

# CONSTITUTIONAL EXISTENTIAL MINIMUM AND SOCIO-ENVIRONMENTAL VULNERABILITY IN THE SCOPE OF COMPULSORY DISPLACEMENTS

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## ABSTRACT

The deployment of the Thermal Power Plant of Itaqui Port, in São Luís-MA, has caused the forced displacement of families from the community of Vila Madureira, Itaqui-Bacanga, São Luís-MA to Vila Nova Canaã, Paço do Lumiar-MA. In this situation, some socio-environmental rights which make up the right to the existential minimum were mitigated. Under this assumption, this article aims to analyze and discuss the effectiveness of the reach of the presence of existential minimum in the resettled community in question, demonstrating that this possibility will only be realized with the application of non-discriminatory public policies that can reduce socio-environmental vulnerability. To this end, the effectiveness of rights to health and work were analyzed by means of participant observation, together with interviews. By collecting these data, it was possible, therefore, to highlight the non-recognition of certain subjective rights to benefits related to the minimum necessary for a dignified life. Thus, it is demonstrated that fundamental and protection rights give rise unconditionally to the inclusion of environmental protection in fundamental rights, providing the guarantee of the existential minimum for the full development of human individuals.

**Keywords:** compulsive displacement; dignity; existential minimum; public policies; socio-environmental vulnerability.

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*MÍNIMO EXISTENCIAL CONSTITUCIONAL E VULNERABILIDADE  
SOCIOAMBIENTAL NO ÂMBITO DOS DESLOCAMENTOS  
COMPULSÓRIOS*

*RESUMO*

*O advento da instalação da Termelétrica do Porto do Itaqui, em São Luís-MA, proporcionou o deslocamento compulsório de famílias oriundas da comunidade da Vila Madureira, Itaqui-Bacanga, São Luís-MA, para a Vila Nova Canaã, Paço do Lumiar-MA. Nessa conjuntura, alguns direitos socioambientais que compõem o direito ao mínimo existencial foram mitigados. Com base nesse pressuposto, este artigo almeja analisar e discutir a efetivação do alcance do mínimo existencial na comunidade reassentada em questão, demonstrando que tal possibilidade somente será concretizada com a aplicação de políticas públicas não discriminatórias que possam diminuir a vulnerabilidade socioambiental. Para tanto, foi analisada a efetividade dos direitos à saúde e ao trabalho, por meio da observação participante com a aplicação de entrevistas. Por intermédio da coleta desses dados, pôde-se, portanto, evidenciar o não reconhecimento de certos direitos subjetivos a prestações relativas ao mínimo necessário para a existência digna. Assim, demonstra-se que os direitos fundamentais e da proteção ensejam incondicionalmente a inserção da proteção ambiental nos direitos fundamentais, proporcionando a garantia do mínimo existencial para o desenvolvimento pleno da personalidade humana.*

**Palavras-chave:** *deslocamento compulsório; dignidade; mínimo existencial; políticas públicas; vulnerabilidade socioambiental.*

## FOREWORD

The establishment of large enterprises related to state policies causes the degradation of the environment where they carry out their activities and, consequently, forces the surrounding residents to move. These changes do not always respect the basic social rights of the affected communities, causing social and environmental impacts. As Laschefski points out (2011, p. 29), “Large enterprises occupy extensive areas and affect the environment, with significant social and environmental impacts felt by locals”.

In this scenario, violations of fundamental rights take place. Lawmakers consider these rights are an existential minimum or even “minimum vital basis”, a list of basic rights essentials for existence and of paramount importance for an ecologically balanced environment and the possibility of a healthy quality of life. In other words, it is “a set of minimum social rights intended to ensure the indispensable conditions for a person’s livelihood and the exercise of their freedoms” (ESPINOZA, 2017, p. 110).

The relationship between ecological existential minimum and environmental degradation caused by government enterprises is not equivalently expressed by a simple cause-effect link, but in a relational way. In other words, when managing territories, what happens is that the State acts as an agent with exclusive dominance over spatial-territorial relations and that takes strategic positions when carrying out the interests of dominant agents. Due to this process, populations become the victims of unwanted impacts of large investments that take over existing resources in territories, concentrate income and power, while affecting the health of residents and the integrity of the ecosystems on which they depend.

As an aggravating factor, these groups, which are subjected to various environmental risks, are those that are less able to make their voices heard in the public arena and have no opportunity to discuss the effects of uneven distribution of pollution and environmental protection<sup>3</sup>. Thus, according to Garcia (2013), the effects of unequal distribution of pollution and environmental protection show, above all, that fundamental social rights and the fundamental right to the environment are not realized, in disregard of the ecological existential minimum. This thus requires an approach to State responsibility in promoting the application of appropriate risk management and integrating populations.

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<sup>3</sup> While higher income populations have the means to move to areas that are more protected from environmental degradation, poor populations are spatially segregated, residing in less valued and geotechnically insecure land (ACSELRAD; MELLO; BEZERRA, 2009).

