


THE TRANSFORMATION OF THE LANDSCAPE OF BABAÇULÂNDIA - TO WITH THE CONSTRUCTION OF THE ESTREITO HYDROELECTRIC POWER PLANT (HPP)

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**Aires José Pereira¹, Layane Mota Soares², Roberto de Souza Santos³ and Luis
Otávio Bau Macedo⁴**

ABSTRACT

It is the concern of this article to show the transformation that the geographical space of Babaçulândia underwent with the installation of the Estreito Hydroelectric Power Plant, Maranhão. The area chosen and delimited for the development of this study gathers, so to speak, several landscape modifications resulting from the installation of the Estreito Hydroelectric Power Plant. The city of Babaçulândia and its entire community suffered a lot from these strong metamorphoses. Studying the issue of the quality of life of the residents around the city of Babaçulândia, who suffer directly from the transformation of its original landscape, is one of our most important pretensions to be shown in this article. The choice of the theme was made through several observations and inquiries directed to this issue, which reflects on the entire community of the city of Babaçulândia - TO. Thus, this research aims to highlight the main changes in the landscape of a given space with the installation of a hydroelectric power plant at a global, regional and local level, making the community of the area under study come to know the reality of this subject and its harmful and beneficial consequences for all.

Keywords: Landscape Transformation. Babaçulândia – TO. Estreito Power Plant.

¹ Associate Professor II in the geography course and in the Master's Degree in Environmental Management and Technology at UFR

E-mail: aires@ufr.edu.br

ORCID: <https://orcid.org/0000-0002-7707-1187>

² Degree in Geography from UFT – Araguaína Campus

E-mail: motasoareslayane@gmail.com

ORCID: <https://orcid.org/0009-0008-1287-0800>

³ Full Professor of the Geography course and PPGeo at UFT – Porto Nacional

Email: robertosantos@mail.uft.edu.br

ORCID: <https://orcid.org/0000-0002-4373-6443>

⁴ Professor of the Economic Sciences course and the Master's Degree in Environmental Management and Technology at UFR E-mail: luis.otavio@ufr.edu.br

ORCID: <https://orcid.org/0000-0002-2002-5366>

INTRODUCTION

The municipality of Babaçulândia is located above the 13th parallel and located on the left bank of the Tocantins River, with the state of Maranhão as its limits to the east, Araguaína to the west, Philadelphia to the south, and Wanderlândia and Darcinópolis to the north. The municipality of Babaçulândia currently has 1,883.5 km² and a population of 10,329 inhabitants.

According to the Biogeographical Manual of the Municipality of Babaçulândia, its settlement dates from June 1926 with the Vila da Nova Aurora do Coco, on the left bank of the Tocantins River, when Henrique Figueiredo de Brito, established himself there with a small business, building the first tile house, and thus starting the village belonging to Boa Vista in the district and by Decree Law No. 557 of March 30, 1938 with the toponym of Babaçulândia. By virtue of State Law No. 741, of June 23, 1953, it was elevated to the category of municipality, solemnly installed on the first day of January 1954.

Also, according to the Biogeographic Manual of the Municipality of Babaçulândia, although its history has been recorded since 1926, it took on the air of a city and agitated progress, in the fifties, because navigation at that time was in full swing, making the trips from the port of Babaçulândia to Marabá, reaching Belém, where they brought kerosene and other industrialized products. And from Babaçulândia they took the mallow fiber, the almond and the oil of the babassu.

It is the concern of this work to show the transformation that the geographical space of Babaçulândia underwent with the installation of the Estreito Maranhão Hydroelectric Power Plant and its intimate relations with the process of disorderly growth of this city.

The area chosen and delimited for the development of this study gathers, so to speak, several landscape modifications resulting from the installation of the Estreito Hydroelectric Power Plant. The city of Babaçulândia and its entire community suffered a lot from these strong metamorphoses.

Studying the issue of the quality of life of the inhabitants around the city of Babaçulândia, who suffer directly from the transformation of its original landscape, is one of our most important scientific pretensions to be shown in this work.

According to the theme addressed, it can be observed that the concern with the environment in Brazil is really a problem of lack of planning and awareness of all actors in a given society. The reason that led to the study of this theme was relatively leveraged by

the curiosity to understand and explain this dynamic of landscape modification throughout the city of Babaçulândia.

