

# Fear Heuristics in Forced Settlements and the Socio-Environmental Crisis

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**Abstract**— *The heuristics of fear refers to the negative motivation which awakes as one responsible action, to adopte wise choice to do care with attention for life today and in future. The question to be answered is how is the ethical involvement regarding the social-environmental insecure in the settlement in Porto Velho at Nova Mutum Paraná? As argumentation, apply the U Theory and Eco-development Theory. The principal objective of this article is to analyze the heuristics of fear in a social system in the settlement established in Nova Mutum Paraná, City of Porto Velho, Rondonia, Brazil; and the specific objectives are the following: seek the cause-effect phenomenon of the fear in the social system in the Novo Mutum Paraná settlement (1); establish the social-environment responsibilities due to the settle (2); and indicate the possible convergence in perspective of the U Theory (3). Apply the study of cases method and its procedures. As consequence of the ethical implications of social-environmental unsafe in the settlement is delineated by the legal responsibility and the ethical responsibility. The innovation in the hyper-complexity of the system which causes eviction, deterritorialization requires the ability to operate from the deepest fields of social emergency and activates the sources of social fields. Should be adjusted (tuned) in every single involved, as following: open mind, open heart, and open goodwill; educate to be prudent with the heuristic of hope. This article will be the concern to researchers and other people involved on theoretical*

*questions to delineate investigations about applied social sciences.*

**Keywords**— *Forced settlements. Heuristic of fear. Socio-environmental responsibility. Theory of Ecodevelopment. Theory U.*

## I. INTRODUCTION

The heuristic of fear refers to the fear that awakens to action with responsibility for life today and in the future, where fear and respect for being are the fundamental and inalienable conditions for the formulation of the ethics of responsibility. With the implementation of the Jirau hydroelectric plant, a municipality in the state of Rondônia, there was a deterritorialization of the local inhabitants of the village of Mutum Paraná, which led to the consequences and losses that compensatory means will never provide. The question to be answered is: how are the ethical implications of socioenvironmental insecurity characterized in forced settlement in the municipality of Nova Mutum Paraná in Porto Velho?

This research aims to study the heuristic of fear in the social system of forced settlement located in Nova Mutum Paraná, municipality of Porto Velho, State of Rondônia. Specifically, it aims to: raise the cause-effect phenomenon of fear in the forced social system in the settlement of Nova Mutum Paraná (1); characterize the social and environmental responsibility resulting from

forced settlement (2); and point the way of convergence possible in the face of the application of Theory U (3).

This work, after this introduction, is divided in the theoretical-conceptual revision dealing with the main approaches raised in the literature, the preparation methodology, the results according to the objectives presented, the conclusion answering the research question, and the references of the works accessed who supported this study.

## II. THEORETICAL-CONCEPTUAL REVIEW

Concepts of fear heuristics and forced settlements in the municipality are considered essential, since in the municipality of Porto Velho, in the state of Rondônia, there is a specific social and environmental crisis in the settlement of displaced persons due to the construction of hydroelectric plants, which was forcibly generated. In order to substantiate the object under study, Ecodesign Development Theory and Theory U were inserted, which seemed the most adequate to enable the recognition of the causes of existing problems and the way of convergence to solve these problems.

### 2.1 Concepts on the heuristics of fear, ethics and forced settlements in the municipality

Decisions and answers can be complex, difficult or not, because the human being uses mental shortcuts called heuristics, techniques of thought and behavior inherent to the human being that reacts, almost intuitively, trying to find immediate and easy answers to their concerns, no matter whether right or wrong. For the forced settlement Nova Mutum Paraná, decisions were made that caused socio-environmental effects in the municipality of Porto Alegre, which now need solutions.

#### 2.1.1 Concepts on heuristics of fear and ethics

According to Abramovay (2016), individuals are led to close over their social reference groups, to persist in the legitimacy of their lifestyles, and to deny changes in their habits; a conclusion of studies of human behavior from the angle of culture, psychology and ethics. Studies in Moreira (2016), based on the principle of the responsibility of the philosopher Hans Jonas, address the concept of ethics as guiding human actions in this contemporary reality, warning of an ethics of responsibility, capable of stopping huge progress with good sense, hindering the power of men to self-destruct, a concept that will permeate this work.

