Geography, history and the environment: environmental degradation in alta Floresta/MT

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SUMMARY

This study is an analysis of the environmental degradation in the municipality of Alta Floresta, located in the extreme north of the State of Mato Grosso, in the middle of the Amazon region, precisely in the so-called Legal Amazon. The municipality in question stands out for its high level of deforestation that was due mostly to the expansion of economic activities. This degradation does not cease to be a reflection of devastation in Mato Grosso and, more generally, in the Amazon region as a whole. To approach this degradation is necessary for greater understanding of the theme treated in this work, the approach to the concept of the environment, and then the emergence of a new development model, which seeks to reconcile economic growth with the preservation of the environment (sustainable development), so in vogue in contemporary times, in the face of a widespread mobilization in defense of the environment. Soon, then, is to address the devastation in high forest as the reflex degradation in Mato Grosso and the Amazon, concluding that, despite the high index, some authorities have shown an environmental
awareness, with regard to the search for solutions for the rehabilitation of springs and fines for farmers that harm the environment.

**Keywords:** High Forest; Environmental Degradation; Amazon; The Amazon Rainforest; Sustainable Development

**INTRODUCTION**

This work consists of an analysis of the environmental degradation in the municipality of Alta Floresta, Mato Grosso in Amazon region. Such municipality presents a high index of deforestation, resulting from the expansion of economic activities. This situation is not simply local, private, but reveals the serious problem of the devastation in the Amazon rainforest.

The Amazon represents the largest collection of tropical forests in the world, with great diversity of flora and fauna and occupies approximately 7,000,000 square kilometers, in North-Central South America. Most of the Amazon are in Brazilian territory and extends by the following States: Amazonas, Pará, Acre, Rondônia, Mato Grosso, Maranhão, Tocantins, Amapá and Roraima. This Amazon is also known as the Brazilian Legal Amazon.

However, during the last decades of the last century and the beginning of this century, the Amazon region goes through transformations caused mainly by deforestation, hunting and gathering (with regard to mining and wood) and urban growth. Widespread exploitation, unsustainable and illegal resources, justified by the pursuit of immediate profit, along with the advance of the agricultural frontier caused, on the threshold of this century, further loss of original coverage of the Amazon rainforest.

The situation of environmental degradation is not so different in the State of Mato Grosso, which, as mentioned, is one of the constituent States of the Amazon. Throughout the process of expansion of farming activities and integration projects, especially those promoted in the 1970, in the context of the military regime, some forest areas of the State, as well as of the Amazon region, in General, were devastated.

Within a particular project of colonization, came up with the opening of roads in forest areas, the current municipality of Alta Floresta, in the North of Mato Grosso and has registered a high rate of environmental degradation, manifested by deforestation, mainly because of the expansion of economic activities such as agriculture.

This municipality is one of the examples of environmental degradation in the midst of a season virtually widespread, by conservationists, Governments, non-governmental organizations (NGOs) and civil
society, in General, in favour of preserving the environment.

In this measure, for greater understanding of the topic in question, if, in the first chapter of this work, addressing the concept of environment and then focusing on the new model of development that seeks to, in contemporary times, solve a dilemma between economic growth and exploitation of natural resources: sustainable development, which will be examined in the environmental education.

The analysis and discussion of the results sought to show the environmental degradation in the municipality of Alta Floresta, since its rise to the present day, within the framework of own clearcuts that characterizes the State of Mato Grosso and the Amazon as a whole.

THEORETICAL FRAMEWORK

As the present work deals with the environmental degradation in the municipality of Alta Floresta, Mato Grosso focusing on the action in time and in space, by reference to the concept of geohistória, i.e. within the interdisciplinary relations history and geography, having space and time in a dialectical relationship on an ad infinitum.

Before the approach regarding the geohistória and mediation through space, it is important to highlight that the geography relates to the various branches of knowledge, thus enabling an exercise in interdisciplinarity. There is timely, although brief, this concept.

Generally speaking, the interdisciplinarity refers to a kind of interaction between disciplines, between the areas of knowledge. Such interaction can occur at different levels of complexity: multi-disciplinarity, multidisciplinarity, interdisciplinarity and transdisciplinarity

As Japiassú (1976), the multidisciplinary approach is characterized by a simultaneous action of a number of disciplines around a common theme. But, this action is fragmented, is it explores the relationship between the disciplinary knowledge and, moreover, there is no cooperation between the disciplines.

On multidisciplinarity already checks some sort of interaction between knowledge, although they still are on the same hierarchical level, in the absence of any kind of coordination from a parent level.

In turn, interdisciplinarity, according to the author, is marked by the presence of an axiomatic (understood here as the axis of integration of disciplines, which guides the interdisciplinary actions) to a group of related disciplines and defined in hierarchical level immediately above, introducing the notion of purpose. In General, the interdisciplinarity is an act of Exchange and reciprocity between disciplines, there is no absolute truth within the reach of human beings.
As Santos (2002), the notion of interdisciplinarity has evolved with the economic and scientific progress. Thus, the new realities require a particular explanation and the emergence of new scientific disciplines.

There is still a level of disciplinary integration beyond interdisciplinarity: transdisciplinarity, which appears as a latest proposal in the epistemological field can be defined as a kind of coordination of all disciplines on the basis of a general axiomatic.

With regard to the proper geo-history, i.e. interdisciplinary relationship between geography and History, it is necessary first of all an analysis of the conception of history as "(...) study of man in time (...) ". (Bloch, 1997, p. 55). This conception comes into collision with the predominant definition in 19TH-century historiography, the history is the study of the human past.

Within this framework, the idea of history as the study of man in time breaks with the traditional definition of that history should go back only to the past. The study of history must then go to actions and human transformations (or stay) that develop or settle in a certain period of time, including the present. The analysis of this present time is fundamental to note that the present moment is affected by processes that develop in the passage of time.

This (re) definition of History study in time represented an important step in the expansion of the historical areas, but should include another element, besides the man and time: space, because the actions and transformations that affect human life historically considered if can render in a geographical space.

