro IT by the year 2038, containing the emission of 7,258,352.3t of CO2e (Carbon Dioxide Equivalent) into the atmosphere, also contributing to the preservation of the culture of the Paiter Suruí people (IDESAM, 2011, p. 6). The project estimated a time frame of 30 years, having officially begun on June 9, 2009. The proposition is from the Metareilá Association of the Suruí Indigenous People, which had the technical support of the Kanindé Ethno environmental Defense Association, the Amazon Conservation Team (ACT – Brazil), Forest Trends, the Amazonas Institute for Conservation and Sustainable Development (IDESAM) and the Brazilian Biodiversity Fund (FUNBIO).

In a study conducted by Lima (2018), the evaluation of the project was positive:

The results indicate that carbon capture in Indigenous Lands provides sustainability and brings socioeconomic and socio-environmental benefits to the indigenous community, besides being an instrument for a new model of environmental management for environmental preservation from the Territorial Protection of Indigenous Lands, which contributes to a more efficient public management of conservation of the Amazon rainforest.



The Suruí Forest Carbon project has inspired other indigenous peoples to develop similar actions and the initiative has earned chief Almir Suruí, the project's creator, the "Hero of the Forest" award, awarded by the UN in 2013.

The potential of this project in contributing to reforestation is remarkable (more than 150,000 trees were planted in the wake of the project). However, it cannot be expected that it or others of the kind will actually minimize global warming. What they minimize is the discomfort of large companies that do not give up polluting.

The environmental crisis in which we find ourselves is expressed in a special way by the sign of global warming, and is the result of the process of capital accumulation – it is conjunctural to the capitalist system of production and consumption, so that it demands radical measures to cope with it. To Löwy,

Attempts at moderate solutions prove to be completely incapable of facing this catastrophic process. The so-called Kyoto Treaty falls far short, almost infinitely short, of what would be necessary. The Kyoto Treaty actually proposes to address the problem of greenhouse gas emissions through the so-called "polluting rights market". Companies that emit more CO2 will buy from others, which pollute less, emission rights. This would be "the solution" of the problem for the greenhouse effect! Obviously, the solutions that accept the rules of the capitalist game, which adapt to the rules of the market, which accept the logic of infinite expansion of capital, are not solutions, and are unable to cope with the environmental crisis – a crisis that turns, due to climate change, into a crisis of survival of the human species (LÖWY, 2013, p. 81).

In this sense, coloring capitalism with other colors, dressing it up as "good intentions", "greening it" through a "green economy" will not be enough to overcome the environmental crisis in which we find ourselves. Without prejudice to this understanding, it is necessary to value the efforts of indigenous peoples and other traditional peoples and communities in protecting forests and rivers. More than ever, we need to be at their side in the struggle for the defense of their territories and ways of life, because if we lose their experiences and epistemologies, we will be even further away from the possibility of a more harmonious and just life from the point of view of an environmental ethics.

4 Final Considerations

The reproduction of capital on the Amazon frontier produced new temporalities and reconfigured the spaces, imprinting on them the marks of contradiction: conflicts of ideas, divergent interests, unfound temporalities and disparate socioeconomic realities. Marks that evidence the physical and symbolic violence of the expansion of capital through national developmental policy.

In the process of expanding the agricultural frontier of Brazil, the pressure for land exerted by migrants from the center-south and the limitations of the State in the provision of it resulted in the invasion of the territory of the Paiter Suruí and in numerous conflicts that unfolded in the agrarian, ethnic, cultural and economic aspects. The violence bequeathed negative balance for both ethnic groups (suruí and non-indigenous national society) and resulted, for the former, in urbanization of ways of life, social disorganization and precarious insertion in the trade system. Interethnic contact triggered profound changes in the Suruí way of life and in its



forms of relationship with nature, converging on unsustainable exploratory practices of the forest resources available in the Sete de Setembro Indigenous Land, practices that have been reviewed since the 2000s and are expressed in the Paiterey Program and in low-carbon economic projects.