In studies by Pereira (2016) the effects of the modern rationalization process, such as the two World Wars, are approached when philosophers questioned the project of modernity and its consequences, identifying two positions: those who look favorably and those who point to risks and limits. The author compares statements by

philosophers Zygmunt Bauman and Hans Jonas that warn of the risks in human existence. For Bauman the project of modernity comes down to establishing an artificial social order by means of a systematic distance from what escapes from the rational order, and this project is contradictory, since what it denies constitutes the force that puts it in motion, that is, ambivalence (contingency). Zolet (2016) discusses Hans Jonas that presents the limit situation that leads to the modern rationalization of the immediate solutions presented by the technique to the daily problems; man goes so far as to endanger existence. Bauman and Jonas converge on the process of rationalization of modernity and its negative consequences.

When fear is a responsible fear, it becomes an invitation to action and not to stagnation; this is necessary and positive. Therefore, it becomes a question of ethics of responsibility towards future generations; affirmations of Battestin and Nogaro (2017). Nodari (2014) corroborates that this positive kind of fear that is rethought by having the will of the worst is avoided is essential and leads to an ethical attitude that is fundamental, making it possible to reflect and act on the tomorrow of humanity.

Therefore, the heuristic of fear does not refer to the pathological fear, but to the one that awakens to action with responsibility. It is not the unfeasible fear of the future, but a responsible choice to have zeal and care for life today and in the future. Zolet (2016) argues that for Jonas, fear and respect for being are the fundamental and inalienable conditions for the formulation of the ethics of responsibility and that this heuristic of fear (fear) is imbued with hope of avoiding greater evils, transforming - in heuristics of hope.

#### 2.1.2 Concept of forced settings and its social system

According to Nascimento (2017), with the advent of political states there are, historically, forced settlements; those where the state and / or different and stronger social groups have forced other groups to vacate their spaces for others, by the force of the state in favor of enterprises that aim at the profit or improvement of an entire nation; such as the construction of large hydroelectric plants, such as the forced settlement of Nova Mutum Paraná. The author affirms that there is no way to deal with the subject Mutum Paraná without understanding that there is a specific territory, fundamental in the construction of the subject, its identity and, also, its subjectivity, space of reception of the population that develops social life there, economic activity and political organization; there is a social dynamic in motion that characterizes territoriality. Therefore, the full valorization of the territory is natural and inherent to the local inhabitant.

Ribeiro and Moret (2014), when dealing with these relocated communities, address the negative reflexes in economic and cultural conditions, and the confrontation

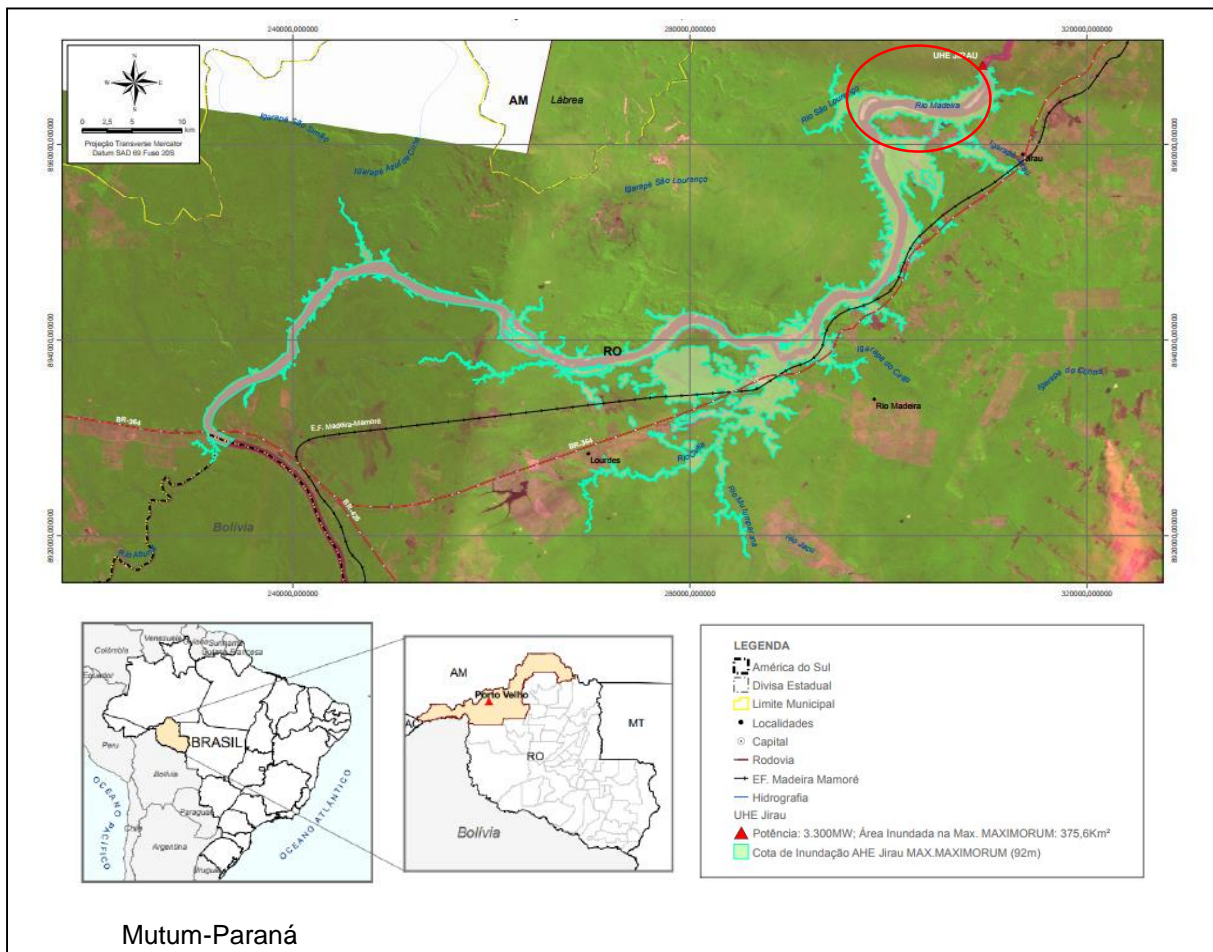
in routines unrelated to their traditional knowledge, aggravated by the lack of structural unemployment and the demobilization of the workforce of the construction of the Hydroelectric Power Plants that started to swell the settled community.

