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THE BELO MONTE HYDROELECTRIC POWER PLANT AND ENVIRONMENTAL JUSTICE

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Abstract: The importance of the study and practice of environmental justice derives from the fact that the impacts of natural resource scarcity and the destruction of ecosystems are unequally distributed across different social groups and geographic regions. This work explores the conflicts linked to electricity generation at the Belo Monte hydroelectric power plant, notable for its disregard of the region's traditional peoples. Inaugurated in 2016, construction works have been suspended on various occasions because the EIA report did not adequately assess socioenvironmental impacts. As a result, there is a lack of consensus regarding the viability of the development project. Belo Monte represents the short-sightedness of economic policies underpinned by the idea of development as growth.
Keywords: Belo Monte hydroelectric power plant, the Amazon Basin, environmental justice, socioenvironmental conflicts.

INTRODUCTION

The importance of the study and practice of environmental justice derives from the fact that the impacts of natural resource scarcity and the destruction of ecosystems are unequally distributed across different social groups and geographic regions.

This paper therefore explores conflicts linked to electricity generation at the Belo Monte hydroelectric power plant (hereafter referred to as Belo Monte), regarded by many as a new model in the expansion of the hydroelectric frontier in the Amazon and notable for its disregard of the region's traditional peoples.

The case of Belo Monte, located in the Xingu River Basin close to Altamira in the north of the State of Pará, is analyzed from the perspective of environmental justice, understood as a set of practices and principles that ensure both fair and equitable access to natural resources and to the information needed to constitute collective subjects or movements aimed at promoting the construction of alternative and democratic models of development.

It is a fact that the appropriation of natural resources for export, such as minerals and precious metals, is intensifying in the Amazon, incorporating the region into the global capitalist system as a supplier of low value-added commodities with an extremely high environmental impact, just as in colonial times.

Set in this context, the Amazon basin is characterized primarily by its energy production potential, facilitating the appropriation of, and monopoly control over, the region's natural resources.

Thus, studies showing that disadvantaged groups experience disproportionate environmental risk exposure can help tackle environmental degradation, avoiding the transfer of environmental burdens to the poor and ensuring that those responsible for impacts are held accountable.

BELO MONTE

Major infrastructure projects have been a constant in Brazil, causing a series of socioenvironmental conflicts over the years. A prime example is the controversy generated over the last 20 years by Belo Monte, whose location is shown on the following map.

Conceived as far back as 1975 during the military dictatorship, the original design of the Kararaô complex (Belo Monte's former name) was larger than the current project. Originally, the military government intended to build six dams between the Xingu and Iriri Rivers, not even sparing the then Xingu National Indigenous Park. At the time, the 'economic growth at all costs' ideology prevailed.

The initial project envisaged the construction of a hydroelectric complex with an installed capacity of 20,000 MW (larger

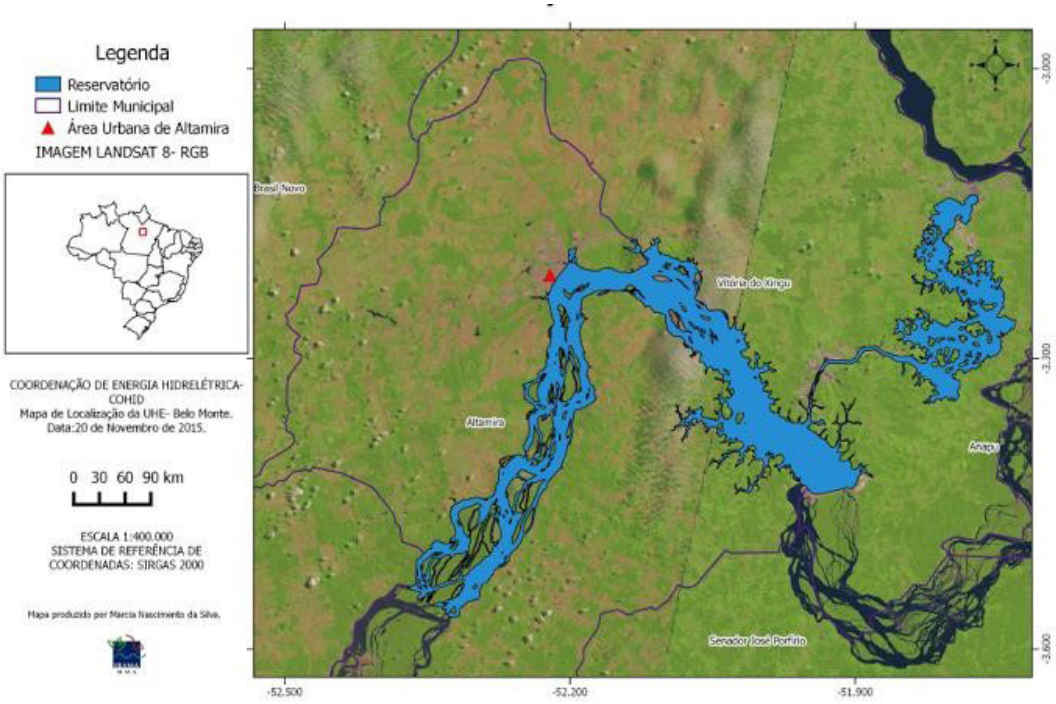

Figure 1- the Belo Monte hydroelectric power plant on the Xingu River, Pará

Available at https://lh3.googleusercontent.com. Accessed on 20 June, 2016.

than that of the Itaipu dam) and flooding of an area of 18,000 km^2, 12 times the area of São Paulo.