Based on these aspects, the present article discusses the reach of the existential minimum in the resettled community of Vila Nova Canaã, in the county of Paço do Lumiar, Maranhão (MA). Resettlement took place through the process of relocating families living in the community of Vila Madureira, a village located on the margins of BR-135 highway, in the Itaquí-Bacanga area, in the county of São Luís-MA, to an area in Paço do Lumiar-MA, due to the construction of the Thermolectric Plant (TPP) of Porto do Itaquí. We want to stress the processes resulting from local economic development that speed up environmental degradation, social segregation, and the deterioration of population health.

To carry out this study, the conditions of the effectiveness of health and labor rights were analyzed through participant observation, including open-end question interviews<sup>4</sup>. It is worth mentioning that eight on site visits were made to the above-mentioned community, from December 2018 to January 2019b, by a master's student team including three professionals working in the areas of Law and Business Administration, who were able to observe the new environment where the residents of Vila Madureira, from Itaquí-Bacanga, are settled.

As for the inclusion criteria, they included the residents of the place we are focusing on, who are part of the list of displaced families from Vila Madureira in Itaquí-Bacanga, São Luís-MA. All residents who were not from the mentioned village were excluded. A sample of 22 resettled heads of households had their statements recorded. Priority was given to the analysis of these discourses; and by observing the results qualitatively, we found that there is the possibility of reaching the existential minimum in the resettled community, demonstrating the social and environmental vulnerability faced due to the disregard for basic rights of the resettled.

To actualize the possibility of reaching the constitutional existential minimum is thus to apply non-discriminatory policies, carried out in a uniform manner, taking into account the interests of economically disadvantaged vulnerable groups, because they also have the right to a balanced environment and the right to life. In this light, Sarlet and Fensterseifer (2011b) emphasize that the recognition of the guarantee to a social and environmental existential minimum, allied to environmental justice, represents a condition of possibility for the exercise of the other fundamental rights. As a result, environmental protection is the constitutional objective or end of the Brazilian Rule of Law.

4 "In this methodology, which is commonly used in qualitative research, the researcher remains in continuous contact with the community studied, seeking to identify, through their discourse and other elements, the view of the local population" (CHIZZOTTI, 2018, p. 66).

In order to highlight the elements presented above, we discuss, at first, the realization of the conditions for a decent life and their relationship with fundamental human rights. This is, thus a way of questioning the Right to Work as a component of the existential minimum, while its importance is set by the economic order itself in order to guarantee an existential minimum. This makes it necessary to achieve a healthy and balanced environment as a risk mitigation measure.

Then, social and environmental vulnerability is related to the idea of compulsory displacement. To that end, we analyzed the resettlement in Vila Nova Canaã. Based on that discussion, we have shown that, as a social object, environmental risk is reversed into a relational dynamic condition substantially dependent on the human threat, and the complexity of the systems that characterize society allows mainly for the construction of scenarios of relationships of potential injustices in the context of territorial occupation.

And to conclude, we assumed that an unequal distribution of environmental risks accentuates the conditions of social and environmental vulnerability, which clearly demonstrates a process of loss of minimum living conditions for the residents of the Itaquí region, especially those residing in the region called Vila Madureira. Thus, based on the discussions, it can be inferred the constitutional existential minimum for the studied community will be achieved when the Government, through public policies, guarantees social and environmental rights to the resettled people.

## **1 RIGHT TO EXISTENTIAL MINIMUM: ACTUALIZATION OF DIGNIFIED LIFE CONDITIONS AND THEIR RELATIONSHIP TO FUNDAMENTAL HUMAN RIGHTS**

Understanding the existential minimum implies the notion of the principle of the dignity of the human individual, according to which every human being is important and needs to be respected by the authorities and the community<sup>5</sup>. In Garcia's (2013) view, in a discussion about the realization of the existential minimum, it is necessary to identify two quite distinct aspects: the right not to be deprived of what is considered essential to the conservation of a minimally dignified existence and the right to demand State benefits that reflect this minimum<sup>6</sup>.

5 "The principle of the dignity of the human individual corresponds to the intrinsic and distinctive quality of every human being that makes them deserving of the same respect and regard by the State and the community" (SARLET, 2002, p. 60).

6 Full human dignity requires an understanding of its ecological bias, given that a minimum environmental quality is necessary to achieve this goal, so that a balanced environment is a part or an element of that dignity.

From the above, it can be inferred that the ecological existential minimum is that capable of ensuring minimum livelihood conditions, without risks to the life and health of the population or irreparable damage to the environment<sup>7</sup>. Thus, minimum livelihood conditions consist of the fundamental rights and guarantees stated in the 1988 Federal Constitution (CF/88), with its list of fundamental rights (STEIGLEDER, 2017).

Along those lines, in order for the existential minimum to obtain, we need a broader view of what is essential for a healthy quality of life<sup>8</sup>. In fact, one must understand what is essential, adopting a minimum standard of interpretation of CF/88 in its Art. 225, which provides for environmental protection; Art. 1, concerning the grounds for the Federative Republic of Brazil, together with Art. 6 on social rights (FIORILLO, 2017). The wording of Art. 225 of CF/88 provides for the essentials for a healthy quality of life, namely: “Everyone are entitled to an ecologically balanced environment, a common good for the use of the people and vital to a healthy quality of life; so, the Government and the collectivity have the duty of defending and preserving it for both the present and future generations” (BRASIL, 1988).