Nascimento (2017) affirms that in the capitalist conflict, capital and labor collide, there is a movement in search of conditions of production with low cost, aiming profit; not infrequently, leading to the destruction of geographical landscapes and the forced displacement of peripheral populations; the greed for productivity and profitability that has led companies and states to co-opt, to the detriment of populations with no power of action; was what happened with Vila Mutum Paraná. As a consequence of the implantation of the Jirau hydroelectric plant, there was a deterritorialization of the local inhabitants that implied in sufferings, since the individual felt the loss of what was built for years and that constituted his own reality where was articulated its structure, its functionality and its values symbolic. The change implies adequacy to the new environment, satisfying the basic needs of maintenance,

housing and sociability, including religious practice, human dignity, family and child rearing; constitutional right.

Legally, the principle must be that of submission of the State to the Law. The author goes on to say that the problem lies in the lack of sufficient demand for extensive work to raise awareness of the population, uninteresting with the public power, once the people are clarified of their rights and how to act to obtain them. It becomes a real threat to the ruling political class and manipulates its own economic and power interests. In this case, socio-environmental education depends on the performance of: government, family, school and society bodies. Public authorities should legislate and provide the entire population with the necessary environmental education; which has been standardized for decades, and it is the duty of the State to adopt measures for the preservation of the environment, as well as the recovery and restoration of degraded areas, punishment of violators and awareness of society. Next, in Map 1, the Jirau Hydroelectric is presented in the area of the municipality of Porto Velho.

**Map 1:** Jirau Hydroelectrical Power Plan in Porto Velho, Capital of Rondônia, Brazil



Source: Adapted from Agência Nacional de Energia Elétrica [ANEEL] (2007).

At the time the population of the Village of Mutum Paraná revolved around a thousand and six hundred inhabitants who lived for months the expectation of removal to the new village that came to be denominated of New Mutum Paraná. Map 2 shows the location of the old village of Mutum Paraná.

Map.2: Mutum-Paraná District location map



Source: Adapted from Moret and Ferreira (2009).

Nascimento (2017) states that these families were almost without the historical record of their memories, except for some articles and scientific works, which means to tear a collective identity that had its beginning in the middle of the eighteenth century, by the arrival of rubber tappers and gold diggers. The Madeira Mamoré Railway and BR 364 crossed the old village, times of expectations of progress; today, with hydroelectric plants, expectations continue for the nation and end for the people of Mutum Paraná.

### 2.1.3 Municipality concepts

In studies by Pena (2017), there is a difference between concepts of city and municipality: one refers to human occupation and the other to territorial delimitation by foreign exchange. Municipality is a legal division of a certain territory, part of a State, administered by a city hall. Already, city is the urban area of a municipality, delimited by an urban perimeter and that separates between the city (urban area) and the countryside (rural area). The municipality, by legal provision, may have other smaller cities besides the host district. They do not have sufficient political autonomy for emancipation. They are the villages, the towns, the districts and others.