So, the choice of the theme was made through several observations and inquiries directed to this issue, which reflects on the entire community of the city of Babaçulândia - TO.

The importance of this study is to know and study the dynamic process of the harmful and beneficial aspects in the landscape in the period before and after the installation of the Estreito hydroelectric plant in the city of Babaçulândia.

It is, therefore, an empirical and bibliographic research, carried out through bibliographic review, visits, interviews and photographic records in the area of investigation, in the period from 2014 to 2016.

Thus, this research aims to highlight the main modifications of the natural landscape of a given space with the installation of a hydroelectric power plant at global, regional and local levels; making the community of the area under study come to know the reality of this subject and its harmful and beneficial consequences for all. Therefore, this municipality will be able to claim its rights, through constructive criticism, before the municipal government.

LITERATURE REVIEW

The greater the scale of human endeavors, the greater the speed of transformations and the more striking they become. Often, new landscapes are formed without considering the history of the place, the characteristics of the environment or its importance to the population. The formation of the immense lake of Babaçulândia, occupying places where there were plantations, had a great impact on the population, especially on riverside families, who made their living from the river and their small plantations. On the other hand, the lake of Babaçulândia has also become a place of mass tourism.

According to data from the National Electric Energy Plan (PNEE, 1995), the generation of electricity is one of the main needs of the modern world, being supplied in most of the world with the relative tranquility of coal and oil thermoelectric plants. From 1885 onwards in the USA, the use of electricity emerged as an alternative as a cleaner method, according to energy experts. According to Mc CULLY (2005, p.45), "[...] It is estimated that currently 60% of the world's rivers are dammed, more than 80 million people from different regions of the Earth have been displaced by the construction of hydroelectric

projects and entire ecosystems lost with more than 45 thousand hydroelectric dams in the world". In this context, Santos comments that:

If the problems are simple, decision makers can choose from alternatives through an unstructured process, by simply evaluating the information. However, when the problems are complex, there are many agents and actors involved and different points of view, the systematization of the answers is fundamental (SANTOS, 2004, p. 153).

It is worth mentioning that the right to a quality life is constitutionally guaranteed to all, both in the Federal Constitution and by the Stockholm Conference and the Earth Charter, all documents that aim at the sustainability of the environment and the quality of life of the population. Philippi Jr and Alves (2004, p. 27) remind us that:

[...] The right to an ecologically balanced environment can be considered as an extension of the right to life, whether it focuses on physical existence and human health, or whether it focuses on the dignity of this existence, that is, the quality of life provided. The environment is a fundamental right according to Article 225 chapters VI of the 1988 Constitution and the 1st principle of the Stockholm Conference of January 1992 and is reaffirmed in the 4th Principle of the 1997 Earth Charter. [...]

Differences exist in all parts of the planet, being perceived in customs, traditions, dances, ways of eating, ways of dressing, speaking, religions and in the technical-scientific-informational levels between developed and underdeveloped countries. It is also understood that the completion of the Estreito Hydroelectric Power Plant interfered with the population's way of life. It is worth analyzing here a phrase by Gonçalves (2005, p. 127), which is formulated as follows: "In fact, what happens is that the differences between the ways of life that characterize each cultural people are not respected", thus making it difficult for the population to have an egalitarian and dignified life.

In this sense, we can point out that all this that happened in Babaçulândia about the modification of its landscape was due to globalization, which affects the various spheres of society. He realizes that this restricts the living conditions of countless residents of rural areas in the country and in the world. Because the development preached in his speech does not reach everyone, but leaves people at the mercy of the development process. In this regard, HAESBAERT makes the following comment:

Globalized capitalism is accompanied by a process of socio-spatial exclusion that causes an increasing mass of people to be on the margins of the benefits of the economic system, with no option even to change location in search of better conditions for survival. (HAESBAERT, 2006, p. 256).

We can emphasize that the moment these people are forced to leave the place where they live, they not only lose their homes and material goods, they also lose their reasons, which give meaning to their lives, ties of old friendships. They go to a world totally different from everything they are used to. In this sense, BOSI comments:

A memory is a rough diamond that needs to be polished by the spirit without the work of reflection and locality, it would be a fleeting image. Feeling also needs to accompany it so that it is not a repetition of the old state, but a reappearance. (BOSI, 1983, p. 81).