In the initial part of the heading of Art. 225 of CF/88, one can identify how essential the right to an ecologically balanced environment is for the effectiveness of a healthy quality of life; however, the analysis at the final part of this article shows how fundamental it is. In this sense, according to Gonçalves (2017, p. 104), “it is possible to identify the express consecration of a general fundamental duty of protecting the environment, ascribed not only to State but to all citizens (*erga omnes*), for present and future generations”. According to Sarlet and Fensterseifer (2011a, p. 91-92, emphasis added):

There is, therefore, the recognition by the constitutional order of the *dual functionality* of environmental protection in the Brazilian legal system, which takes both the form of an *objective and task* of the State and of a *fundamental right (and duty)* of individuals and the community, involving everyone in a complex set of fundamental ecological rights and duties.

Thus, the notion discussed here goes beyond the physiological right

<sup>7</sup> “The dignity of the human individual, in its turn, will only be assured – in terms of the basic conditions to be guaranteed by the State and society – when everyone is assured no more nor less than a healthy life” (SARLET; FENSTERSEIFER, 2011b, p. 120).

<sup>8</sup> “A dignified human existence is not considered only in its physical aspect, in the sense of maintenance and survival of the body, but also in the intellectual and spiritual aspect by ensuring, among other things, the right to education, food and health. Thus, it is necessary to recognize certain subjective rights to benefits linked to the minimum necessary for the dignified existence of the individual, and not only for their livelihood. Without guaranteeing this minimum necessary for human existence implies a direct violation to the constitutional right to life and, moreover, to a dignified life, which is the basis of all fundamental and human rights” (GARCIA, 2013, p. 40).

to life, as it considers the need for human beings to enjoy social rights in order for environmental quality to obtain. An appropriate and quality environment is one where social rights are effectively implemented. Thus, the enjoyment of social rights such as health and housing at desirable levels is linked to a minimum standard of environmental quality, such as access to clean water and basic sanitation (FENSTERSEIFER, 2008).

The wording of Art. 6 of CF/88 (given by Constitutional Amendment No. 90/2015) reports social rights as: “Education, health, food, work, housing, transportation, leisure, safety, social security, protection of motherhood and childhood, and assistance to the helpless, in accordance with this Constitution are social rights” (BRASIL, 1988). Thus, it can be determined that the existential minimum takes on an ecological bias, as it presupposes a respect for the right to an ecologically balanced environment by ensuring the full exercise of human dignity through the complementation and coexistence of social and environmental rights.

As shown by Ayala (2010), without the possibility of access to existential minimum conditions, one cannot speak of real or factual freedom, nor of a standard of living compatible with human dignity; in fact, the guarantee to the existential minimum is a premise for the exercise of the other fundamental rights in various aspects. Therefore, the attribution of basic social rights is advanced as a minimum condition for individuals to be able to recognize themselves in society’s norms and thus to recognize and understand themselves as part of the moral community. This author emphasizes:

The normative discussion that we intend to establish between the fundamental right to the environment and fundamental social rights is extremely important in shaping the legal content of the principle of human dignity, since the rights in question are material projections of the vital and basic elements for dignified and healthy human existence. Communication between fundamental social rights and the fundamental right to the environment is also one of the central objectives of the concept of sustainable development on the perspective established by the socio-environmental Rule of Law, in that, together with the idea of environmental protection, its central objective is to meet the basic needs of the world’s poor and to equitably distribute social resources (e.g. access to water, food, etc.) (AYALA, 2010, p. 50).

Among social rights, it is necessary to emphasize the importance of rights to health and work as rights that are part of the existential minimum. The Brazilian Constitution honors these rights by including them in the list of fundamental rights, expressed in Art. 196 (BRASIL, 1988), namely: “Health is the right of all and the duty of the State, guaranteed by social

and economic policies aimed at reducing the risk of diseases and other issues, and universal and equal access to actions and services for fostering, protecting and recovering them”.

It should be noted, however, that the effectiveness of the right to health is not obtained only with the existence of healthcare clinics and hospitals; it is necessary for them to actually function regularly. Validating this conception, the Ministry of Health Ordinance No. 1,820/2009 provides for the right to appropriate and timely healthcare to remedy diseases and ills of society. Transcribed *in verbis* (BRASIL, 2009):

Art. 3. Everyone has the right to proper treatment at the right time to solve their health problems.

Sole paragraph. It is the right of each person to have adequate quality, and timely care and have continuity of treatment guaranteed; to that end, the following must be assured:

I – Streamlined care using appropriate technology, by a trained multi-professional staff and with adequate service conditions [...].

In addition to the effectiveness of care in health clinics, the need for basic sanitation in neighborhoods and communities needs to be emphasized, in order to avoid health problems in children, young people, and adults. Along those lines, Law No. 11,445/2007 defines basic sanitation as a set of infrastructure and operating facilities that integrate drinking water supply, sewage and other services (BRASIL, 2007).

The absence of this right is felt in destitute communities, and it is not always treated as a priority by public authorities. Public agencies do not act together and with strategic planning. In that situation, basic sanitation is of paramount importance for the protection of the social right to health. Thus, it is necessary that public agencies act together for the maintenance of those services in communities. Special attention to sewage and drinking water services is a duty of the Government. As pointed out by Sirvinkas (2019, p. 460):

It is destitute populations that suffer the most from a lack of basic sanitation and, consequently, from a lack of water. Undoubtedly, there is a lack of joint planning among public agencies in order to implement strategic planning, starting from basic education and extending to environmental issues at all levels of education in order to make the population aware of elementary issues on water, for example.