However, its social and environmental impacts and the country's economic conjuncture in the 1980s and 1990s meant that the project never materialized. The project faced staunch resistance from civil society and ended up being abandoned due to the destruction it would have caused to indigenous and riverine peoples, local communities, and the environment.

A campaign launched in 1989 by the indigenous leader Raoni Metuktire drew international attention to Belo Monte. Together with the British musician Sting, the chief of the Kayapó people visited 17 countries denouncing project irregularities and raising awareness about indigenous people's claims and the social and environmental impacts of the dam (Sudatti, 2014).

The ambitious plan was resumed in 2001 in response to an energy crisis in the country, which was forced to introduce energy rationing measures at the time. Criticism from environmentalists, raised in view of other major infrastructure projects such as the Itaipu and Tucuruí dams and new environmental crime laws, forced a review of the original plan for the Belo Monte complex, leading the Lula government to scale down the project, but without impeding the exploration of the full energy production potential of the Amazon's rivers by the energy sector.

Following intense discussions within the National Energy Policy Council, in 2009 a proposal was presented envisaging the construction of a single plant on the Xingu River: Belo Monte.

Inaugurated on 5 May 2016, construction works have been suspended and later resumed on various occasions because the EIA report did not adequately assess socioenvironmental impacts. As a result, there is a lack of consensus regarding the viability of the development project.

With a peak capacity of 11,233 MW, Belo Monte is Brazil's largest hydroelectric power plant and the third largest in the world.

The construction affects a 100 km stretch of the Xingu River, whose waters are diverted into bypass channels to feed the reservoirs, flooding areas of the municipalities of Vitória do Xingu, Altamira, and Brasil Novo (BLOG NORTE ENERGIA 2016).

According to Bermann, the conception and construction of Belo Monte is related to the "stigma of energy security in each of the countries involved in these projects" (BERMANN 2012, p. 6).

The author suggests that "in recent years, this dimension has been presented as energy integration projects, designed within the Initiative for the Integration of the Regional Infrastructure of South America (IIRSA)" (BERMANN 2012, p. 6). The planning and construction of hydroelectric plants in the Amazon has therefore become both a national and regional issue.

For Fleury and Almeida (2013), the construction of Belo Monte is an expression of environmental conflict in so far as it goes beyond material and symbolic disputes over the use of resources. It is a conflict in which experiences of society-nature relations are at stake, traversed by the notion of development.

Belo Monte has proved to be a huge social and environmental disaster due to its enormous impact on the region's vast bio and sociodiversity. The construction of the reservoir to feed the plant's turbines will flood an area of 640 km^2 – equivalent to 90,000 football pitches – in a region harboring over 440 species of birds and 259 mammals, impacting 30 indigenous lands and 12 protected areas (SUDATTI 2014).

The disaster will have a permanent impact on the traditional ways of life and sustainable livelihoods of local peoples, including fishing, agriculture, and extractivism, and is set to alter the region's water regime and ecological cycle, jeopardizing flora and fauna that has yet to be discovered or studied.

ENVIRONMENTAL JUSTICE

The uncontrolled exploitation of nature far beyond the planet's carrying capacity is supported by the following idea of progress:

> (...) now, with the aura of "sustainability", processes of accelerated destruction of the natural environment and exhaustion of the physical environment on which the survival of humanity depends continue to be fueled. This issue is particularly relevant in Latin America, which is a global center of ecological distribution conflicts (conflicts over water use, access to forests, agricultural areas, the control of biodiversity and energy resources, conflicts over the right to housing, to a toxic waste-free environment, among others) (SUDATTI 2014, p. 2).

These conflicts in the name of human rights are organized by new social actors and movements identified in Latin America under the umbrella of environmentalism of the poor (Martinez Alier, 2007) or the environmental justice movement. These movements place environmental issues at the center of the development debate, giving special prominence to the social reality of disadvantaged and vulnerable groups. This concern with the dispossessed arises from the need for social justice and equality for present generations or, more specifically, those suffering environmental injustice.

The concept of environmental justice has emerged in opposition to environmental injustice, whereby economically and socially disadvantaged groups (such as low-income populations, those who suffer racial discrimination, ethnic groups and traditional peoples, working class neighborhoods, and marginalized and vulnerable groups) bear the greatest burden of the environmental impact of development.

The environmental justice movement proposes to "mobilize the environmental movement that has developed over recent decades in support of the struggle against the dynamics of discrimination that place the burden of industrial and economic development on the shoulders of specific population groups" (Porto, 2005).