Still including the affective bonds created with the place where BOSI lives, he considers that:

An abstract effort is not enough to recreate impressions that accompany impossibility. The vital tone that accompanies those sensations, that capture of the world, has been lost. When we pass on the same sidewalk, next to the same wall, the noise of the rain on the leaves awakens something. But the polished feel of now is reminiscent of the joy of yesteryear. This shadow has something like joy, it has its outline in another emotion. (BOSI, 1983, p. 84).

Therefore, it is hoped that with this work, it can reinforce the studies that accompany the transformations generated by the option to produce electricity through the use of water, analyzing how the population and the public power have taken advantage or not of the positive achievements of the Estreito Hydroelectric Power Plant and how they deal with the consequences left by this project.

CONCEPT OF LANDSCAPE

According to Maximiano 2002, the notion of landscape is present in the memory of human beings even before the elaboration of the concept. The embryonic idea already existed based on the observation of the environment. The expressions of this memory and observation can be found in the arts and sciences of different cultures, which initially portrayed particular elements such as wild animals, a set of mountains or a river. The cave paintings are a reference for this perception directed to some components of the environment.

In this sense, we can emphasize that knowledge about the landscape can be found in all aspects of human life, that is, in the material and concrete elements. In this regard, Maximiano (2002) comments on the concept of landscape:

Among geographers there is a consensus that the landscape, although it has been studied under different emphases, results from the dynamic relationship of physical,

biological and anthropic elements. And that it is not only a natural fact, but includes human existence. (MAXIMIANO, 2002).

In this aspect, the author points out that the concept of landscape is directly linked to human actions on the environment where each one lives.

There are several conceptual elements on which we can better observe and understand geographical space and its numerous forms of analysis. One of the most important elements in the meantime is the concept of landscape, which represents one of the most notorious and necessary aspects for understanding the world in which we live.

In Geography, the American Carl Sauer stands out, with his work entitled *The Morphology of Landscape*, from 1925, where he uses the term landscape to establish the unitary concept of Geography, considered to be a phenomenology of landscapes. Sauer, in his aforementioned work, was one of the first geographers to treat geography in an integrated way, privileging, at the same time, natural and social factors, inserting the understanding of the landscape category as an integrating link of these factors. Thus, Sauer (1925 apud CORRÊA, 1998, p.13) defines the landscape as being:

An area composed of a distinct association of forms, at the same time physical and cultural, where its structure and function are determined by integral and dependent forms, that is, the landscape corresponds to a complex organism, made by the specific association of forms and apprehended by morphological analysis, emphasizing that it is an interdependence between these various constituents, and not of a simple addition, and that it is convenient to consider the role of time.

In this sense, it can be emphasized that the author reports that the landscape is, therefore, the perceptible aspects of the geographical space, that is, the way we understand the world from our senses, such as sight, smell, taste, among others. Of course, vision is usually the most preponderant of the senses when we talk about understanding the landscape, but it is not the only one, so that we can also perceive the space by its smells, sounds, flavors and external aspects.

Thus, we can understand the concept of landscape in various ways, "landscape is not the same as geographical space, but can be understood as a manifestation of it. Space is the object of study of geography, while landscape could be understood as a multidimensional measure of understanding a place." (MAXIMIANO, 2002).

It is understood that the analysis of the modification of the landscape in the city of Babaçulândia allows us to verify the different dynamics concerning the functioning of the locality under study, as it reveals or omits information, in order to denounce the economic,

political and cultural characteristics that structure the process of formation and organization of the social space. After all, geographic space is the result of a complex interaction between society and its landscape.

It is interesting to observe that landscapes present aspects and elements referring to the present and the past, which often coexist in the same space. If we observe, for example, the landscape of a historic city, we can notice elements of the past that have been preserved together with aspects of the present or that have emerged in more recent times. Thus, it is possible to compare these landscapes and observe at least some of their main characteristics, such as their architecture, cultural styles and others.

Furthermore, the landscape carries with it natural aspects and also cultural or humanized aspects. When a certain area is formed only by the elements of nature, we speak of a natural landscape, but when it presents some human intervention, then we speak of a cultural landscape, also called a "humanized landscape" or a "geographical landscape".