In fact, municipalities are responsible for providing services that include basic sanitation, which, when implemented, ensure the necessary conditions for the health of women and men. Toward that, domestic



legislation, in CF/88, is also equally concerned with the right to work and the conditions of the work environment, prioritizing the care given to them in order to ensure the greater value of the Brazilian State: the protection of human dignity. According to art. 7 of the Constitution (BRASIL, 1988): “The rights of urban and rural workers, as well as others aimed at improving their social status, are: XXII – a decrease in the risks inherent to work through health, hygiene and safety standards”.

For Barcellos (2002), human rights have their anthropological foundation in the idea of human needs. By acknowledging, exercising and protecting them, the intention is to meet a series of requirements deemed necessary for the development of a dignified life. As a result, it can be seen how developing a rational justification for those rights is indispensable, which reflects on their tutelage and protection. So, the central issue that comes up between the right to an ecologically balanced environment and human rights lies in the grounds for both, which is the right to life and health, in order to ensure a healthy life.

Thus, we can infer that quality of life will be incorporated mainly to the possibilities of meeting the desires of individuals who seek it, and this highlights the image built by each individual according to their interests, goals and life expectations (BARCELLOS, 2002). Given this, the legal nature of the existential minimum, which is presented in two distinct contexts, an objective and a subjective one, stresses the need to develop services provided by the State. The first concerns its objective nature, which comprises the institutional and procedural safeguards provided to individuals to ensure their minimum rights.

According to Ayala (2010), the existential minimum corresponds to a core part of the human individual dignity, to which positive or symmetrical legal efficacy must be recognized; that is, it is an indispensable content for the existence and dignity of the individual, thus fostering state benefits to guarantee these essential conditions. Similarly, Barcellos (2002) points out that the existential minimum presupposes a right to the minimum conditions of human existence, which cannot be the object of State intervention, but requires positive benefits provided by the State.

The diagnosis shows a condition of social and environmental vulnerability, with social and environmental problems overlapping and interacting. This situation demonstrates the intrinsic absence of fundamental social rights and the fundamental right to the environment, in relation to the ecological existential minimum, which requires, by means of sustainability

guidelines, an analysis of the State's responsibility in promoting the proper management of risks and in the integration of populations. As Bucci (2017, p. 141) points out, "Public policies are government action programs aimed at coordinating the means available to the state and private enterprises to achieve socially relevant and politically determined goals".

Given these considerations, it is noteworthy that social rights, which are components of the existential minimum, are not available to the Executive and Legislative Powers. This means that, given the inertia of these powers, the Judiciary Power can decree the realization of these rights, as they are indispensable for a dignified life. As pointed out by Torres (2008, p. 82):

[...] The Judiciary Power may order the delivery of positive benefits, as such fundamental rights are not under the discretion of the Executive or the Legislative Power, but are included in the institutional guarantees to freedom, the structure of essential public services, and the organization of public establishments (hospitals, clinics, primary schools, etc.).

However, in Brazilian law theory, it is considered that the implementation of public policies through judicial measures is subject to remarkable consideration in light of the theory of the "reserve of the possible", which argues that the State may not guarantee social rights due to its limitations and budgetary reserves. In other words, according to that theory, scarcity of resources can serve as a foundation for the state not enforcing some rights. As stressed by Barcellos (2002, p. 142):

The phrase reserve of the possible seeks to identify the economic phenomenon of the limitation of available resources in view of the almost always infinite needs to be met by them. [...] reserve of the possible means that, in addition to the legal discussions about what can be legally required from the state – and ultimately from society, which supports it – it is important to keep in mind that there is a limit of material possibilities for that right.

Along the same vein, the theory of the "reserve of the possible" acts as a limiting factor for the realization of social rights. Those in favor of this view argue that a lack of public economic resources limits the realization of provision rights (CANOTILHO, 2008). However, with regard to the existential minimum, it is not pertinent to argue the grounds of the theory of the reserve of the possible, since it is the minimum standard necessary to guarantee the principle of human dignity, which is the pillar of the whole system of human and fundamental rights, which are not dependent on

budgets and should be guaranteed in any situation. As explained by Clève (2003, p. 23):

Clearly, the realization of social rights will only occur in light of the social and economic coordinates of space-time. But the reserve of the possible cannot, in a country like ours, especially in relation to the existential minimum, be understood as an obstacle clause, but rather as a clause imposing caution, prudence and responsibility in the field of judicial activity.

Nevertheless, Barcellos (2002) notes that it becomes perfectly possible – through the guarantee of the existential minimum – to make effective social rights compatible with the theory of reserve of the possible. However, there are still parts of each of these social rights that, although contributing to the improvement of the quality of life of individuals, are not essential to their dignity; therefore, they are not part of what law theory calls the existential minimum. Indeed, the theory of the reserve of the possible can be perfectly applied to them, provided that, as stated by Garcia (2013, p. 44), “their enforceability is conditioned to the existence of the public financial resources necessary for realizing them”.