In Pena (2017) approach, cities exist that occupy every area of the municipality and thus are city and municipality at the same time. There are also cities that are

physically linked to other cities, sometimes separated by a street; though different, form a continuous space called a conurbation. When a large city has several conurbations, it means that several cities are linked to a larger city. This is called the metropolitan region, which has a functional character, and is intended to integrate into the organization, planning and execution of public functions of common interest, as Mendes (2016) treats.

Mendes (2016) states that municipality contains a concept of jurisdictional power, that is, limited by a legal jurisdiction granted by greater power. This power is applied through laws and policies developed so that a given geographic space is governed; concerns a municipality whose municipality is part of the administrative division of one State and both of a country. The municipal power is restricted to a specific territory and refers to organizations and institutions that allow certain governmental measures to be carried out within a specific municipality and which consequently obey state and federal laws. The municipal power is dependent on the state government and both of the federal central power.

### 2.2 Concepts on Theory of Ecodesenvolvimento

Studies in Silva (2013) on the precepts of Ignacy Sachs, author of ecodesenvolvimento theory, this one deals with the conservation of biodiversity, respect and territorial management as an ethical ideal and care for future

generations to stay on this planet. Silva (2013) states that, for Sachs, the creation of forest reserves represents self-defeated politics from the point of view of environmental preservation; since it violates the right to life because it entails the withdrawal of the population living in it and dependent on certain natural spaces and natural resources, as the only means of survival for the ecodevelopment.

Studies in Pedro Filho (2015) point to the tense dualism in the 1970s, in Stockholm, which persists to this day, between developmentalists at any cost and those who defend the environment, above development. At that time, economic development theory, interpretive of capitalism, disregarded environmental components, renewable or not; there was not the pressure of human activities on the environment reached a critical state.

The consequences of the economic development of life and human health, according to Sachs (1981, p. 14), are a work nature. way to join the futures of this generation and all future companies the possibility of developing; What for Hans Jonas, in Moreira's studies (2016), is the Principle of Responsibility, where all feelings are direct, with nature, with the life and future of children and other generations, collectively: Imperative Ecological ethical of Jonah; Differently from Kant's categorical imperative, restricted to individual (private) behavior.

The Ecodevelopment Theory was launched by Maurice Strong in the early 1970s. The concept of ecodevelopment, as discussed by Pedro Filho (2013), does not allow the separation of the environment and development, concomitantly requires to obey three fundamental criteria: equity social, ecological prudence and economic efficiency; good sense in the use of local resources without exhausting nature, reconciling economic growth with increased productivity of resources, reduction of processed materials, allied to conservation of the environment and income redistribution, Sachs precepts in the mid-80s, addressed in Pedro Filho (2015).

In this work, the forced settlement of Nova Mutum Paraná, in the municipality of Porto Velho, State of Rondônia, is studied from the perspective of the Ecodevelopment theory at the confluence of Theory U, in the face of the heuristic of fear produced in the population settled unilaterally.

### 2.3 Concepts on innovation based on Theory U

Developed by Otto Scharmer, Adam Kahane, Peter Senge and Joseph Jaworski, Theory U has been used in different ways involving the organization or the entire production chain of a country; makes it possible to recognize the causes of existing problems and provides appropriate innovations to solve them, affirms Maia (2013); it is divided into three phases: Feeling (1), witnessing (2) and performing (3); this leads to the creation of prototypes and practical action, where there is the possibility of making feedback and new adjustments. The

author continues to affirm that Theory U provides the individual to walk a path so that he can understand his own mental models and their insertion in the lived reality, leading him to reflect and understand reality in all its extension, being ready to initiate a positive innovation; new ideas emerge to be put into practice. The whole process needs to be restarted and revised, if necessary; propitiating change in the way of seeing and perceiving the world, maintaining this understanding while carrying out its activities.

### III. METHODOLOGY

To reach the results, a causal relationship involving a vulnerable community based in the Western Amazon was used, focusing on ethical responsibility. The research has a qualitative and descriptive approach; it is followed by the rite of investigations in the axis of the social sciences applied to the socio-environmental management, treating the secondary data; the Case Study Method and compatible procedures were applied. According to Siena (2011), it is a method that leads to learning from its parts and detailed information, quite usual in dealing with issues in Administration.