Complex and comprehensive concept, because it integrates other concepts, such as the landscape which can be regarded as a category of analysis, being the first bookmark to the recognition of spatial difference that occurs in a certain part of the territory (RAJA .1989). Making the same exists through its forms created in different historical moments that co-exists in the current moment. Being the "result of a society's cultural action at certain times, and the same resist temporalities" (SANTOS, 1999, p. 84). Already the space is the "result of the action of the subjects that constitute the landscape by making a provisional synthesis always between social content and spatial forms" (SANTOS, 1991, p. 88), namely, the geographical space can be defined as one that suffered modifications, on the part of human actions throughout history.

Mediation, a Geo-history, linked to the design of Braudel (1992), for the interaction between man and space, their exchanges and limitations of an before each other, within a temporality, especially represented by a long duration, that is, one that concerns a story almost motionless, which cares for extremely long phenomena, such as : the evolution of the landscape and the history of man in their relationship with the environment.
So, for Santos (1997), the geographical space consists of a system of objects and a system of actions, i.e. formed by an aggregate, solidarity and contradictory objects and systems of actions, considered, not in isolation, but as a single framework in which the story takes place. In the beginning was the wild nature, formed by natural objects, which, throughout history are being replaced by manufactured objects, technical, mechanical, artificial nature tends to act as a machine. It appears, then, that the geographical space is a stage of human achievements, and thus an important mediator between geography and History.

In this context, if the space is subject to the imperatives of time, on the other, the temporality is also subject to the dictates of space and geographical environment. To give one example, Barros (2010, p. 76) refers to a work of Braudel ("Mediterranean"), which shows a "world are dichotomously divided into two seasons: while the summer authorizing the war, winter announces the station of the truce, in addition to that, the sea not revolt allows passage of large military convoys if forward from one point to another of the Mediterranean Sea". In this way, the climate (physical aspect of the geographical environment) rewrites the space, which resets the time when human actions are: space, time and man.

In the case of this study, human actions on the space (the transformations performed by the man in the landscape of the Amazon region in time of creating High forest) and the influence of that space on these actions of human beings, the example of the favorable climate to the colonization project, justify the adoption of geo-history as a theoretical framework.

1. ENVIRONMENTAL DEGRADATION AND SUSTAINABLE DEVELOPMENT

Before the case of environmental degradation in the municipality of Alta Floresta, Mato Grosso, it is necessary, for greater understanding of the issue at hand, the approach of the environment definition. Then, focus on environmental degradation in contemporary times, specifically with regard to deforestation.

And, in the context of indiscriminate exploitation of natural resources, in the scenario of the capitalist system, causing environmental degradation, emerged in the late 20th century, a proposal for a "reconciliation" between development and environment: sustainable development, which will be discussed on the so-called environmental education.

While there are several definitions of the environment, we can highlight the following: "(...) a dimension that juts for everything, the Planetarium to the factory, passing by the national, municipal and industry, and involving the psychological atmosphere of the habits and relationships of everyday life "(Ab'Saber, 1993, p. 112). For this, we can say that the environment is also set to the specific place where the natural and social elements are in dynamic relations and interaction and involving cultural and technological creation processes and social and historical processes of transformation of the natural environment and
In General, the environment consists of everything that relates to the maintenance and reproduction of life. It involved the physical elements (Earth, air, water), the climate, the living elements (plants, animals, men), the cultural elements (habits, customs, namely the story of each social group, of each community). Can also be defined by the way in which human activities interact with these elements. Make up also the environment of these interactions between them, and between them and human activities. In this way, the Centre of environmental education of Niterói (2009), points out in his article what is the environment that the environment is not restricted to the natural surroundings, but extends to the environment created by the human being.

However, in contemporary times the term environmental degradation, is in vogue, appearing with some frequency in technical and scientific publications and in journalistic texts. According to Mariseni (2010) Law No. 6938 of August 31 1981, which establishes the National Environmental Policy, environmental degradation implies adverse alteration of the characteristics of the environment. There is a character of adversity, negativity, expressed by that concept.

Another aspect that concerns the environmental degradation is its cause. The law, however, does not clarify whether the degradation is causing the human being itself or a natural phenomenon such as lightning that hits the forest and causes, because as Mariseni (2010), the destruction of the same, by means of a fire, is explicit only the fact that environmental degradation is characterized by a negative environmental impact.

We seek to focus the environmental degradation caused by human activities and, as the object of this research is a forest area affected mostly by deforestation, is from now on an approach about environmental degradation manifested by deforestation, as: the reasons; forms and consequences.

The reasons that lead to the devastation of a particular forest area, generally are linked to economic activities: obtaining firewood for sugar mill furnaces; cleaning the ground for crops or pastures for livestock; logging, among others.

As for the forms, the main have been burning of large areas for the practice of agriculture and animal husbandry and logging, an important source of energy and raw material for the construction of dwellings. In addition, the opening of roads, the expansion of urban centres and the implementation of major projects, such as the construction of hydroelectric power plants, also stimulate the ravages.

Finally, the consequences of deforestation are the destruction of biodiversity; the degradation of watersheds; the grounding of rivers and Lakes; reduction of rainfall; decrease in relative humidity;
increase of the greenhouse effect, compromising the quality of water and desertification, as is discussed on the site CULTIVATED in 2010 the destruction of forests and its consequences, which seeks to raise critical thinking about the direct action of man in the Woods.

In relation to loss of biodiversity, living beings in native vegetation originated from a slow evolutionary process that took approximately around of billions of years. And, the loss of diversity beings, in addition to the loss of genetic variety consists of an irreversible process. According to the National curricular parameters (1998) the removal of the vegetation that protects the sources causes serious problems to good natural that, according to studies, has been drying up: water, indispensable, as we all know, to life on the planet.

So, as for the grounding of rivers and lakes, with the soil without vegetation cover, erosion (soil loss caused by agents such as water and wind, as well as by the man himself) occurs with great frequency and intense way, being the solo taken directly to rivers and lakes.

Deforestation is also linked to a reduction in rainfall, with the overthrow of large areas with Woods, the climate is changing, causing more extensive periods of drought, i.e. absence of rains. In addition, the devastation of forests causes a decrease in relative humidity, because the perspiration of the leaves is one of the fundamental factors of regulation of air humidity and temperature environments. However, with the overthrow of the Woods, the air is dry and the temperature rises and becomes unstable.