Given the above, the building and strengthening of the values linked to the socio-environmental existential minimum lay down a new condition, in which fundamental aspects of environmental protection and other rights allow for a broad understanding of the concept of existential minimum in order to achieve a life with environmental quality. Thus, the vital minimum ground for rights must be ensured by the State to all individuals, including the right to health, whose exercise, according to Barcellos (2002), implies a balanced and healthy environment as an affirmation of the values advocated by democracy and social justice.

## **2 SOCIAL AND ENVIRONMENTAL VULNERABILITY AND COMPULSORY DISPLACEMENT: AN ANALYSIS OF THE RESETTLEMENT IN VILA NOVA CANAÃA, PAÇO DO LUMIAR-PA**

As for the protection of human rights, the notions of equality and vulnerability are complementary. In this sense, from the perspective of Kowarick (2003), those who, for different reasons, have their ability to deal with the possible violations of those basic rights – that is, human rights – weakened are vulnerable. This diminution of capacities and vulnerability are associated with a certain condition that allows each individual to be

identified as a member of a specific group that, from a general outlook, is in a position of clear material inequality in relation to the majority group<sup>9</sup>. In contrast, Acselrad, Mello and Bezerra (2009) say that the notion of vulnerability is relatively attributed to a lower or greater degree of people's susceptibility to risk exposure in places without any form of infrastructure, and who face situations that affect their daily lives due to changes suffered by social groups, to the detriment of the fixed social space<sup>10</sup>.

If so, based on the identification of threats in the territory at different geographical scales, vulnerability allows for different thematic (social and environmental) approaches, caused by spatial changes. Therefore, the definition of vulnerability makes enormous theoretical and methodological contributions to the pertinent analyzes of the effects of possible threats in a given environment. In this context, it becomes possible to glimpse the problem of threatened living conditions of traditional communities and destitute populations that live in vulnerable areas as a direct result of the process of socio-spatial segregation and, therefore, as a problem of territorial dimensions. Thus, the social and environmental issue becomes adequate to translate a crisis that is, at the same time, social and environmental (KOWARICK, 2003).

In this sense, the processes of compulsory displacement have shown that, as a rule, resettled families, groups or peoples are typified as vulnerable because they lack minimum performance of the State regarding services such as healthcare, education, security, work and income, and so are not able to achieve quality of life due to their social and environmental fragility. According to Mendonça (2013, p. 4):

The situation of the lack of vital minimums and social, political, and economic disregard to which these people are subjected has served as a justification for accepting displacement proposals, or the poor capacity of those who do not accept the situation of being displaced to resist them.

In this sense, it should be noted that, with the establishment of large companies, there is not only ecological damage, but also the "loss of

9 "Vulnerability is different from risk. The etymological basis of the word comes from the Latin verb 'to wound'. While risk implies exposure to external hazards over which people have limited control, vulnerability measures their ability to combat such hazards without potential long-term loss of well-being" (UNDP, 2007, p. 78).

10 The United Nations Development Program (UNDP) defines vulnerability as the human condition or process resulting from physical, social, economic and environmental factors that determine the likelihood and scale of damage caused by the impact of a particular hazard. Although the definition of vulnerability adopted by the International Strategy for Disaster Reduction (ISDR) encompasses several conditions, the impact of which affects the susceptibility of a population, the UNDP definition understands vulnerability as a human condition or process.

the actual space of housing and survival, and, consequently, of cultural, economic, social and spatial references” (MENDONÇA, 2013, p. 33). These losses reflect on the lives of those affected, in aspects little noticed by the great businesspeople and public authorities, so that they create unfavorable social and environmental conditions that lead to the escape of the affected groups. An example of that is the case of the Belo Monte-Pará Hydroelectric Power Plant (HPP).

The implementation of this plant is the scene of social and environmental conflicts and is characterized, as Giongo, Mendes and Santos (2015, p. 509) explain, “by situations such as the non-acknowledgment of communities affected by resettlement programs, delays in compensation to residents of the region, as well as environmental damage”. According to Zagallo (2004), most of the recommendations on displacement and resettlement have the risk of impoverishment as a main concern, leading to the mitigation of impacts to protect against this risk. Thus, “with multidimensional characteristics, impoverishment is grounded in processes of rights violations, going beyond issues of an eminently economic nature, with losses as dramatic or more as the monetizable ones, implying irreparable damage to families” (MENDONÇA, 2013, p. 22).

As Acselrad says (2010, p. 114), “Locational blackmail of investments is the central mechanism under the prevailing conditions of liberalization for imposing environmental and labor risks on destroyed populations”. Although the experiments show the damage done to the expropriated communities, the large enterprises are considered as vehicles of progress for the region and the affected communities. When a venture project is presented in a municipality, there is a celebration by all sectors of society. As shown by Giongo, Mendes and Santos (2015, p. 508): “These enterprises are presented as a means of progress and modernization for the region and those affected, as if they were ‘behind the times’ and needed a ‘civilizing intervention of development’”.

The Vila Nova Canaã, Paço do Lumiar-MA resettlement is formed by individuals who suffered the process of compulsory displacement, left their cultural identities and other relationships with nature and neighbors. The thermoelectric plant was deployed in São Luís-MA in an area the residents of Vila Madureira – a village located on the banks of BR-135 highway in the Itaquí-Bacanga area – predominantly utilized for farming. In 2009, 94 families were relocated to the municipality of Paço do Lumiar (RIBEIRO, 2004).