Siena (2011) conceptualizes procedure as the process of collecting, processing and analyzing data. In this study, a theoretical-conceptual review was performed based on available literature, with updated collections and academic manuals, visits to websites and others. made it possible to understand, treat and explain the causal relationship in response to the research problem. It was also used research responses made to families residing in the settlement studied in Nascimento (2017).

### IV. STUDY OF HEURISTICS OF FEAR IN THE SOCIAL SYSTEM OF FORCED SETTLEMENT

The forced settlement, object of this study, is based on the municipality of Porto Velho, Capital of the State of Rondônia, located in the Northern Region of Brazil, which is part of the Western Amazon. According to IBGE (2010), the population was estimated for 2017 in 519,436 inhabitants; poverty rate is 21.89%, HDI is 0.736 and a non-literate population is 5.21%. The same body reports 7.5% of the unemployed, and an average wage income of 3.5 minimum wages. The Gini coefficient is 0.47 and the resident population suffers from a severe crisis in public security, with a 21.2% crime rate (robberies, robberies, murders, rapes) recorded in the last statistic. Searches at specialized sites reveal disasters related to natural disasters in the last five years, such as the historic flood of the Madeira River in 2014.

According to Ribeiro (2011), with the advent of the recent construction of two hydroelectric power plants, the population increased by approximately 45 thousand inhabitants, while the public power does not supply the

safety, education, health, transportation and other services required for mister; As a consequence, the injury exceeds the tolerable level that the individual could absorb: violence was out of control, traffic became chaotic, services became more saturated, there was an increase in the average waiting time for hospital admission (40 days), in addition to patients in hospital and lying on the floor of the city's main emergency room.

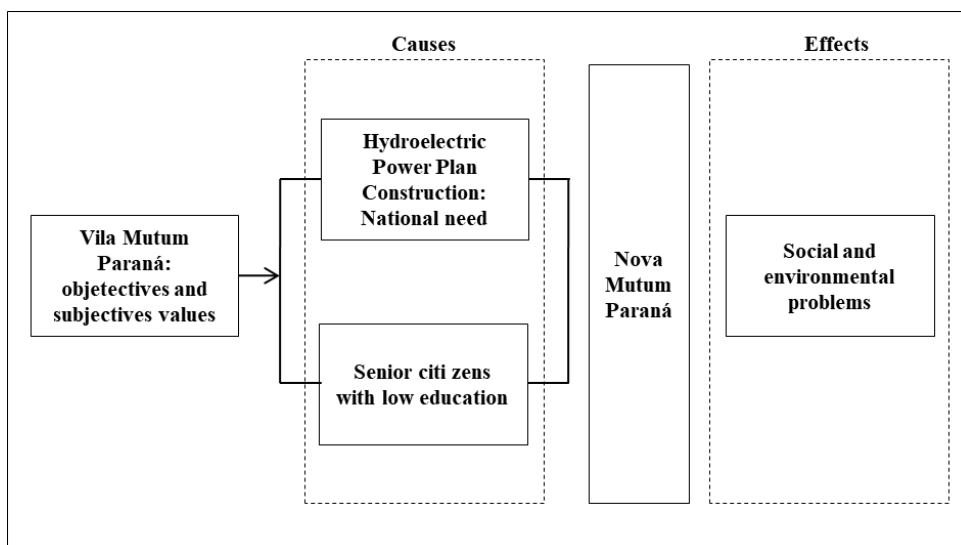
This framework of degradation reaches the resident in a spurious logic that points to the logic of extreme poverty experienced by the majority, especially those individuals thrown to the edge of the periphery, as treated in Lima (2017). Within these highlights there is a forced settlement called Nova Mutum Paraná, which came with the displacement of an entire population of a village called Mutum Paraná, where the heuristic of fear was clearly brought to the forefront of the uncertain future in the New Village.

#### 4.1 Survey of the cause-effect phenomenon of fear in the forced social system

This subtopic will deal with the cause-and-effect phenomenon, having as its object the fear in the forced social system and the Porto Novo settlement of Nova

Mutum Paraná as a locus, as a result of the disorganization of the local logic of the village of Mutum Paraná, whose population had identity with objective values such as : family, house, plantations; and subjective as: emotional, sentimental, according to studies in Nascimento (2017), demonstrating the heuristic of fear among the settlers. As causes: the construction of hydroelectric power plants, in order to provide Brazil with the electrical energy infrastructure necessary to enable its development with greater security; search for productivity and profitability, to the detriment of populations with no power of action. As a result of the deterritorialization of the local inhabitants, resulting in the settlement Nova Mutum Paraná, whose population of age, with no difference between men and women, had low educational level where approximately 50% had incomplete first degree and 15% no schooling; and only 2.5% with higher education, these being men. Most of them had their own homes and lived the fear of monetary loss with the indemnities, as well as fear of not being compensated, also expressing sadness about leaving the village and fear of missing something they would not have in the New Village (subjective fear) latent in the life of the residents of the old Vila Mutum Paraná. Figure 1 below refers to this cause-effect relationship.