A forest area with rivers, waterfalls and wild animals is an example of a natural landscape. The area of a city or an agricultural field are examples of cultural landscapes. In many cases, it is possible to observe scenarios in which the two types are presented together, which represents, at least in theory, a balance between nature and society. Still dealing with the concept of landscape, the architect KOTLER (1976), in an article on landscape, refers to the definition of other fields of work:

For the sociologist or the economist, landscape is the basis of the physical environment, where man as a collective uses it, or not, and transforms it according to different criteria. For the botanist or ecologist, the landscape means, first and foremost, a set of organisms in a physical environment, whose properties can be explained according to laws or models, with the help of the physical and/or biological sciences.

In view of all that has been exposed, it is believed that the concept of landscape has gone through several currents and approaches, and over time has adapted to new forms and functionalities, proposing new studies. As a result, it is rethought not only as a material result of interactions, but as a new way of looking at the landscape. In view of this, Bertrand (1972 apud OLIVEIRA, 1998, p. 63), understands that the landscape is:

As a result of the dynamic combination, therefore unstable, of physical, biological and anthropic elements that, reacting dialectically on each other, make the landscape a unique and inseparable set, in perpetual evolution, in a portion of space, it is necessary to think of legal norms that contemplate both the complex of

natural elements and that of built elements, or even both, considered in their dynamics and identified as landscape heritage of the collectivity.

According to what has been disclosed above, the landscape is a result of natural and human forces that constitutes a physical and cultural fact, which are interconnected in space in a certain period (time), understanding this result as the product and not as an image. It should also be understood as a determined morphological structure, which can be measured, quantified and qualified.

Thus, it can be reported that the concept of landscape is of paramount relevance to understand the topic at hand, where one of the major discussions presented in this section was the transformation of the landscape of the city of Babaçulândia that occurred by the installation of the Estreito Hydroelectric Power Plant. Many residents reported the great change that occurred in the city, such as: the filling of the lake, trees were cut down and many houses demolished.

TRANSFORMATIONS CARRIED OUT IN THE LANDSCAPE OF BABÇULÂNDIA – TO – ANALYSIS AND DISCUSSION OF THE RESULTS

In this sense of landscape modification in Babaçulândia, it can be emphasized that this natural element was totally transformed by the installation of the Estreito Hydroelectric Power Plant, and many residents of this city had their lives changed as a result of the project, where many report suffering when they see their houses being demolished and several native trees were cut down to fill the lake.

We can report that through the interviews carried out with some people from the city of Babaçulândia, we must point out that most of them miss the old landscape, that is, the portrait of the city before the filling of the lake, resulting from the installation of the Estreito Hydroelectric Plant.

After the *in locus research*, the collected data were systematized in the form of an explanatory table for a better understanding of the readers.

Table 1 refers to gender, age and how many people were interviewed, where the sentimentality of the local population with the place draws our attention, especially the older community, where according to the table 20 people were interviewed, aged between 30 and 70 years old, 20 female and 20 male. This can explain the sadness of many residents who left the place where most of its history was built.

With the data collected, we can emphasize that most of the people interviewed reported that they have such a great feeling of disagreement with the loss of the landscape from before and having left their old homes. Some believe that when they left their place of origin, there was a feeling of total anguish and sadness, because for those who are over 45 years of age, they could not imagine living anywhere else. Many also complained about the amounts of compensation paid by the CESTE consortium, as they stated that the amount paid was not fair and they were not able to buy decent housing; Others said that nothing pays for the tranquility they had in the city before the lake was filled, where they complain that violence in the city has increased considerably and home burglaries are currently increasing.

Some people between 30 and 35 years old pointed out that in a way their departure from the city had a positive aspect, as many find possibilities for better studies and jobs. This is in the case of some interviewees who currently live and work in the city of Araguaína. But they say that every weekend they return to visit family members who stayed there. All this means that, although they have left for another city (in this specific case, Araguaína) in search of job opportunities and survival, etc., they always return to their roots. They return to their seat. They return to the warmth of their home. They return to see family, friends and the essence of their lives, the place where they were raised.