According to Acselrad (2004), the practice of environmental justice is the most coherent way of tackling environmental conflicts. It avoids treating conflicts in terms of the efficiency of interest-based mediation, typical under technocratic and economistic approaches:

> The notion of "environmental justice" expresses a movement that entails the resignification of environmental issues. It is the result of the singular appropriation of environmental themes by the sociopolitical dynamics traditionally involved in the construction of social justice. This process of resignification is associated with the reconstitution of arenas in which social disputes for the construction of possible futures are played out. In these arenas, environmental issues are increasingly central and increasingly viewed as intertwined with traditional social issues of employment and income (ACSELRAD 2010, p. 1).

Thus, the field of human rights is intertwined with the socioenvironmental conflicts resulting from new cycles of economic investment and private natural resource appropriation that produce exclusion or expropriation. It is therefore important to reflect upon this situation from an environmental justice perspective to help understand and tackle the unequal distribution of the impacts of environmental degradation (Malagodi, 2012).

However, as Moral Hernández & Magalhães recall, the "'public benefit rhetoric' (...) is used to legitimize the private discussions and decisions that place the interested and threatened public as mere spectators and institutions as mere supporting actors" (MORAL HERNÁNDEZ & MAGALHÃES 2011, p. 2).

An example of the "public benefit rhetoric" can be seen on the Belo Monte blog (2016), maintained by the company responsible for the construction of the plant, Norte Energia S/A. For obvious reasons, the blog promotes the eco-efficiency discourse, conveying a positive and enterprising image by applying the principle of environmental compensation, developing reforestation projects, generating employment, and preaching respect for indigenous peoples and disadvantaged groups. As Sudatti points out, "many of the poverty-stricken residents of the region end up assimilating these ideas and believing in the Belo Monte dream" (SUDATTI 2014, p. 8).

However, despite this propaganda, observed from the outset of the project and during the construction process, it was the resistance of indigenous peoples and local communities that became a problem for the progress of construction works and "it was exactly this resistance that was crucial in ensuring that the Sarney government later abandoned the project" (SUDATTI 2014, p. 8).

Thus, the struggle waged by the various groups affected by the project can be seen as an environmental justice movement fighting to defend livelihoods, ways of life, and culture.

Another point in the pursuit for environmental justice that warrants highlighting is the fact that claims and demands related to Belo Monte were not satisfactorily resolved by the competent authorities, leading to denunciations to international human rights organizations (ISA, 2015). Despite this:

> (...) none of the definitive impediments provided an insurmountable obstacle to delivering Belo Monte. Not even the Organization of American States (OAS) was able to maintain a strong position and interfere in the economic and political goals

> that impelled the decision to go ahead with Belo Monte, regardless of the disastrous ecological, cultural, and anthropological consequences and the illegality that legally underpins this development (...) (SUDATTI 2014, p. 10).

The case of Belo Monte illustrates that neither Brazilian nor international law are effective in safeguarding the rights of the indigenous groups and traditional communities affected by the project. As a result, the region's riverine communities and indigenous peoples have ended up losing control over both their land and resources, threatening their food security, health, and autonomy.

FINAL CONSIDERATIONS

Often resulting from pressure brought to bear by social movements and civil society organizations, legal instruments are important tools for implementing environmental justice. However, it is important to realize that these instruments are actually the result of the dynamics of capitalism, which appropriates the social and environmental protection discourse, tailoring it to its reality and controlling the ongoing historical social process.

Despite this, it is also true to say that socially, economically, and culturally marginalized social groups find concrete motives for their calls for environmental justice within these very instruments.

Environmental governance in this country, unfortunately understood by successive governments merely as the management of public affairs related to economic development, shows a huge gap between institutional arrangements and environmental regulations, resulting in significant delays in their implementation.

This gap is primarily due to the short-sightedness of economic policies underpinned by the idea of development as growth. An example of this situation is the subordination of the Environment Ministry to other ministries in successive governments.

As Zhouri (2008) maintains, governance should be established as a political model in which various governmental and non-governmental actors, civil society, and corporations systematically come together to present solutions via new corporate arrangements, thus enabling the promotion of environmental justice. Brazil should also reexplore other potential sustainable energy sources.

The granting of environmental licenses for projects such as Belo Monte is the result of the desire for economic growth.

Finally, it is also important to keep on criticizing and deconstructing concepts and statistics used simply for publicity purposes, showing the economic, social, and environmental infeasibility of the development by revealing data manipulation and misinformation.

When it goes against major infrastructure projects, the position of specialists, environmentalists, and defenders of human rights and indigenous peoples are often be seen as "backward". For the defenders of development projects, the ways of life of these peoples are "outmoded" and should be changed in the name of modernization, uprooting traditional and sustainable practices that have existed since ancient times.

It is essential that different actors across different sectors of society – specialists, universities, state and federal public prosecutor's offices, religious entities, NGOs, environmentalist, indigenous peoples, and other local groups such as traditional farming and fishing communities – continue to play this critical role. This is the only way to bring the violence perpetrated by this and other energy projects to light.

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