Fig.1: Relationship cause-effect of fear in the social system of the Nova Mutum-Paraná forced settlement.



Source: Prepared by the authors.

The national need coupled with the low level of formal education has caused the population of Vila Mutum Paraná to be afraid of: moving to the forced relocation of Nova Mutum Paraná, starting a new life, problems such as unemployment, inadequate housing, insecurity and violence. This population, for lack of education, was susceptible to fear of the future. As a result, we have the socio-environmental effects. In the hydroelectric reservoir and surroundings, nature has changed: the climate has

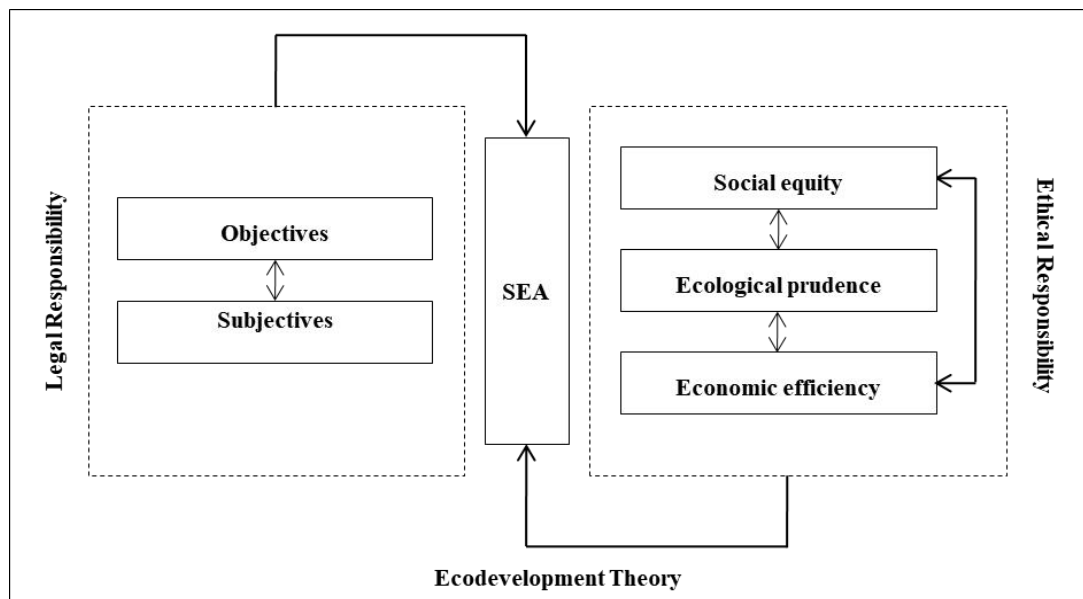
changed, species of fish have disappeared, animals have fled to dry refuges, trees have turned rotten wood under the flood; there was a social impact as people left their homes and livelihoods and needed to start over without prospects, loss of community ties, separation of families and communities, destruction of sacred sites, and others with unprecedented consequences. insecurity, and violence. This population, for lack of education, was susceptible to fear of the future. As a result, existing socio-environmental

effects. In the hydroelectric reservoir and surroundings, nature has changed: the climate has changed, species of fish have disappeared, animals have fled to dry refuges, trees have turned rotten wood under the flood; there was a social impact as people left their homes and livelihoods and needed to start over without prospects, loss of community ties, families and communities separation, sacred sites destruction, and others unprecedented consequences.

We next proceed to the characterization of social and environmental responsibility resulting from the forced settlement of Nova Mutum Paraná, a permanent commitment of private institutions, governments in all instances, different social groups and individuals; a question of ethics of responsibility where social and environmental impacts must be prioritized, before thinking about economic development, according to Figure 2.

#### 4.2 Characterization of social-environmental responsibility resulting from forced settlement.

Fig.2: Characterization of social-environmental responsibility (RSA) resulting from the Nova Mutum-Paraná forced settlement.