Figure 1: Table 1: Age, gender and numbers of respondents

AGE	SEX	NUMBER OF RESPONDENTS
30	Male	E1
42	Female	E2
58	Female	E3
35	Male	E4
30	Female	E5
47	Male	E6
54	Male	E7
70	Male	E8
58	Female	E9
34	Female	E10
39	Male	E11
42	Male	E12
55	Female	E13
59	Female	E14
52	Male	E15
62	Male	E16
70	Female	E17
35	Male	E18
46	Female	E19
38	Female	E20

Source: SOARES, Layane Mota. Interview conducted in May and June 2016.

In turn, Mrs. Petrolina Dias da Conceição (Mrs. Peda) told us that she lived in the Jatobá Region, municipality of Babaçulândia, she went out with her sister by canoe to the Palmatuba Village (Garrancho), where they went to do various purchases for the whole family. She reported that they left home at 5 a.m. and arrived at the village of Garrancho at noon. He emphasized that they did not feel lazy, because there they did their shopping and visited friends and relatives, returned home around 1 p.m. and arrived at their home only around 7 p.m. Mrs. Peda told us that she thought the landscape of the Tocantins River was very beautiful, with its clean and transparent waters, she liked to fish and bathe in those waters. Currently, she has never visited the waterfront or the artificial beach again, as she says with a broken heart that her life no longer has meaning without the house she had, where she raised her 13 children. She currently lives in the city of Araguaína in the company of her sister who was a canoe partner. She also reported that today sadness is her companion, who is afraid of not lasting long, because she lives outside Babaçulândia.

In another conversation with a resident of the city of Babaçulândia, we can report that few people benefited from the compensation of the dam and others were harmed, not receiving the real values according to what was agreed between the parties. In addition, many problems arose in the quiet life of the city, where crime increased and a great climatic discomfort set in due to the filling of the lake.

Other interviewees say that one of the main negative points with the filling of the lake was that most of the community lived on the banks of the river, where they stopped planting their swiddens and ebb and flow, which was the main means of family subsistence.

Many of the interviewees emphasized that the old landscape of Praia do Coco was more beautiful and pleasant than that of the artificial beach, because people said that we cannot compare a natural thing with something modified by the hand of the human being.

Photograph 1: Ladeira Avenue to the old Babaçulândia beach, before the lake is filled



Source: MOTA, Layane Soares. Field research conducted in March 2016.

Some residents said that the waterfront is not well used by the people of the locality, it has to have more safety for visitors, more leisure area for children, such as a *playground* and playground with various toys. Others reported that the waterfront is very good, as it has improved the economic performance of the locality, giving many opportunities for new ventures such as restaurants, bars and inns on the shore.

When we asked most of the people interviewed about the artificial beach, they answered that Praia do Coco, the Bote Islands and São José were true landscapes in relation to the new beach. According to the interviewees, they were part of their lives and their stories, the water was clean and pleasant for bathing, and currently many people complain about the dirt in the water of the new beach and the constant piranha attacks.

Photo 2: Avenue slope to the old Babaçulândia beach, after the lake is filled



Source: MOTA, Layane Soares. Field research conducted in March 2016.

This is just a summary, as it was the story of almost all the residents of Babaçulândia. A good part went to live in Araguaína, or to the center of Babaçulândia, others moved to rural areas, where they had more facilities to support themselves.

Photo 3: João de Deus Square, before the lake was filled



Source: MOTA, Layane Soares. Field research conducted in March 2016.

At this point, it is worth emphasizing that on the way to your school you observe elements such as: streets, houses, buildings, trees, people, animals, among others, which are nothing more than a landscape.

The landscape can be made up of natural elements (rivers, trees, plants, the sea, the stars, etc.) or man-made (houses, buildings, roads, etc.).

Through all these inquiries about changes in the landscape, it is of paramount relevance to highlight the main transformations that occurred in the landscape of Babaçulândia, with the installation of the Estreito Hydroelectric Power Plant. As shown in photographs 1 and 2.

Landscapes are constantly changing. These modifications can be natural (earthquakes, tidal waves, hurricanes, among others) or human (deforested forests, bridges and viaducts built, demolition and reconstruction of buildings).

Changes in landscapes are also related to new discoveries made by man and the incessant search for technological advances that can benefit their lives.