While large carbon reserves in its structure, the forests, if cleared, burned, the carbon into the atmosphere, causing a significant increase in the greenhouse effect, making the planet hotter.

As if not enough such damaging consequences to nature, the forest devastation also compromise water quality, due to erosion caused by deforestation, making the water unfit for consumption. Another negative effect is manifested by withdrawal of forests associated with inadequate management of the soil and causing desertification of environments, marked mainly by the absence of life.

But if, on the one hand, the deforestation is justified in many cases, by economic development, the clearcuts do not leave, on the other hand, lead to losses of economic (and social), as: the reduction of tourism; the loss of water potential, pharmacist and Brazil's genetic, according to the website Cultivado.com.br/saude_meio_ambiente_desmatamento_impactos.htm.

The decrease of tourism attaches itself to the fact that the areas of native forest, represent, in General, an attractive, especially to the so-called eco-tourism. Thus, the disappearance of forests, forests, brings great losses to tourism and irreversible in these locations.
The Brazil practically is the largest water reserve in the world, but with deforestation, there is degradation of springs and rivers, discarding, allowing the loss of that status. In addition to the loss of water potential, the pharmaceutical potential of Brazil is also committed to the forest devastation, because the country holds great biodiversity, but it takes very little of the pharmaceutical potential of your plants.

Environmental degradation manifested by deforestation and causes negative effects on the environment, has strong ties to economic activities, responsible for the capitalist system gear. In this way, Nascimento (2011) that this is expressed by the "progress", the development needs of natural resources, but these should be preserved as far as possible, mainly on behalf of the permanence of life on the planet. Such panorama induces the scenario of human aggression to nature and vital continuity of economic development, the concept of sustainable development

1.1.1 the SUSTAINABLE DEVELOPMENT in the CONTEXT of ENVIRONMENTAL EDUCATION

Parsed degradation is part of the so-called environmental issue. This is presented in the form of various issues that affect the life of mankind. In this context, environmental education, is considered a political practice that has as main characteristic to provide the collective organization in the search for solutions to environmental problems. However, environmental education is not restricted to collective dimension involves the individual dimension: "(…) the individual's engagement in the fight for better conditions of life depends on a position (…) that (…) modifies as do political (…) " (Chapani & Daibem, 2003, p. 21)

Environmental education involves, at the same time, the individual, to the extent that guides the use of the environment, and society, creating a critical consciousness that can lead to the fight for rationalization of the use of natural resources and point out the distortions of the systems, with regard to the environment. Environmental education had as the United Nations Conference on Environment, held in Stockholm, Sweden, in 1972.

This Conference, as well as her continued, such as the Intergovernmental Conference on environmental education, held in Tbilisi, Georgia, in 1977, in the then Soviet Union, established the basis for a new understanding of the relationship between environment and development, creating an inseparable link between development and the environment. This link is the basis of the concept of sustainable development ENVIRONMENT Canada (2008), which will be approached soon on.

The Stockholm Conference emphasized the urgent need to create new instruments to deal with environmental problems and, among these instruments, appeared to environmental education, which began to receive attention in virtually all forums related to the theme of development and the environment.
The resolution 96 of the Stockholm Conference recommended the environmental education of interdisciplinary character, with the goal of preparing the human being to live with the environment. And, to set such a resolution, the United Nations Educational, scientific and Cultural Organization (UNESCO) and the United Nations Environment Programme (UNEP), held in 1975, the Conference in Belgrade, capital of Yugoslavia, at the time, was where approved the letter from Belgrade, where they meet the basic elements for structuring a program of environmental education at different levels: national, regional or local level.

The Tbilisi Conference was organized to discuss important points related to the environment: main environmental problems of contemporary society; assumptions of education to assist in the solution of these problems; activities implemented at national and international levels, aimed at the development of environmental education; the same implementation strategy at the national level; regional and international cooperation in order to promote environmental education and needs and modalities for the implementation of actions.

The final report of this Conference, in 1978, brings together basic guidelines to be incorporated into the landmark environmental education theorist. The Declaration adopted at that Conference stresses that environmental education must prepare the individual, through the understanding of the major problems of the world today, allowing you to technical knowledge and qualities necessary for the performance of a productive function, seeking to improve the lives and protect the environment, taking into account the ethical values. As a result, the Tbilisi Conference calls on member countries to include in their education policies, contents, guidelines and environmental activities based on the objectives and characteristics defined for environmental education, as well as in reports by Tbilisi of 1977.

Given the concerns with environmental education, the idea of a new development model for the 21st century, in an attempt to reconcile economic growth and reducing poverty, with the preservation of the environment. In this scenario, according to Gonçalves (2005), the environmental movement, which saw economic development as harmful to the environment, rivaled the entrepreneurs, then, most representative agents of this development.

In 1987, the World Commission of the United Nations on environment and development (UNCED), presented a paper that became known as Brundtland Report, according to which sustainable development is that which meets the needs of the present without compromising the ability of future generations to meet their own needs. That report is not exactly a critique of industrial society, as demand growth both in industrialized countries and underdeveloped countries, relating to overcoming poverty of these to the continuous growth of the developed countries. Thus, the above-mentioned report has been accepted by the international community.
The document defined the concept of sustainable development, but the final milestone came in 1992, when more than 170 countries met, through their representatives, in Rio de Janeiro, for the United Nations Conference on environment and development (UNCED/UNCED), a singular event that became a milestone for mankind, as well as tells us (2005) because according to him, the main objectives of this United Nations Conference were:

The fundamental objectives of the Conference were to achieve a fair balance between the economic, social and environmental needs of present and future generations and establish the foundations for a world association between developed and developing countries, as well as between Governments and sectors of civil society, focused on understanding the needs and common interests. (GAUTAM .2005, p. 13).

The Earth Charter document created by the UN in 1987, with a view to sustainable interests must be understood above all as an ethical global movement to achieve a planetary ethic code, supporting a core of principles and values that are facing the social injustice and the lack of equity in the planet, reigning by means of five human rights guidelines; democracy and participation; the equity; minority protection and the peaceful resolution of conflicts. These pillars are cemented by a vision of world solidarity and respectful of difference and the planetary consciousness.

To fulfill its objective to propose a model of development committed to the preservation of the environment and of life on the planet, the UNCED has drafted several documents, among which, Agenda 21, a comprehensive programme of action in the field of environment and development.