Source: Prepared by the authors

Table.1: Description of Social and Environmental Responsibility, according to figure 2

Social environment Responsibility (SEA)	Description	Detail
Legal Responsibility	Objectives	Security, housing, indemnification, health, education, compensation of the Energy Consortium, among others.
	Subjectives	Archive and historical memory of the village of Mutum Paraná, beliefs, social ties, among others.
Ethical Responsibility	Social equity	It implies that all individuals in society have the same rights and opportunities. It aims to destroy the barriers that result in exclusion, inequality.
	Ecological prudence	It means acting responsibly, realizing the unknown and potentially dangerous consequences, acting in a way that minimizes the effects of human activities.
	Economic efficiency	It relates to the more balanced way of using inputs for production, producing more with less resources, without waste.
Ecodevelopment Theory	Environment and development	Environment and development can not be dissociated; should be treated according to the content, modalities and use of growth.

Source: Prepared by the authors

#### 4.3 Path of convergence in the face of the application of Theory U.

In the context of forced settlement Nova Mutum Paraná, after a decade, few were the changes. So that new projects aimed at development and profitability do not lead

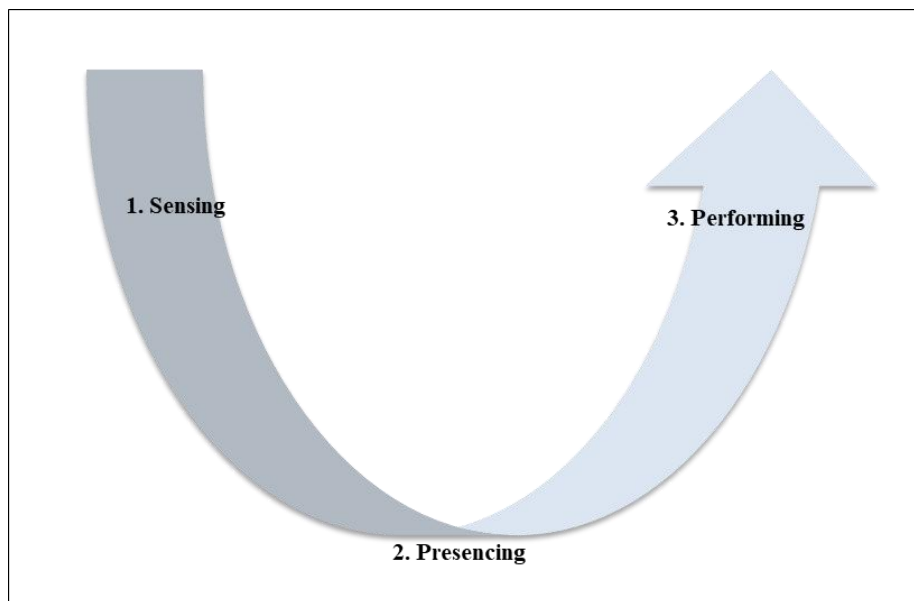
to an increase in poverty, degradation of the quality of life and consequent social inequality, there is a great need and urgency for public policies that guarantee, not simply the basic rights for displaced persons: it is education, which does not mean the establishment of a traditional school, but

a school that is liberating and proposes a rupture with any existing neoliberal perspective. In order to do this, Theory U brings innovation so that the leaders involved can act effectively, changing their mental shortcuts to the heuristic of hope.

Genuine innovation in the hypercomplexity of a system that causes displacement, deterritorialization, requires the ability to operate from the deeper fields of social emergency; which requires a process that integrates three movements: opening up to contexts that matter (costing), connecting to the source of stillness (co-

presencing) and prototyping the new (co-creation); necessary to access and activate the deeper sources of social fields. Three instruments must be adjusted (or defined) in all involved: the open mind, the open heart and the open will. Going through the U and attaining Realization requires a commitment to serve the whole and the ability to reintegrate the intelligence of the head, the heart and the hands, which becomes achievable through education. Figure 3 and the respective table 2, demonstrate the path to be covered after the barriers have been overcome.