Moreover, the resettlement of families in Vila Nova Canaã helped increase the vulnerability of the population, which was already considered lacking in social care. The situations experienced in the countryside show that the resettled people suffer from the lack of decent work and housing conditions. Many promises of guarantees of social rights were not fulfilled, such as paving in the neighborhoods, assurance of decent work and a sewage network. As recorded by Mendonça (2013, p. 10):

The equation presented by the company and the government was very simple: either the maintenance of the territory ancestrally occupied by the residents who had family relationships, festivities, and exchanges with the neighborhood areas, but without any basic service offered by the State, or resettlement with the promise of these minimal services.

Thus, a population that does not have its social rights guaranteed or a healthy quality of life is considered as vulnerable. When the State ceases to maintain public services or does not provide them to the community, it exposes that community to various risk situations, such as diseases resulting from a lack of a sanitary sewage system. Law No. 10,257/2001 ensures the right to public utilities within cities and towns. The municipal government has the duty to guarantee services such as sewerage, water supply, power, and stormwater collection, which need to be adequate and efficient (BRASIL, 2008).

In addition to facing all the problems arising from an imposed life change, the resettled population in Vila Nova Canaã, Paço do Lumiar-MA, is forced to live without the existential minimum, which makes them even more vulnerable. This creates a problem: the population does not have sewerage services, drinking water, street paving; in addition, the vegetable garden provided by the company for the resettled people to work on is five kilometers away, causing an obstacle to the realization of the right to work. Based on reports from the Resettlement Residents Association, through its chairwoman, about 40 families remain in the resettlement. Many families could not bear the life changes imposed and sold or rented their homes.

The complexity of these dynamics and the depth of changes and disruptions to the lives of affected families impose exhaustive planning and agreement among all parties involved in order to ensure the necessary predictability, adequacy and timeliness of relocation processes. Thus, it is intended to guarantee families participation in decisions as part of the establishment of the options that would best meet to their ambitions and

that, consequently, would enable the restoration of their means and ways of living (MENDONÇA, 2013).

### 3 DISCUSSION

We have noticed that the resettled people from Vila Nova Canaã, Paço do Lumiar-MA, live under very plain conditions. They are made vulnerable by a lack of effective State participation, and so are surrounded by social problems. From the interview records, it appears that part of the population, who lived on what they planted, fished and farmed, sold the land that provided their only livelihood in the hope of the benefits that compensation could bring to their families in the short term. Among the questions posed during the interviews, four are of particular interest to the discussion. The first is: what is your profession? Did you have to change your profession when changing your neighborhood? If so, did you feel harmed by that change?

Below are the answers of R6, R7 and R15<sup>11</sup>, respectively:

R6 – I just arrived from there. It's tiring. From here to there was five and a half kilometers. It was bad for me. I work in the vegetable garden. Right from the start, we were paid a fee for us to work in the garden, and we started to pay a transport ourselves. Then, the company stopped paying the fee, and then the folks stopped going to the garden. Now only those who want are there.

R7 – Many left, and others died. It was better when I worked at Vila Madureira. Everything was better there. Yes, everything was bad for me. They fooled us. Here, it's tiring. We work in the sun and without many resources. I'm old.

R15 – I worked in the garden for a while. But then, it got very difficult, because it was far from the village and it was difficult to go there. I dropped it. It was very tiring. Today I'm unemployed (stated orally).

It is worth noting that the farm was provided by the company for the resettled people to have a source of income. However, the distance from Vila Nova Canaã to the farm is a factor that makes them even more dissatisfied with the work environment. As recorded by interview, it is five kilometers away, which makes them tired and less willing to work. Moreover, the distance from the farm to the community acts as a real obstacle to the right to work. Walking five kilometers became unsustainable and led some to give up working. The effectiveness of the right to work is also a concern of the City Statute, which advocates the participation of the municipal

<sup>11</sup> Respondents were properly coded as: Resettled (R), with sequence of numerical order of interviews (1, 2, 3, and so on).

government in labor relations (BRASIL, 2008). Such concern is in line with Fiorillo's studies (2017, p. 542):

It is important to consider that the law determines the necessary participation of the municipal government in the relationship of human labor/free enterprise as part of the planning of the economic activities of the Municipality. This means considering that, based on the City Statute, the right to work of men and women in cities and towns reiterates the duty of the municipal government with regard to the effectiveness of the above-mentioned law.

Another, no less important issue is the direct exposure to the sun faced by the resettled farm workers. This can be considered harmful to their health and well-being. This concern is legitimate and is in line with Rocha (2013, p. 70):

Numerous situations change the equilibrium of the environment: gases, dust, high temperatures, toxic products, irradiations, noise, the stressful schedules themselves (work at night and rotary shift work). In short, everything that harms the health, well-being and safety of workers.

The workers' direct exposure to the sun was confirmed during visits to the farm. They show numerous skin diseases caused by sun exposure; however many workers are not even aware of protective measures against those. This situation violates Art. 7 of the Constitution, which deals with the dignity of working conditions and reminds one of investigations on sun exposure of rural workers (SILVA et al., 2015, p. 236): "That the individuals participating in this sample have been exposed to the sun for a long time, the participants even know about the risks they are taking, but the lack of knowledge about protective measures and the factors that predispose to the disease is quite remarkable".