Second Gadotti (2002, p. 2), ? in this programme are set out in treaties in many areas that affect the relationship between the environment and the economy: energy, atmosphere, deserts, oceans, fresh water, technology, international trade, poverty and population ?. The document is divided and four sections:

the social and economic dimensions) (refer to the international policies that can assist in enabling sustainable development of strategies to combat poverty and the misery and the need to introduce changes in the patterns of production and consumption); b) conservation and management of resources for development (deals with the management of natural resources and waste and toxic substances); (c) strengthening the role of major) social groups (indicates the actions needed to promote participation, especially by NGOs); means of treating financial mechanisms and implementation of legal instruments for the implementation of projects and programmes with a view to sustainable development (GADOTTI, 2002, p. 2)

Agenda 21 became a reference tool and mobilization for change of the development model towards more and more sustainable societies. She has for objectives: ? a) promote patterns of consumption and
production that reduce environmental pressures and meet the basic needs of humanity; b) develop a better understanding of the role of consumption and way to implement more sustainable consumption patterns?. (GADOTTI, 2002, P. 3)

In short, the Agenda 21 is not mere environmental agenda for sustainable development, whose primary purpose is the promotion of a new development model. This model expresses the attempt to promote economic growth, through a streamlined exploitation of natural resources, seeking, in this way, preserve the environment, especially the Brazilian forest areas, as handled by deforestation, the devastation, which are justified by the expansion of economic activities, such as forestry, agriculture and livestock.

While sustainable development is intended to promote economic growth through the rationalization of natural resources sustainability seeks to work with the integration of nature conservation and development, satisfying the basic human needs such as food, being necessary for that rely on social self-determination respecting cultural diversity so that in this way promote the integrity of nature.

This is the case of the municipality of Alta Floresta, Mato Grosso, in the middle of the Amazon region which is marked by the high rate of environmental degradation, with regard to deforestation. This does not cease to be a reflection of clearcuts in the State of Mato Grosso and the Amazon, as a whole.

2. METHODOLOGY

The present paper was prepared on the basis of a literature review on the present situation of exploration of the brazilian portion of the Amazon rainforest. To this end, a survey was made based on current bibliographies found both in library collections and the internet, in order to obtain an overview with emphasis on the process of colonization of Alta Floresta city such as the far north of the State of Mato Grosso, these information obtained through bibliographic research and visits in various environmental issues sites such as ECOBRASIL VIVATERRA, and farming, where were collected information about environmental degradation and sustainable development. However it is necessary to emphasize that the present work aims to contribute to a broader vision of the real situation of the city of Alta Floresta-MT for degradation due to its colonization.

For this, he sought information that are scattered in the literature, performing readings that deal with different authors in his works on subjects relating to the geography and history of interdisciplinary manner as well as the environmental degradation in the North caused by the deforestation for pasture, as well as perform readings on sustainable development having this as a challenge of the 20th and 21st century then we used the method of analysis and discussion of the information obtained in the survey period.
Given this, the objective of the present work is to make an analysis of the current situation in the region and present options for their conservation, as well as the environmental rehabilitation through the management of sustainable development which aims to meet the needs of the current population without degrading or harming the future generation, worrying about today for tomorrow. Thus, sought information on available literature on internet sites such as BRAZIL ENVIRONMENT, ENVIRONMENTAL EDUCATION CENTRE of NITERÓI (CEAN) among others for clarify first what come to be the environment and its importance for humanity and the need to carry out a policy of sustainable development, considering that the same has been discussed by the United Nations since 1980 when they form the World Commission on environment and development. Putting then this theme on focus of Alta Floresta-MT municipality which has great degree of environmental degradation due to its poor colonization due to lack of education.

3. ANALYSIS AND DISCUSSION

3.1. ENVIRONMENTAL DEGRADATION IN THE AMAZON: THE CASE OF HIGH FOREST IN MATO GROSSO

Alta Floresta, see map 1, is located in the extreme north of the State of Mato Grosso, about 830 kilometers from Cuiaba, capital of the State was created in the late 1970, from a colonization project in the Amazon region of Mato Grosso.
The rainforest of that municipality has certain degree of similarity with other regions of the brazilian Amazon. However, the municipality of Alta Floresta has one of the highest rates of environmental degradation in the State of Mato Grosso. Being possible to see this situation in Map 2, which features the degraded areas by deforestation in the region called legal Amazon. Spotlight can observe the city of Alta Floresta, where tom red symbolizing the degradation of this area.
In this measure, for greater understanding of the high Forest and creation of its location, it is necessary first of all an approach about the brazilian Amazon, specifically refer to their natural features, integration projects, by the Brazilian Government, the exploitation and resistance of the forest people. Then this is the geographic location, the history of High Forest and environmental degradation of its countryside, in the deterioration in the State of Mato Grosso.

3.2 the AMAZON REGION: forest, integration, exploitation and resistance

The case of the Amazon region, it is necessary, for greater understanding of the issue at hand, the approach to the definition of the region according to Vidal de La Blache (1845-1918). For he country is something concrete that is able to exist, which can be transformed through the historical process that is by man-kind. The result of this formulation is the concept of region, which allowed the construction of a regional geography with an apparatus "eminently descriptive, keeping the tonic of all geographical thinking" (MATTHEWS, 1995, p. 77).

It is in this context that conceituamos the Amazon region which occupies approximately 7,000,000 square kilometers, in the North-Central South America. The surface of this region is crossed by the line of Ecuador and extends for eight countries: Brazil, Bolivia, Peru, Ecuador, Colombia, Venezuela, Suriname and Guyana. Most of the Amazon is in Brazilian territory, occupying more than 50% of the area of the country and covers the following States: Amazonas, Pará, Acre, Maranhão, Mato Grosso, Tocantins,
Amapá, Rondônia and Roraima, as we can see on a map 3.

Map 3: States of the Legal Amazon

Source: http://www.google.com.br/imgres?imgurl =
http://www.bbc.co.uk/worldservice/assets/images/2009/07/24/090724125323 _amazonia_map_04_466.gif & imgrefurl =

According to Leo (2002) only if the biodiversity of their systems, the Amazon forest has two major types of ecosystems. These refer to the set consisting of all biotic factors, populations of animals, plants and bacteria, and abiotic, water, Sun, wind, among others, that act simultaneously in a particular region.