Fig.3: Points of Theory U



Fonte: Adapted from Scharmer (2010)

Table 2: Descriptive of the points of Theory U, according to figure 3

Inflection Point	Steps	Descriptive	Barriers
1. Sensing	Suspending	Suspend judgments so that it is possible to visualize the objective reality with which the individual is confronted; realize the reality of the displaced people settled in Nova Mutum Paraná and the effects caused by the construction of the power plants.	Without the ability to turn off (or suspend) the voice of judgment, there will be no progress to access creativity and it will hardly reach the deepest levels of the U.
	Redirecting	Return the attention of the object to the process in order to help the leaders see the system from a perspective that allows them to understand how their own actions contributed to the problem (s).	Emotions of disconnection, such as cynicism, arrogance, and coldness are impediments to redirection; will not allow them to understand their actions.
	Letting Go	Identify the models used (which previously seemed to be caused purely by external forces) and perceive internal influences. Steplet go oftheoldmodels.	The fear of: letting the self and the known world go; move on; surrender in the space of nothing; to dissociate from old ineffective educational models.
2.Presencing	Presencing	Bottom point of U marks the movement of withdrawing and reflecting; which includes the stage of Presencing, where silence occurs to perceive the occurrence in the descent, allowing the	Prevent Presencing; do not prepare for this phase, discarding the "Sensing" step.



		inner knowledge to emerge into the new.	
<b>3. Performing</b>	<b>Letting Come</b>	It consists of anticipating the new from the future that seeks to emerge; new direction from the external mode to the interior mode of seeing, visualizing new ways of promoting education for innovation among the settlers in Nova Mutum Paraná.	It requires a commitment to serve the whole and the ability to reintegrate the intelligence of the head, heart and hands.
	<b>Enacting</b>	The development of the inner mode of seeing to transform inner vision into outer action; stage where the new is put into practice. Plan the possible practice for transforming education to the settlers of Nova Mutum Paraná and to the municipality of Porto Velho.	Stagnation; fear of not being able to plan the possible practice for this liberating education.
	<b>Embodying</b>	Transform the new into actions, infrastructures and practices; incorporate the new in the educational context in the ecosystem.	Fear of non-acceptance of new educational paradigms, lack of commitment to serve

**Source:** Prepared by the authors

Educating for prudence with the heuristic of hope will make it possible to co-create the emerging future for the evictees of Vila Mutum Paraná, for other forced settlements already existing in the municipality and for others to come. Batestin and Nogaro (2017) argue that transformative education, while still silent, grounds the practice of actions aimed at the welfare and defense of life. The path of change necessarily passes through behavioral relations, not just physical or economic aspects.

The state, the consortium, and the universities should study and implement an education project for every settlement before deterritorialization actually took place. Not with the intention that the future settlers learned to fight for their rights only; but especially so that they would feel prepared to face the new life in the new settlement with more concrete perspectives of more qualified work. It is a legitimate concern with a type of education that contributes to the effective formation of human beings who are aware of their potentialities as historical subjects. The main objective of this kind of education in the settlements would be the real implantation of schools that were instruments of social transformation. Schools where there was an educational proposal that provided knowledge and also concrete experiences of transformation of reality where the settlers could be prepared critically and creatively to be inserted in the real process of changing their realities.

Nova Mutum Paraná is reality; the old village is gone. People continue and what one has to consider is that the acts of doing and carrying out actions are a consequence of a balance between values and feelings; these, together and balanced, personify a highly transformative potential when used openly to any innovations without pre-judgments. Mind, heart and hands

need to work in the same direction, in the same focus, allowing the emergence of innovations.

## V. CONCLUSION

Living with impartiality and doubt about everyday projects is challenging; the more so in view of grandiose projects such as the construction of hydroelectric plants, whose consequences, catastrophic or optimistic prognoses are a constant. This does not exempt the establishment of criteria, rules and regulations in the face of any responsibility assumed by all (or anyone) involved, namely: public power, private institutions, population, religious, family and educational institutions. All should establish criteria of precaution, prudence and ethical responsibility.

The heuristic of fear, Jonah's perspective, is visionary, for by anticipating dangers one can guide and take a prudent and responsible stance, protecting the generations to come. However, education is vital and has much to contribute in the process of alertness and precaution for the dangers of the technique, being able to make possible the interconnection of technical-scientific knowledge with a responsible ethical knowledge, along with adjustments in all involved: the open mind, the open heart and the open will, a philosophical reflection that goes from the radicality of the old paradigms to the effective innovation (Theory U). Liability as a mediating criterion, besides helping to form systems capable of increasing prevention capacity, can increase the dimension of care with life, thus representing an extremely educational role in the expansion of knowledge about the consequences of actions of each individuals, especially those that directly impact the environment (Ecodevelopment Theory coupled with Jonas' affirmations).

There is a solution for the forced settlement of the displaced people of Vila Mutum Paraná in Rondônia, as well as for other forced settlements, it is important to educate so that apparently inevitable disastrous consequences are replaced by new and pleasant ways of living the development for the whole Nation, from process of deep and effective innovation (Theory U).

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