During the visit to the garden, it was found that the workers were not properly dressed because, despite wearing long-sleeved shirts, they were without protective headgear. Regarding the use of long-sleeved shirts, Mantovani et al. (2009) stress that wearing this type of clothing does not block the sun's rays, depending on the fabric.

Now, the second question that interests this study is: can you tell which services are provided by the community health clinic, and if they are provided every day? How do you rate community care from such services? Below are the answers of R10, R11 and R14, respectively:

R10 – There are some doctors, but not every day. They take a while to see you. I don't



know what services they provide.

R11 – I can't really say for sure... I only know it's terrible. We have to wait in line.

R14 – There's no doctor here. The service is trash. It's just a makeshift clinic (stated orally).

In the speeches, we noticed frustrations with the services provided by the healthcare clinic, more precisely, the lack of professionals and resources and that it takes a long time for the patients to be cared for. On visiting the healthcare clinic, we found that, in fact, care provision is irregular and also noticed structural problems, such as deteriorating stretchers. On that matter, Fiorillo (2017, p. 540) considers that:

The right to public services established by Law 10,257/2001 assures Brazilians and foreigners residing in the country are consumers before the municipal government, which, as a service provider within cities and towns [...] is obliged to guarantee adequate, efficient, safe and – regarding the essentials – continuous services.

This dissatisfaction reveals another worrying situation: the weakness of the bond between the healthcare clinic and the community, also resulting from the lack of knowledge of the resettled people about the services provided that clinic, considering R11's testimony. Such a situation, which acts as a barrier to access to services, is in line with Goddard and Smith's (2001, p. 1150) view: "Knowledge about the availability and effectiveness of health services among individuals and their perceptions of the benefits of the provided care are factors that may influence access to said services".

The third key question for this study was: How do you rate the quality of water and sanitation in the neighborhood? Have you ever had a problem because of water? The following responses from R7 and R17 stand out:

R7 – There is no basic sanitation here. We have no sewerage network. When it rains, it becomes a bog. The water is terrible and it is from a well.

R17 – There is no sewage system and the water is terrible. There were days when we couldn't drink water because it was stinking too much of chlorine, and a lot of people got sick, and my daughter and niece ended up in the hospital.

R17's testimony expresses a legitimate concern, which aligns with Bonissoni (2015, p. 72):

[...] Current figure related to water access in Brasil, and in several other nations are alarming and very concerning. Reality is often not perceived or perhaps not disclosed, in view of the interest in truthful data, which are often not the most convenient.

There is no sewage system in the community, or sidewalks. The sewage is discarded in sumps, as can be deduced from the testimonies. This problem and that of access to clean water should be made a priority by local, domestic and international public authorities. Sumps are not the most suitable places to keep waste produced by a household; due to the lack of such basic services, many people have died. Therefore, the principle of the dignity of the human individual has been violated. This concern is legitimate and is consistent with Sirvinskas's notes (2019, p. 456):

At the national level, less than half of Brazilians live in a suitable environment, where there is clean tap water and treated sewage. Worldwide, one child dies every eight seconds, and in Brazil seven children die each day from diarrhea, and 700,000 people are admitted to public hospitals each year due to a lack of sewage collection and treatment.

R17's testimony describes a community exposed to disease risks due to poor sanitation; it is clear that children are exposed to infections due to contact with soil contaminated by solid and liquid waste. According to the National Sanitation Information System (SNIS), more than 100 million Brazilians do not have access to sewage collection systems. In Maranhão, sewage collection rate is 30.26%, that is, millions of Maranhão residents do not have access to proper sewage treatment (BRASIL, 2016).

According to the Brazilian Institute of Geography and Statistics (IBGE), only 54.6% of households in Paço do Lumiar-MA have adequate sanitary sewage collection. In the town, the average infant mortality rates are 19.02% per 1,000 live births. Hospitalizations due to diarrhea are 0.6% per thousand inhabitants. Compared to the other counties in the state, it was in 55th of 217 and 207th of 217, respectively. When compared to cities and towns across Brazil, the positions are 1349th out of 5570 and 3103th out of 5570, respectively (IBGE, 2017). The concern with public policies that guarantee the effectiveness of the fundamental right to basic sanitation is in line with Moura and Julio (2017, p. 663):

Note, therefore, the important role of articulation of basic sanitation policy with environmental, urban and sanitary policies towards achieving multidimensional effectiveness of the fundamental right to basic sanitation and, consequently, the guarantee of quality of life for the citizen.

According to Paim (2006), the health sector should seek solutions for vulnerabilities that influence processes that cause people to get sick, through intersectorial actions. Therefore, asphalt, sewage and waste

collection will influence the quality of life of the community.

The fourth essential question for this study was: Do you consider the Nova Canaã community a good living environment? How do you assess this environment today, after the move? Did you feel harmed by the resettlement? What do you think should be improved in the environment so you can have a decent life? Regarding this question, the answers of R3 and R8, respectively, stand out:

R3 – It's quiet here, it's good. But it should be paved, there's a lot of dust. When it rains, everywhere gets flooded here. It's a disaster, and lighting isn't good either.