The first refers to forests of flood areas, such as meadows, i.e. low land and plans that border rivers and streams; igapós stretches of forest, where water stagnates after the flooding of rivers and mangroves, swamps and lagoons-Bank spillway. The second consists of the forest ecosystem of the Mainland: high and dense; low; of slopes; natural fields; Savanna biome typical of plant formations of tropical characteristics semiúmidas and constituted mainly by shrubs and herbaceous vegetation; While the Cerrado is composed of vegetation characterized by tortuous trees, among which vegetate grass grazing cattle and appropriate plowed fields that are devoid of trees and shrubs.
These forest systems make up the Amazon forest, the largest forest body on the planet and that goes well beyond the limits of the political boundaries of countries. The emergence of this forest was made possible by the geographical position of the Amazon region of Ecuador, line marked by intense solar energy input, with almost permanent supply of humid air masses, with absence of cold seasons or droughts and without much thermal amplitude, i.e. difference between highest and lowest during a certain period (VIVATERRA, 2011).

In the peripheral region of the forest, more precisely in the area comprising the States of Rondonia and Acre, a phenomenon called "cold", which means the penetration of Atlantic polar air mass in the Amazon, in the winter season in the southern hemisphere, causing a small low temperature. So, the Amazon has high rainfall, and the fields of Boa Vista, Roraima, an exception. Average temperatures vary between 24 and 27° c.

One of the striking features of the Amazon rainforest is the contrast of colors, fauna and flora. In this measure, even the rivers possess this color contrast: white rivers that carry a large amount of fine sediments, as small particles of various minerals); the Black River (which is born and run between firm lands and carry usually organic material (leaves and animal remains) and the rivers from the greenish areas between the cerrado and of forests.

But, as Lena (2002), Amazonia appears as a set of more delicate ecosystem in the world, formed by the rain-forest-floor units-forest-rain, in which each of the three is indispensable and irreplaceable. Distinct from other soils, in which forests hold up because of the fertility of those idols, in the Amazon region the situation is different, because, with rare exceptions, is the forest that sustains a soil that is generally poor.

By removing the forest cover is lost the forest, as well as the existing fauna and soil in it. Therefore, it is known that the Amazon is the largest forest region and water catchment area of the planet, is a "green desert", that is, one of the most sparsely populated areas in the world due to its unhealthy and difficulties of access. However, there were periods in which certain occupying some areas, which is justified by the search for riches of the forest, as the "drug of the outback and rubber, between the colonial phase and the beginning of the Republican regime". (LEO, 2002, p109)

In the context of this scheme, the Amazon is to object to legislation focused on the planning and development of the region. In this scenario, in 1953, the Government of Getúlio Vargas, the law no 1806 marks the creation of the supervision of the Economic Recovery Plan of Amazonia (SPVEA) and the Legal Amazon. From the creation of this term, it was possible to begin to devise incentive plans for the economic exploitation of the above-mentioned region.

However, only in the Decade of 1960, in the context of the military regime, began an era of new and far-
reaching modifications to the Amazon. In this scenario, in 1966, the Government of field marshal Humberto de Alencar Castelo Branco created the development of Amazonia (SUDAM), which became one of the main funders of the "large projects" in the region. The following year was created one of these "major projects": the Manaus free Zone, which was intended to create an industrial pole in Amazonas State and launch a free trade area.

This way, the Government of general Emílio Garrastazu Médici, hard-line military period in power called the years of lead covering also known now named economic miracle from 1969 to 1974, in which sought to intensify the integration of Amazon, with the background transfer northeasterners (plagued by the drought that hit the Northeast in 1970) for the Amazon region. Thus, according to Skidmore (2004, p. 288), "the excess population of the Northeast would be taken to the Amazon, attracted by the fertile land and cockroaches, offered by the National integration program (NIP)".

Such a program should include, among other things, the opening of a new highway that would facilitate the placement of thousands of families. Thus, prioritized the construction of the trans-Amazon Highway highways and Cuiabá-Santarém. The design of the trans-Amazon Highway, basic to the PIN, for example, answer the aspiration to achieve the brazilian distances depopulated at the border of the country.

For Skidmore (2004), the Medici interest by Amazon had another logic, in addition to the need to assist the Northeast with the displacement of their inhabitants. Yes, a long time ago, the brazilian elite, specifically the military, I was afraid of losing the Amazon for lack of colonization. Several generations of cadets had been reached regarding the geopolitical significance of the Amazon and, now, on condition, officials feared possible incursions of Peruvians and Venezuelans for the Amazon region. This concern increased when the mineral wealth (especially iron deposits) of this region became known, accelerated with the launch of the Jari project, which was an attempt to create an exploration of Brazil's tropical trees to produce pulp for paper[3].

But, the process of occupation held by the military Government was distinct from that held in earlier periods. Before the settlers sought only explore the forest wealth, but now wanted Earth to develop agriculture and animal husbandry. Within this framework, the model of folwark of rubber plantations until then, dominant, provided the permanence of workers in the forest, gives space to new ground: the farm for livestock, which promoted the withdrawal of the forest and the people that lived there. In this way, Indians, rubber tappers, and bordering settlers took their land invaded and ravaged, in name and a progress that turned the forest into scorched earth.

In early 1970, the traditional peoples of the forest started to organize and develop strategies of resistance. Were created the first syndicated of farmworkers in Acre and in other States of the Amazon region. In several locations, the progressive segments of the Catholic Church reinforced the popular struggle,
through small Christian communities[4]. Several intellectuals, artists, students and workers have created civil organisations and an intense social movement spread in several regions that have suffered the impact of official policy.

Yet in this decade, the farmers have adopted strategies of resistance, published by Francisco Alves Mendes Filho, Tapper and environmental leader, and consisting of a cord headed by women and children placed in front of pedestrians, preventing them to advance to the Court. This technique came to be used frequently by rubber acreanos.

In addition to the disclosure of this peacefully, Chico Mendes had the intention of creating a political fact that would lead to the dispossesson of the area and creation of extractive reserves, where the resources of the forest would be used so rational, without destruction, protecting it from the threat of agricultural projects, of the great flood caused by the timber and construction of hydropower plants.