In an analysis of the historical trajectory of the Paiter People suruí regarding the use of forest resources, three distinct moments are noted: the first, which comprises the first three decades after contact (1969-1999) is marked by the opening of the suruí to the illegal trade of wood. This practice caused important changes in vegetation cover and land use (pasture formation and commercial agriculture organization), destabilized the social life of the ethnic group, intensified the socioeconomic inequalities internal to the group and restricted its culture, although it generated wealth and urban opportunities to a few, who were able to buy houses in the city, automobiles, attend non-indigenous schools, travel etc.

In the fourth decade after contact, there was a movement of indigenous peoples towards a critical reflection on the challenges that the new way of life and new economic practices have had in their culture. The difficulties of obtaining game, almonds and fruits due to the destruction of the forest became a nuisance factor, leading the Suruí Gamep clan to present a reforestation project, the Pamine project, which began to be implemented in 2003.

Alongside the Pamine project, discussions on the need to develop an ethno environmental management project of the territory gained intensity, leading them to elaborate in 2008 the Ethno environmental Management Plan of the Sete de Setembro Indigenous Land. This planning, named by them as "life plan" and "Paiterey program" predicted actions for a future time lapse of 50 years. Concerns with the conservation of environmental resources, food security, control of genetic heritage and the generation of income in a sustainable way are now included in the group's plan and political struggles.

In 2009 the suruí started the leading role of modern actions, which in our opinion constitute a new phase of their policy of management of environmental resources. It highlights the Suruí Forest Carbon project, through which they demonstrate to incorporate into their culture new rationalities and economic strategies. With this project the suruí aim to contribute to the environmental preservation and reduction of global warming, as well as to ensure the maintenance of their traditional way of life and obtain income, practicing the trade of forest biomass converted into carbon credits, in the dynamics of the green economy.

Although the green economy is controversial and the Clean Development Mechanism provided for in the Kyoto Protocol is ethically questionable and its effectiveness in containing global warming, the suruí's political attitude - of putting themselves in dialogue with different social actors, rethinking the management of their territory and resuming forest care - is positive for a culture of transition to sustainability. This culture will one day be able to carry out the necessary structural transformations in the productive system to actually establish a new logic and a new system of ecological coexistence.

Thus, the experiences of the Paiter Suruí presented here, especially those related to their insertion in the carbon credits market, are relevant to the debate on the theme of the transition to sustainability, as they point to the construction of a new agenda of social practices concerning the use of natural resources, and that



can be appropriated and adapted by other traditional peoples and communities, in their territories, as a way of generating income and forest recomposition.

Although traditional peoples and communities stand out for the conservation of biodiversity resources, it is known that many of these territories are crossed by agents who conduct unsustainable practices, aimed at immediate profit. Thus, presenting them with good practices already implemented, as well as possibilities for sustainable socioeconomic development, is a necessary step towards the transition towards global sustainability and the achievement of the Sustainable Development Goals (SDGs).

In the case studied, the redefinition of economic practices was possible due to the systematic evaluation of available resources, carried out with the support of national and international partners, which also allowed the evaluation of the social impacts caused by the illegal timber trade and the definition of a "life project", in which the notion of sustainability and concern for the common good underlies. Therefore, it is perceived that the 2030 Agenda and the objectives of sustainable development are aligned, in particular with objectives number 7 – Clean and accessible energy; 10 - Reduction of inequalities; 13 - Action against global climate change; 15- Earth life; and 17 - Partnerships and means of implementation.

In this sense, the Sete de Setembro Indigenous Land can be identified as a territory in transition to sustainability. As a movement, process, this transition is marked by dialectics. Challenges of different orders cross their daily lives, such as distrust of leaders, the material urgencies of the present and the uncertainties arising from the crisis generated by COVID-19. On the other hand, sustainable practices are already noted in several aspects of the life of that community and the resources derived from the actions developed in the list of the new agenda already materialize in community benefits, such as the Cultural Center and other improvements in the infrastructure of the villages, the reduction of poverty and social inequalities and the resurgence of species of animals and birds that had disappeared, by force of deforestation, and which are now seen again in the villages and around them.

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Submitted on 30/06/2021

Accepted on 08/11/2021



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Financing source: Kanindé Ethno-environmental Defense Association.