With these two photos you can see the before and after of the Avenue that gave access to the old riverside of Babaçulândia beach. We can observe through these two photographs the great discrepancy between them. Many people went up and down this avenue that gave access to the old natural beach of Babaçulândia, this place served as a meeting point in the late afternoons for chatting among friends.

Photo 4: João de Deus Square, after the lake is filled



Source: MOTA, Layane Soares. Field research conducted in March 2016.

Another example of modification in the landscape of Babaçulândia can be seen in photographs 3 and 4. Through photographs 3 and 4, we can see the big difference in the landscape: in one we see the main square of the city before the lake fills, in the other we see the same square, in the background we can already contemplate the lake already full.

In this sense, in the search for greater comfort, progress or simple economic advantage, human beings end up reallocating natural resources, changing the configurations of the environment in which they live. This is done through activities such as cutting trees, treating the soil, raising domestic animals, constructing buildings, paved roads, drilling mountains to open mines or tunnels, or even throwing organic and industrial waste into the air, rivers and seas. With these and other modifications, we have the geographical landscape that surrounds us, a mix of natural and processed elements. Another example of modification in the landscape of Babaçulândia can be seen in photographs 5 and 6.

Photograph 5: Panoramic view of Babaçulândia, before the lake fills



Source: MOTA, Layane Soares. Field research conducted in March 2016.

Through all this, the landscape, in a general sense, is every portion of land contemplated from a natural or aesthetic perspective. For geographical science, however, the term has a specific meaning and refers to the very object of geography.

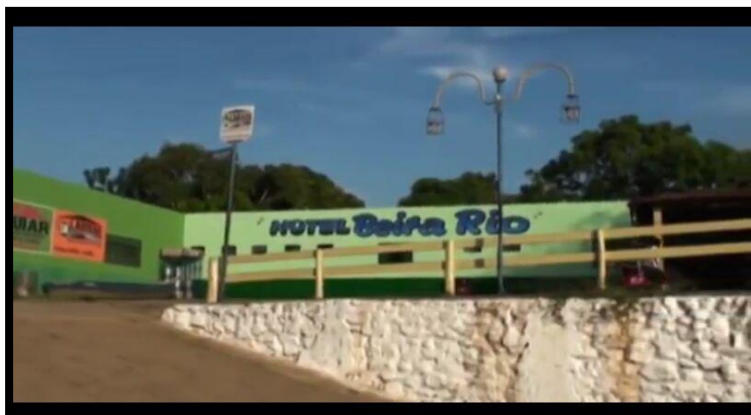
Photo 6: Panoramic view of Babaçulândia, after the lake is filled



Source: MOTA, Layane Soares. Field research conducted in March 2016.

In this scientific sense, landscape is the result of the combination, in a given territory, of the physical, biological and human elements that constitute its organic unit and are closely related. For many authors, the object of geographical science is the study of terrestrial landscapes in their structure, genesis and function. General geography studies and classifies the various types of landscape on the earth's surface. In photograph 6, we can see a beautiful landscape that has been modified in the city, where we have a good part of the waterfront and the artificial beach of Babaçulândia. Currently this landscape is one of the main postcards and tourist cards of the locality.

Photo 7: View of the Hotel Beira Rio before the lake fills



Source: Documentary Memories of Babaçulândia, 2011.

With this, it is worth emphasizing that all these changes in the landscape of Babaçulândia were carried out with the implementation of the Estreito Hydroelectric Power Plant, where many residents had to abandon their homes and go to live elsewhere.

Photograph 8: View of the slope that gave access to Babaçulândia Beach before the lake was filled



Source: Documentary Memories of Babaçulândia, 2011.

To reinforce the above-mentioned questions about the transformation of the original landscape in the urban area of Babaçulândia, it can be seen in figures 7, 8 and 9.

In the performance of his economic activities, man modifies the environment in which he lives: he cuts or plants trees, plows land, constructs buildings and paths, drills mountains to open tunnels or mines, throws organic and industrial waste into the atmosphere, rivers and sea, channels surface waters. The result of all this is the geographical landscape, a synthesis of natural elements and the transformative action of human beings.

The riverside was one of the busiest points in the city of Babaçulândia, before the lake was filled, there were some bars and a hotel on the banks of the river, where it gave access to the city's natural beach. Many people miss this place, many children went there to bathe, while their mothers washed the clothes of the whole family in the river.