Then comes the awareness that the devastation of the Amazon forest not only an environmental issue, but social. The speech of leaders like Chico Mendes stimulated the formation of an Alliance of the forest people, bringing together all the traditional peoples of the Amazon in defense of their common good: the forest.

As Abrú (2001), in the Decade of 1980, Chico Mendes was becoming respected abroad, but little known in Brazil. In 1987, the ecologist received representatives of the United Nations (UN), in Xapuri, Acre, to check the damage caused by international financial bodies funded projects. Such projects would destroy the forests, and throw the rubber tappers and Indians of their dwellings.

In the same year, Chico Mendes has been in the United States, where he reaffirmed his complaints to the U.S. Senate and the Board of the Inter-American Development Bank (IDB). Soon after, received the Global 500 Award from the UN, awarded to the most outstanding personality in the fight for the preservation of the environment.

However, legitimacy and notability obtained by movement of the forest people. The murder of Chico Mendes in 1988, at the behest of local farmers. His death caused huge pressure on the international financial institutions, which have had to revise their investment criteria in the Amazon, the Brazilian Government changed the policy of development of the region. The Amazon would be more respected by their importance, but this did not prevent further environmental degradation in the Amazon region.

Nowadays, the Amazon is target of indiscriminate exploitation of its natural resources. So, Rajan and Jacovine (2007, p. 2) that "we cannot talk in exploration in this region without the main focuses of human pressure, which occur mostly around the main roads and large navigable rivers". With regard to urban
centres Skidmore (2004) tells us that the same, cover 5.6% of the Amazon biome, assuming a radius of 20 km around the headquarters of each of the municipalities. For him, the urbanisation is significant around poles of wood processing, mineral extraction, zona franca (Manaus and Macapá), capital and regional centers. The agrarian reform settlements should also be taken into account since they cover almost 5% of the biome, of which approximately half are in forested areas with no signs of human pressure. Concentrating on stopping a large number of settlements, especially in the South and West of the State. All other States that make up the Amazon region, also home to settlements in forested regions. The holding checked in several regions of the Amazon is driven mainly by livestock and by logging

Deforestation represents exactly the removal of native vegetation in a particular area for alternative use of the soil, such as livestock, agriculture or urban sprawl. The accelerated deforestation in the Amazon in the last decades is associated with many factors, including the deployment of large infrastructure, mainly roads; the conversion of forests for livestock; the expansion of the agricultural frontier; illegal and predatory exploitation of wood; and the historic lack of effective State presence in the region and concrete support to non-predatory activities, especially family and community character

Logging can reach an area almost as large as 10,000-15,000 km2 to deforested annually in the Amazon. In addition to the damage caused to the forest, the extraction of trees makes it more susceptible to fire. The clearings caused by falling trees and for tractors allow the penetration of solar radiation inside the forest, increasing the flammability of vegetation and so the number of fire outbreaks. This flammability can be reduced, however, if they are used methods of low-impact logging.

Based on studies conducted by the Institute of man and the Environment (IMAZON), and Jacovine (2007), points out that, in 2004 were exploited 24,500,000 cubic meters in tora on Amazon for mechanical processing, which resulted in 10,400,000 cubic meters of sawn timber, laminated or compensated. Official data show that one-third of the total was exported and two-thirds were consumed in the Brazilian market.

In addition, as, worsens the disorderly and illegal occupation of public land, exacerbate social conflicts over possession of the Earth and, consequently, contributes to further speed up the deforestation in the region. The economic implications of this occupation are alarming. The increase in the supply of wood reduces your price what causes an unfair competition with the loggers interested in investing in forest management.

3.3 Mato Grosso and environmental degradation

The agricultural production in Brazil has expanded thanks to the integration of new areas, among which include regions that are part of the Legal Amazon. Such integration, characterized by the removal of the
native vegetation cover and replaced by pastures and crops, has worried scholars from diverse areas, with regard to environmental costs and levels of degradation caused.

Within this framework, the expansion of grazing areas is the main determinant of the deforestation of the Amazon region. Another important factor in climate conditions in the North, with uniform temperatures throughout the year and dry periods and less severe and extensive than other regions of Brazil, enabling the pasture is the food base of cattle during the year. This way informs us MELO (2002) makes possible the production of the so-called "green ox", key component to the achievement of the most demanding markets.

The Green ox consists of a new standard, to meet the foreign markets, which demand more natural products. Usually the herd is fed with pasture lands in the region, according to the reality of each farm and soil conditions. Only next slaughter cattle grain-based feed receives or soybean meal as protein sources. This gives power to steer the ideal cover of fat and helps conserve the meat, making it soft. (BETH MELO. The State of São Paulo from 9/4/02. in: http://www.agrisustentavel.com/san/boi.htm)

The process of deforestation in the Amazon region was driven, in the years 1970 and the mid-1980 by a Government subsidized agricultural credit with rates well below inflation. The hyperinflation that devastated the Brazil during the Decade of 1980 hindered such credit. In this context, however, the land was highly valued, generating speculation: "(...) important until around 1987, when there was a subsequent increase of the profit of the pasture from the production of beef (...). " (FEARNSIDE, 2005, p. 114).

During the decades of 1980 and 1990, the livestock was the most activity expanded in the Amazon and still expanding throughout this century, faced with the increasing demand of the flesh and the participation of the Amazon region in the supply of the internal market. In this scenario, the deforestation intensifies.

Between 1987 and 1991, in the context of the brazilian economic recession, there was a drop in rates of deforestation, because farmers had no ability to quickly expand its deforested areas and the Government did not have funds for the construction of highways and settlement projects. In 1991, (FEARNSIDE, 2005), many farmers found themselves unable to use their resources to invest in deforestation before the confiscation by the then President Fernando Collor de Mello (1990-1992), of bank accounts with the money subsequently released by small benefits.

In 1995, however, there was a spike of deforestation: possible reflection of the resumption of economic growth, after the implementation of the Real plan (1994). In which the reforms have increased the agricultural credit. But, economic stabilization, from 1995, contributed to the reduction of the price of
land, making it a bit attractive for speculation, generating in the process of deforestation until fall 2002. That year, the deforestation process is resumed, forward to the growth of international price of soybeans and meat. In addition to these products, the extraction of wood consists of determining the environmental degradation in the Amazon region.