R8 – I like the environment, but there's much to improve. We have no road paving. We have no lighting. But I felt the change a lot (stated orally).

Based on these responses, it appears that, while resettlers say they like the village environment, they report concerning social problems. Thus, studies concerning socio-environmental perceptions were developed due to the concern with raising awareness on problems related to the environment. In this regard, Alves, Sampaio and Sampaio (2017 p. 3) argue that: “Such studies contribute to awareness-raising regarding reality in a broader and more holistic way”.

Certainly, there is a contradiction in the content of the responses on satisfaction with the environment in Vila Nova Canaã. Although the interviewees report enjoying living in that environment and consider it good to live in, they complain about the social conditions connected to the village environment. According to 2016 data collected by IBGE, 42.3% of households in Paço do Lumiar-MA have people with monthly incomes of up to half the minimum wage; that is, almost half of households have people surviving on insufficient income to maintain quality of life (IBGE, 2017).

At this stage, such data may contribute to the understanding of how differently low-income people respond to environmental issues. People who cannot afford to meet basic needs tend to focus first on securing said basic needs, and then worrying about environmental issues. Therefore, for these people, living in areas with some kind of pollution would not necessarily mean living in a bad environment. Resettled residents are inserted in this context because they live in a very humble way, without many financial resources. According to Steigleder (2017, p. 50): “Misery changes perceptions of environmental quality, requiring only a minimum of quality environmental resources, without further consideration for global environmental quality and recovery of degraded areas”.

The conditions of socio-environmental vulnerability the resettled people are exposed, for not being able to fully exercise their basic rights, shows up in the statements of R7, R10 and R17. This apprehension is in line with Carmo and Guizardi (2018, p. 5):

Vulnerable human beings will not necessarily suffer damage, but is more susceptible to them, since they have disadvantages when it comes to social mobility, and are unable to reach higher levels of quality of life in society due to their weakened citizenship situation.

Matching the answers found in the results of this survey, the need to reach the existential minimum in the community under discussion became evident. By logical consequence, a condition of vulnerability was established, since a failure in the provision of services and the conditions of minimum social rights it was identified. Said conditions being access to health, due to situation of healthcare clinic, and to basic sanitation service and work, due to the labor situation at the Canaã farm.

This result matches what Espinoza (2017, p. 109) says: “The contents of the existential minimum should not be restricted to a rigid catalog of benefits, which is why we can now talk also on an ecological existential minimum to include the right to clean water and basic sanitation”. This is also the conclusion of Sarlet (2002), when highlighting the concept of existential minimum linked to the promotion of a dignified life. In his view, all the benefits which are indispensable for the promotion, protection and enjoyment of a dignified life, which may vary according to the circumstances, necessarily make up the existential minimum.

From the point of view of Kowarick (2003), the guarantee of strengthening institutional capacities in the impacted territories, especially of agencies with responsibilities over the affected social groups, constitutes an effective measure for the governance of displacement processes. According to Steigleder (2017), the State must guarantee access to justice and effective reparation, establishing institutions capable of protecting human rights and enabling the consistent presence of public defenders’ offices and public prosecutor’s offices in the territories targeted by major development projects. Companies have an obligation not to provoke and, if they occur, to cease violations of human rights, committing themselves to the full reparation of the harms caused.

## CONCLUSION

Displaced communities are victims of an anthropocentric-utilitarian paradigm that revolves around economic advantages and leads to the depletion of natural resources and misery. The unbridled pursuit of economic growth overrides the social rights of populations considered as vulnerable (STEIGLEDER, 2017). Although domestic legislation and law theoreticians talk about the existential minimum with an ecological bias, it has been realized that said functions are unknown to most of those who will bear the harmful impacts of development.

The results from this survey show that resettled residents in Vila Nova Canaã, Paço do Lumiar-MA suffered substantially from the imposed displacement. There was great dissatisfaction with basic services not being provided to the community or, when provided, were done so poorly. As for the right to health, which is considered one of the components of the existential minimum, we noticed from our sample that right was downplayed.

In their testimonies, the resettled people registered dissatisfaction with the work of healthcare professionals, and some are unaware of the services provided. In addition, the community is exposed to risks of contamination from water, as there has been a lack of services such as sewage and drinking water supply, which is only piped from an artesian well, and is considered to have a “strange” taste, which causes dissatisfaction among the resettled people and contributes to the downplaying of the existential minimum.

Of course, the sewerage and piped water make up basic sanitation services. With the occasional dissatisfaction with the taste of the water, as attested by part of the population, and the lack of a sewage system, it can be concluded that there is a lack of public policies aimed at implementing such services, which can cause even more harmful consequences for the health of the population.

Based on Wanderley (2009), the results show that the right to minimum working conditions has also been downplayed, the form of direct exposure of farm workers to the sun, posing the risk of skin diseases. Thus, from the perspective of Barcellos (2002), it was seen that the workers did not have adequate clothing to protect against the sun, which contributes to excessive fatigue; therefore, vulnerability obtains. It further contributes to the condition of vulnerability that there is no transportation to help workers commute to the donated farm to earn their income. Thus, we

have inferred that, in the surveyed community, the possibility of reaching the constitutional existential minimum will be made possible when the Government, through public policies, effectively guarantee social and environmental rights to the resettled people.

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