Photograph 9: View of Humberto de Campos Street, which gave access to Babaçulândia Beach before the lake was filled



Source: Documentary Memories of Babaçulândia, 2011.

As shown in photograph 9, you can see Rua Humberto de Campos. This street was very busy, had some important shops, one of the largest state schools in the city of Babaçulândia and gave direct access to the port of boats on the riverbank.

Therefore, the highest degree of humanization of the landscape is reached in the city, where cultural transformation is almost absolute. Rural landscapes, which are very different, are qualified by the agricultural, livestock and forestry uses of the territory, as well as by other economic factors (roads, railways, mines and industries). Landscapes in which human action has not imposed itself in a decisive way on the environment are predominantly natural, such as forests and prairies, whose conservation includes the rational use of resources, or steppes and tundras, territories of little economic value.

LANDSCAPE MODIFICATION IN THE DIDACTIC CONTEXT

At this point, it is of paramount relevance for the state and municipal schools of Babaçulândia to take their students to the main points of modification of the local landscape resulting from the installation of the Estreito Hydroelectric Power Plant, so that students can perceive the transforming dynamics of human action in a given place and space.

In terms of education, according to Rose (1996), the most orderly example of how a particular type of geographical knowledge covers a specific type of visualization of the world is probably the field of work, critically explored by the notion of landscape.

Individually, geographers have focused on different ways of considering spaces, regions and landscapes, which involve photographs, advertising and promotional materials and video, such as programs made for television or cinema.

According to Matias (2005), when evaluating the scope of new technologies in the reality of school geography, as an aid for the perception and interpretation of landscapes: "the image for geography is essential".

If, on the one hand, one of the most formidable visual resources of geography are maps, because through them we locate ourselves, orient ourselves and verify the spatial distribution of geographical elements, on the other hand, image repository sites can be very useful for teaching approaches related to the perception and interpretation of images.

In this sense, we mention some of the tools that can be used: photosearch.com, gettyimage.com, trekearth.com and flickr.com. At another time, Matias (2006) indicates that images can function as a key to critical thinking about space. In this sense, he suggests that maps, graphs and aerial photographs, among others, are instruments for geography professionals and students.

It is through them that we examine facts, events, geographical events, conduct information and conceive the earth's surface. Thus, he understands that "new technologies are resources of our time that can be used in an innovative way in the mediation between teaching and learning". But he warns that "the great challenge of the Internet, for those who use it as an educational tool, is to know how to deal with information online. To overcome this fact, it is necessary to create mechanisms to know how to search, select, treat and process information".

Finally, it is appropriate to remember a proposition by Matias (2005), "among the contributions of informatics frequently emphasized by some specialists in the field of educational informatics, is that of favoring the work of the teacher, enriching and diversifying his way of directing the teaching-learning process".

FINAL CONSIDERATIONS

In direct contact with the residents of the city of Babaçulândia, regarding the object of study, he made us aware of the expectations of the local population. In general, people who live in the region miss the old landscapes of the locality.

The greater the scale of human endeavors, the greater the speed of transformations and the more striking they become. Often, new landscapes are formed without considering the history of the place, the characteristics of the environment or its importance to the population. The formation of this immense lake, in places where there were plantations, had a great impact on the population, especially on riverside families, who made their living from the river and their small plantations. On the other hand, the lake of Babaçulândia has also become a place of mass tourism.

Before, it was only possible to have this tourism during the vacation seasons (June, July and August), when the beaches appeared, and it was at this time that most of the population made a living, placed tents on the other side of the river, where the sands of the beach appeared, sold drinks and typical foods of the city. And those who had their boats also worked during the beach period, took tourists and pollution to the other side of the river to the beach.

After the dam, they built an artificial beach, and on it they built small snack bars, and along the entire length of the shore. These snack bars were distributed to families who placed their tents during the vacation period on the beach. Some of these families refused, so it was available to those who wanted an establishment to work, only people who prove that they have no other fixed income can have these snack bars.

It is expected with this work to reinforce the studies that accompany the transformations generated by the option to produce electricity through the use of water, analyzing how the population and the public power have taken advantage or not of the positive achievements of the Estreito Hydroelectric Power Plant and how they deal with the consequences left by this project.

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