In this region, the State of Mato Grosso been leading for years in Legal Amazon deforestation and, only in 2003, according to the National Institute of space research for the year 2005, contributed 43 percent of the total deforested in the Amazon region. In that State, as well as in other States that make up the brazilian Amazon, livestock plays an important role as a determinant of deforestation.

The activity in Mato Grosso is extensive character and employs low-tech, and only profitable as the initial cost of deployment of a pasture is almost zero. The cost close to zero is made possible by the acquisition of land by farmers through the land ownership of public lands by falsifying documents of ownership of land, common practice in the cities are northern Mato Grosso.

The expansion of agricultural activity in Mato Grosso boosted migratory movements toward this State, especially in the years 70 and 80, decades in which the northern region showed lower rates of population growth. In the Decade of 90, South regions maintained low rates of population growth except in some micro-regions like Rondonópolis and Cuiabá, where industrial activities and services are more developed.

According to Fearnside (2005), in the years 1990, Mato Grosso was one of the leaders of deforestation in the Amazon region. And, as has been seen, such leadership occurs at the beginning of this century, mainly as regards the municipality of Alta Floresta, Upstate and Geopolitics (2009), in 2008, was the first on the list of the cities that most desmatavam in the Amazon region, nevertheless have reduced (this year) index of deforestation in the biennium 2007/2008.

3. High Forest 4: colonization and deforestation

High forest was created from a particular colonization project in the 1970, through integration, development and colonization (INDECO), company founded by Ariosto of Riva. In this context, the military Government encouraged the nationalist campaign for the integration of the Amazon region. Such project arose from an invitation formulated by the federal and State Governments, which launched a program of occupation of vast emptiness that demographic characterized North Mato Grosso.

The INDECO began conducting expeditions in the region to conduct research on the fertility of the soil and to deploy a colonization project. Within the framework of these researches, the Mato Grosso State Government planned the occupation of that region. But, due to problems that occurred in official settlements in some Amazonian States, referring to the abandonment of land by settlers, the Government
of Mato Grosso decided by the particular form of colonization.

In this way, were put on sale, by means of a notice of competition for exclusive purposes of colonization, 2,000,000 hectares of land State, located in the municipality amounts to Aripuanã, Mato Grosso. The INDECO participated in the bidding process and obtained 400,000 hectares of land and was at this location that second rose (2003) the company of Ariosto Riva installed the project intended for occupation of the lands by the settlers, through the evidence of soil fertility and infrastructure deployment.

This process of occupation was done in an orderly manner and, through the control of entry and residence of inhabitants in the lands belonging to INDECO. And, to effect such control, the company used, in many cases, using "(...) of strength, to occupy these lands and create a favorable environment to adaptation and fixation of the colonist (...). " (Rosa, 2003, p 74).

The entry was controlled via a ferry on the rio Teles Pires, where only had access to land buyers, officials and other persons authorised by INDECO. In this scenario, the process of colonization was divided into three phases: the construction of a road to the location of the premises of the Office of the company and the city; the taking of possession of the land which meant the expulsion of Indians and squatters, in addition to the opening of the forest, crashing through the forest to build the necessary infrastructure for the Administration, services company and demarcation of plots of land to be sold and, finally the choice of the future buyers of the land. After such a choice (settlers of Northern Paraná) was made an advertisement in the region.

In 1976, with the completion of the construction of the road came the first settlers, which they found in the village, which would receive the title of Alta Floresta, depending on the nature of the region, with high and dense woods. There were already some facilities such as the shed of the INDECO, a health clinic, a grocery store and the construction of a school, a hospital and a church.

In 1979, Alta Floresta, Aripuanã district, then became a municipality and, at the same time an attractive location for the settlers who arrived and purchased their properties. This year, SILVA (2009) the discovery of gold led to the invasion of the project, by thousands of miners from the South of Pará, whose access was facilitated by roads built by the project of colonization.

During this period, high Forest showed high rates of population growth and immigration, and prospecting exploration target, which altered the profile of agricultural municipality, stroke by INDECO colonization project.

For this Ariosto Riva used various means, such as the control of entry and exit of people and using again,
in some cases, the use of force to prevent the amendment of that project. However, the crowd was not contained and, for about ten years, the settlers coexisted with the camp or garimpeiros till the end of the gold cycle.

The decline of gold enabled the resumption of farming as economic base that, associated with the production of cattle, made the project of the INDECO won the hurdles and continue in its goal: keep the settler on land colonized, according to Rosa (2003), under three principles: education, work and religion and whose fundamental cell was the family. Thus, the presence of teachers, priests and agricultural technicians was constant in the Organization of the communities, as well as the presence of own Ariosto Riva and his family in the commemorative events of the municipality.

Training based on the three principles if returned to settler preparation for work as a form of socialization and adaptation to new property. Such training, next to a structure that allowed for the settler in the project, made almost impossible the abandonment of land.

But this colonization in the region of Alta Floresta, based on environmental degradation would expressed by deforestation, because in the 1980, the settlers were attracted by the offer of land: the Government granted the title of possession through the commitment of deforestation of at least 50% of the area, and the result was an immense devastation of the countryside, namely forest area.

According to data from Alta Floresta City Hall made available in 2011 the vegetable area of this region is characterized by small trees, isolated or grouped on a coating of grass, being part of this municipality is occupied by open forest, rain forest characterized by vines and that constitutes one of the subunits of the Sub-montane ombrophilous open. Such forest features plant species as: aroeira, angelim, chestnut, pine, cedar, among others. The forest area of the municipality is also characterized by savanna, which presents different faces: dense tree, open with or without-forest Gallery.

A survey conducted by Raja (2007) showed that, despite the high Forest forest area present a certain similarity with other vegetable formations of the Amazon region, such municipality presents a large number of unidentified vegetation, and these can contribute to the richness and diversity of species. However the expansion of the deforestation in the municipality of Alta Floresta, between the Decade of 1970 and the beginning of the 21st century, indicate a growth of bovine herds, the effective extraction of wood for charcoal, firewood and logs, in addition to gold mining. However, while most important activity, the livestock is one of the main responsible for the extensive deforestation.

In turn, Castro (2008) a survey conducted by the Regional Forum for sustainable development, in Mato Grosso, in the year 2002, emphasized that, in fourteen municipalities in the North of Mato Grosso that make up one of the thirteen macroregions of the said State, high Woods occupied the fifth place as
producer of charcoal and the third in the production of firewood and wood logs, indexes recorded in 1997. Hence comparing the main municipalities in deforestation until 1999, Alta Floresta, with an area of about 9000 square kilometers, had more than 3400 square kilometers cleared, about 38% of its territory.

With regard to logging, based on data from the Brazilian Institute of geography and statistics, in 2008, high Woods recorded a "peak" in this activity, between 1992 and 1996, with sharp drop until 2006. Livestock, in turn, is pointed to as predatory and cause of the intensification of the process of desertification, since it requires large pastures which implies directly in the overthrow of forest and cleaning of the area through burning.

How to gold prospecting activity, cause profound environmental impact, because its main feature extraction based on the random ore mining and solid waste and dispersal of mercury to the drainage, causing siltation and accumulation of sand or lands of the rivers. This leads to an increase in the turbidity of the water, reducing light penetration, harming the aquatic flora and fauna.

In relation to hydrography, the municipality of Alta Floresta has faced the greatest water shortages in recent years, within the framework of the degradation of water sources that supply the above-mentioned municipality. Some of the main urban streams headboards are destroyed by the effects of the high rate of deforestation: without vegetation, exposed to silting and the sources mentioned committed, these streams are almost dry.

As Augustus (2010), the Municipal Environment found that the degradation occurred because of the total and illegal withdrawal of vegetation that protected these springs. On site have emerged for cattle and other grazing animals, planting vegetable gardens and other activities. Those that have been partially preserved are no longer in its original form and have little water.

To seek to modify this picture, Augustus (2010) tells us that it is necessary to act effort, especially on the part of municipal administration, to the recovery of these Springs, the municipality of High Forest runs the risk of running out of drinking water. The Municipal Environment search about recovery, but faced with the lack of financial resources. However, the city has sought the aid of environmental organizations.

In 2008, despite appearing as the first in a list published by the Ministry of the environment, between the municipalities with highest deforestation, high Forest was able to reduce this index, because along with other municipalities, such as mato-grossenses of the Gauchos and new Ports, dropped less than 40 square kilometers of forests in the same years and managed to reduce by 60% the deforestation between 2007 and 2008.

In addition, Augustus (2010) reminds us that the State Government of Mato Grosso created the MT
program Cool, to avoid environmental crimes by the landowners and with the commitment to recover all the areas that have suffered environmental degradation. Hence, many farmers of Rohtak were fined for environmental crimes. In several properties to vegetation that protects the water courses were dropped, through machines.

Conclusion

In the context of the importance of preserving the environment, by means of conferences, forums, programs and campaigns on the negative effects caused by environmental degradation, such as: the greenhouse effect; the impoverishment of the soil, air and pollution of rivers; the change in rainfall; among others, a new model of development, which seeks to reconcile economic growth with the use of natural resources.

Throughout history, the man promoted transformations in natural environment, seeking to adapt it to your needs, but at a certain stage (especially with the advent of machines, from the second half of the 18th century, and were responsible for the change in the mode of production: for manufacturing maquinofatureiro. In the course of the 19th and 20th centuries there was an intense technological advancement, which did not fail to explore in some cases, indiscriminately) natural resources, no major concerns.

But when humans realized that aggression without limits to the nature could compromise his own human survival in the globe, began the international conferences to discuss environmental issues, as well as awareness campaigns and environmental programs.

It is not enough to mobilize in favour of nature conservation, in many places still practicing environmental degradation, mainly through deforestation, the devastation of forest areas. In Brazil, you can take as an example the Amazon forest, whose devastation justified mainly by economic development. Having their wealth exploited by logging and cleared vegetation, giving space to the crop and pastureland for cattle breeding.

Thus, occupation and exploitation scenario since colonial times because of drugs do sertão, passing by the end of the 19th century and early 20th century with the cycle of rubber, Amazon still has his forest devastated today, specifically on the deforestation caused by the expansion of agricultural activity.

With regard to this activity, the State of Mato Grosso, in the interior of the Amazon region, a high rate of environmental degradation, manifested by deforestation, mainly in the North, where is located the municipality of Alta Floresta.

From a colonization project authorized by the Government and who was the first to clear to colonize and
open roads, promote the settlement and expand economic activities in the Amazon region, the municipality of Alta Floresta was born of environmental degradation, although no one should deny that it is working, at least to decrease deforestation and leave the list of municipalities that further degrade the environment.

Despite the high index of environmental degradation, it was exposed that, in high Forest there is already awareness as regards the preservation of the environment and which is expressed in the pursuit of the recovery Springs destroyed by deforestation and the fines to farmers who commit crimes against the environment.

But high forest is not a unique case, because it reflects the problem of deforestation in Mato Grosso and the Amazon region.

BIBLIOGRAPHICAL REFERENCES


Amazon Environment. Biography of Chico Mendes. Available in:
http://ambientes.ambientebrasil.com.br/amazonia/floresta_amazonica/
biografia_de_chico_mendes.html


CASTRO, s. Tapajós-Xingu-Ecoregion main vectors of deforestation in the municipality in Alta Floresta, MT, 2008. Available in:


MARISENI, I.S. Reflections on the concepts of environmental degradation, environmental impact and conservation of nature, 2010. Available in:


__________. Metamorphosis of the living space. 2. Ed. São Paulo: Hucitec


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http://www.vatican.va/holy_father/john_paul_ii/messages/pont_messages.

[5] Francisco Alves Mendes Filho, aka Chico Mendes Xapuri, 15 December 1944 was a rubber Tapper, unionist and environmental activist. Their intense fight for the preservation of the Amazon made him known internationally and has been the cause of his murder. The Union leader and rubber Tapper Chico Mendes was killed on 22 December 1988, in Xapuri, Acre, victim of a 20 gauge shotgun shot. The crime was assigned to Darly Alves da Silva and his son Darci Alves Pereira. Amazon Environment. Biography of Chico Mendes. Available in: