

Resettlement of communities The case study of Jaguaribara: A resilient community (Northeast of Brazil)

Isabelle Amorim

Network on Humanitarian Assistance (NOHA) University of Groningen, The Netherlands
Bangkok University, Thailand
iamorim@yahoo.com

ABSTRACT

This paper examines the displacement of the inhabitants of Jaguaribara (Northeast Brazil) who were resettled due to the construction of the “Castanhao”. The Government planned a new city to shelter the inhabitants from “Old Jaguaribara” that was flooded due to the overflowing of the dam. The case of Jaguaribara provides another perspective for analysing the consequences of the resettlement of the community, elucidating - besides the impoverishment risks - the protective factors that came up during the process of resistance against the construction of the dam, in the light of the concept of resilience. In order to capture the various dimensions of this process, qualitative primary data were used as the main source, together with documentation made by NGOs and professionals involved during the process of resistance against the construction of the dam, as well as semi-structured interviews. The enhancement of resilience in Jaguaribara represented the possibility to transform isolated individuals into a powerful integrated group that could combine forces, catalyse collective gains as well as articulate and defend common interests.

KEYWORDS

Resettlement; Jaguaribara territory; resilience.

Introduction

Resettlement is extremely disruptive and often impacts the most vulnerable communities and individuals. The impacts are economic, social, and environmental. Economically and socially, involuntary resettlement has been criticised because it has often created chronic impoverishment in project-affected communities rather than contributed positively to their development. This paper explains the case study of Jaguaribara, a city located in the semi-arid part of the Northeast of Brazil that needed to be resettled because of the construction of the Castanhão dam by the State Government.

In the light of the literature reviewed as well as information collected during the fieldwork, the case of Jaguaribara emphasises the importance of analysing the consequences of community resettlement. During the construction of the dam, inhabitants demonstrated resistance against

the project and several protective factors surfaced as a result of the resistance. This case study provides evidence that in the case of resettlement not only impoverishment risks, but also protective factors should be considered. Although enhancement of resilience enables people to be agents of their past and present and not just spectators, the analysis of the impoverishment risks of a resettled population is essential for the implementation of measures to minimise the hardships that these people face. Thus, the research question that this paper endeavours to answer is: How can the resettlement of a community, analysed as an adverse situation, influence the enhancement of resilience among the people and consequently yield protective factors that enable the inhabitants to overcome the hardships?

Methodology

This paper is based on the case-study of Jaguaribara. More precisely, it will analyse the enhancement of resilience as a consequence of the resettlement of the inhabitants of Jaguaribara (due to the construction of the Castanhão Dam). In order to capture the various dimensions of this process, qualitative primary data were used as the main source, specifically documentation from NGOs and professionals involved in the process of resistance against the construction of the dam and the resettlement of the community. Semi-structured interviews were conducted with the inhabitants of Jaguaribara. The interviewees were selected according to their role in the process of resistance against the construction of the dam. It is important to emphasise that both men and women participated actively during the resistance and struggle against the construction of the Castanhão dam.

The fieldwork was carried out from 1 to 30 July 2008 in Ceara, Brazil. The interviews were all conducted in Portuguese. Only the most significant responses have been selected and translated into English. The interviews entailed descriptive inquiries into the process of resistance against the construction of the dam, the involvement of the inhabitants and other sectors of the society. More reflective questions on several issues (e.g. people's feelings when they were resettled, their memories regarding the old city, events conducted during the resettlement, grievances etc.) were also included.

The analysis of the enhancement of resilience in a community that has been resettled is not straightforward. As it is a process, it is difficult to grasp, observe and evaluate. Therefore, this study does not look for clear-cut answers based on quantitative measurement of outcomes. Instead, the analysis takes a disaggregated approach, investigating the different factors that determine the identification of resilience in the community.

Resettlement of communities as an adverse situation

Resettlement is involuntary when it occurs without the consent of the displaced persons or, if they do give their consent, without their having had the power to refuse it. A typical example of such displacement is a government agency's expropriation of land for a capital development project. People dependent on that land for their livelihood may be offered fair compensation for their losses. However, generally they have little recourse to oppose the government's expropriation, despite their desire to continue occupying or using the affected land. Without proper

planning and management, involuntary resettlement may result in long-term hardship for affected people and environmental damage to the locations in which they are resettled.

In the 1990s Cernea developed an impoverishment risks and reconstruction model for resettling displaced populations, especially addressing involuntary resettlement and reconstruction (IRR) (Cernea, 2004). Cernea (2004) defines risk as the possibility that a certain course of action will activate future injurious effects, losses and destruction. He identifies eight risks that lead to the impoverishment of a community. These risks are described as follows:

Landlessness is the result when people are removed from their land and they are also removed from their main productive resource. Both people's commercial activities and subsistence livelihoods are removed. In this case the people lose both their natural resources and their man-made capital.

Joblessness occurs when losing employment is a very high risk in displacements and to create new job opportunities in a newly established community is very difficult and requires substantial capital.

Homelessness is the loss of a home or shelter which is usually only temporary for many displaced people but, for some, homelessness can imply deterioration of their housing standards. In a broader cultural sense, the loss of a family's individual home and of a group's cultural space tends to result in alienation and status-deprivation.

Marginalisation occurs when families lose economic power. Many individuals cannot use their earlier acquired skills at the new location nor their previously acquired human capital. Economic marginalisation is often accompanied by social and psychological marginalisation, expressed in decreasing social status.

Food Insecurity - the forced removal of a community often increases the risk that people will temporarily or chronically be undernourished, which according to Cernea (2004:23) reflects "calorie-protein intake levels below the minimum necessary for normal growth and work".

Increased Morbidity and Mortality - massive population displacement threatens to cause serious declines in health levels. Displacement-induced social stress and psychological trauma are sometimes accompanied by the outbreak of relocation related illnesses (Cernea, 2004:24).

The loss of access to common property and services such as pastures, forested lands, water bodies, burial grounds and quarries, results in the deterioration of income and livelihood levels of displaced communities. Usually, governments do not compensate for the losses of common property assets.

Displacement leads to *Social disarticulation*, that is when a community is displaced the existing social structures are torn apart. "It breaks up families and communities; it also dismantles patterns of social organization. Life-sustaining informal networks of helping one another, local voluntary associations and self-organized services are disrupted. This is a net loss of valuable 'social capital' that adds to the loss of natural, physical and human capital" (Cernea, 2004:26).

The eight risks mentioned above, are interconnected and tend to be forced on a community. The affected community is expected to deal with all these risks concurrently and this can result in the impoverishment and social degeneration of the displaced community.

However, the resettlement of communities can also be analysed from another perspective than the impoverishments that affected the people. The following questions emerge with regard to the effects on groups that deal with an involuntary resettlement:

- In addition to all the impoverishment risks, do some factors exist that could be identified as mechanisms to protect the people that are affected by those risks?
- Could those factors be used to strengthen the bond between people that are resettled?
- Could the factors be used to minimise the hardships of the situation and help people to move on with their lives?

These questions guide one into a new concept that has been receiving the attention of professionals from diverse fields in the past few years, namely the concept of resilience.

Origin and historical evolution of the resilience concept

Physics has used the notion of resilience for many years. One of its precursors was the English Scientist Thomas Young who in 1807, considering tension and compression, introduced for the first time the concept of elasticity. Young described experiences of tension and compression of strokes, searching for the relation between the force that was applicable in a body and the deformation that one could produce (Yunes, 2003). From that time the term resilience was used to describe the capacity of a material to absorb energy without suffering plastic or permanent deformation (Yunes, 2003).

Resilience received more attention in the 1980s and since then there has been a lot of progress in the conceptualisation and research about how to enhance resilience in individuals and communities. The concept of resilience and the possibility of its promotion offer a wide multi-disciplinary perspective on intervention based on primary prevention.

Resilience has been conceptualised and defined as:

1. The capacity of the individual to deal with the adversities in life; overcome them and be transformed positively by them.
2. The ability to pass by adversities, to adapt, recuperate and construct a significant and productive life.
3. The characterization by a group of social and inter-psychological processes that make a healthy life possible, even if the individual is living in an unhealthy environment.
4. The dynamic process of positive adaptation in a context of adversity (Luthar *et al.*, 2000).

In summary, the different definitions of resilience emphasise such characteristics of resilient people as: abilities, adaptability, effective response, resistance related to adversity, positive conduct and cognitive and emotional abilities, all of which could appear in stressful situations to overcome whatever difficulties are being faced.

The concept of resilience came to the attention of professionals who were more interested in shifting the focus from individual vulnerabilities to their inherent capacities. The new concept of resilience emerged along with research about the protective factors that are present in individuals and communities when they face an apparently unsolved situation with the goal to stimulate them when detected. The range of studies allows one to visualise an area of research that clarifies the capacity of an individual to overcome or transcend suffering in different contexts from conditions of extreme poverty to physical violence to disasters, terrorist attacks or other kinds of extreme situations. Thus, resilience can be viewed as a way to deal with these bombardments of negative events (Ojeda, 2000). Moreover, with the appearance of the concept of resilience, attention has shifted from needs and risks to exploring the strengths and protective factors that are present in a person or community.

The protective factors of resilience are conditions that follow individual development and can also be stimulated by external conditions. These factors, which can be distinguished as either internal or external (see table below), can influence the reduction in the effects of unfavourable circumstances on individuals and communities. The external factors are related to the conditions of the environment that can reduce the probability of harm, such as the extended family, the support of someone, integration into society and the workplace. The internal factors are related to attributes of the person, such as self-esteem, security, independence, initiative, humour, creativity, persistence and morality (Ojeda, 2000).

Table 1: Protective Factors of Resilience

| Protective internal factors | Protective external factors |
|------------------------------------|------------------------------------|
| Independence | Extended family |
| Self esteem | Capabilities of communities |
| Humour | Support of someone |
| Creativity | Social Integration |
| Initiative and Persistence | Work integration |
| Morality | Connectedness among people |
| Security | Collective self esteem |

Source: Ojeda, 2000

To enhance resilience is to recognise the strength of a person or group that goes beyond vulnerability. Although there are risk factors in situations of adversity, there are simultaneously protective factors that help the person or community to perceive the situation in a different way and overcome problems. The emphasis on protective factors can generate a positive perception of the environment and the feeling that one can take action in the situation. As researchers, we need to be able to recognize those spaces, qualities and strengths that allow a person to deal positively with stressful experiences associated with adverse situations.

Setting up the scene: The Brazilian semi-arid region and the emergence of (Nova) Jaguaribara

This section outlines the context of the case study, giving a detailed description of the political situation during the period the field work was done as well as the characteristics of the Brazilian Semi-Arid region, in order to provide the elements that integrated the decision of the Brazilian Government to resettle the inhabitants of Jaguaribara and to construct the “Castanhão” dam.

The Sertão (or Semi-Arid region): A place of ambivalences

João Guimarães Rosa, in his book: “Grande Sertão: Veredas” (1968), defines the Semi-Arid region in all its plurality. Rosa (1968) considered the Semi-Arid (or “Sertão” in Portuguese) to be a distant place and characterised it as rural and archaic; a place where modernity and civilization had not yet arrived. He describes the *Sertão* with originality, emphasising its human relations. “*The sertão has the size of the world*” but is also what nobody knows how to define: the obvious and the surprising, light and dark, so confused and ephemeral as a place of civilization (Rosa, 1968). This idea of the *Sertão* can be also identified during the Colonial period (1600-1800) as a place located in the countryside as opposed to the coast “...the *Sertão* was related to the notion of distance, land without law, living space of Indians, place without comfort due the lack of civilization, place that represented the opposite of all the conquests that the coast allowed...” (Pimentel, 1997:18).

Geographically the *Sertão* covers an area of 912.208 km² in Brazil. Its climatic characteristics are similar to other “semi-arid” regions in the world: periodic droughts and frequent inundations of the intermittent rivers, sandy soil, shallow, saline and poor in nutrients essential for the development of plants. The basic vegetation is the “Caatinga” that presents a wide variety of formations, all adapted to the long seasons of drought (Rebouças, 1997:131-133).

The droughts can be viewed as an intersection between the Northeast and the semi-arid, but constitute an insufficient element to characterise the complexity of those spaces. The Northeast is a political and cultural establishment consolidated through history. The *Sertão* is a fusion of worlds, where you can find the archaic and the modern, a lack of resources and an abundance of them. It is a place of images, mysticism and emotions. The semi-arid is a place of irregular rain, a target of both droughts and floods. The state of Ceara is a synthesis of all of this where the water is the element that for centuries has represented the salvation of this land.

Water: A powerful political factor

The droughts in the Northeast of Brazil cannot only be considered as caused by the lack of rain, but are also a result of the poor distribution of rain in time and space. In relation to time, this poor distribution is a result of the fact that during the twelve months of the year, it rains only during one month. In relation to space, while in the coast there are “pluvial precipitations”, the interior countryside of the state remains without water.

From the beginning of the last century, the Brazilian government adopted measures to solve the problem of the droughts through basically focusing on palliative projects and initiatives that

show a poor combination between technique and politics, or possibly a political manipulation of technique, transforming a peculiarity of nature into a social problem. A glimpse of the history of the water projects in the *Sertão* shows a constant returning to the old solutions that reflect the dispute for power that water stands for in the region.

The dilemma of the Castanhão

Governments continuously used the droughts and the argument that water constitutes an important issue for the development of the state to justify the construction of dams. Accordingly, in 1985, the media announced the establishment of the “Castanhão”, a federal project that aims to construct a dam in the Jaguaribe River, a large and most important river in the state of Ceara, with the goal of solving the problem of the lack of water and promoting the development of the state. However, like many development projects in this century, the construction of the dam would inundate one city in the province of Jaguaribara.

One of the priorities of the government was the catchment and management of the water resources of the state, so both Federal and State politicians totally supported the construction of the Castanhão: a dam in the Jaguaribe River with a basin occupying half of the “cearense” territory. The dam has the capacity to accumulate 6.7 billions of m³ of water and was planned to be constructed in the Jaguaribe valley, a space which concentrates 70% of the irrigated land of the basin and where periodic inundations affected approximately 30,000 people. The dam would constitute the biggest reservoir of the Northeast, aiming at water and agricultural development, the control of floods, fishing, irrigation, the storage of water and tourism development. After its completion, a channel of 255km will connect the dam with the capital and districts surrounding Jaguaribara, providing water from the Castanhão to Fortaleza and to the industrial complex of the main harbour of the state (the project will be completed in 2010).

The investment for the construction of the dam totalled \$198,6 million, 71 % of the resources coming from the budget of DNOCS and 29% from the state government (DNOCS especial, 1997:20-23).

On the one hand, the “Castanhão” would suggest the end of a city; while on the other hand, it would produce a feeling of belonging among the inhabitants that created a process of resistance for more than ten years against the construction of the dam, a feeling that had enormous repercussions in “Cearense” Society.

The submersion of “Jaguaribara”

Old Jaguaribara (known as “Velha Jaguaribara” among its inhabitants) was completely covered by the water of the big dam Castanhao, which was located 227 km from the capital of Ceara (Fortaleza) in the region called “Medio Jaguaribe” (Middle Jaguaribe). It had an area of 731 km². The main income generation of the province was the fishing in the river Jaguaribe, which flowed through the old district. Agriculture was another strategic source of local income; on the humid land along the banks of the river, the traditional agricultural products were maize, rice and beans. There were also small livestock farmers.

After 40 years of political emancipation and more than one century of history, the “Jaguaribarenses” (inhabitants of Jaguaribara) received in 1985 the news that their city would become an “Atlantic Cearense”. The water would inundate the land of Jaguaribara. A population of around 100 000 inhabitants would need to be resettled. The dam was presented as a means to eliminate the droughts and the floods and bring development to the state. The movement “No to the Castanhão” was established in 1985 when the construction of the dam was first announced, initiating a long process of resistance.

The process of dispute between the inhabitants of Jaguaribara and the government

Resistance became a slogan for Jaguaribara against the Castanhão: “Jaguaribara resisting and living”; “Jaguaribara resisting and singing”; “Castanhão: resistance of the people”.

History depicted the Jaguaribara people as warriors, illustrated as follows in the words of Sister Bernadete: “Jaguaribara was characterised by events of resistance and fighting. The first one was the Indians’ struggle against the white settler, to initially avoid the occupation of the village; the second one was the history of struggle of Santa Rosa de Lima (patron saint of Jaguaribara), to defend the Indians and the black population; the third one was the leader Tristão Gonçalves de Alencar Araripe (viewed as the legal representative of Ceará due to his contribution to the Brazilian republic), who died in Jaguaribara fighting for the establishment of the Republic. Last, but not least, came the ten years of the people’s resistance against the Castanhão.”

We can distinguish two groups in the context of the construction of the Castanhão, one group in favour of the project and another against the project. As part of the first group there was the Government of the State, the Federal Government, the “National Department of Projects Against Droughts” (DNOCS) and the entrepreneurs of the state. This group based their argument for the construction of one big dam with a maximum capacity to accumulate water on its being the only possibility to facilitate the progress and modernisation of the state of Ceará.

The second group, which opposed the construction of the “Castanhão”, included associations, NGOs, social movements, the actual mayor of the city of Jaguaribara and many of its inhabitants. Among them, important actors during the process of resistance were: “The Institute of the Memory of the Cearense people” (IMOPEC), “The Education-based Movement” (MEB), CARITAS, “The Centre of work studies and support to workers” (CETRA), “The movement of the people reached by dam constructions” (MAB) and independent professionals like engineers, lawyers, geographers, politicians and others. This group proposed another project, including the construction of three small dams and the permanent existence of the city where it was already located. The Governor of the State, Tasso Ribeiro Jereissati, refused the proposal. The construction started in 1995 and due to the lack of resources, the work was halted four times. In the same year the transference of the “old Jaguaribara” to the new city was officially announced.

The inhabitants of Jaguaribara followed all the steps related to the decisions about the construction of the dam. In 1986, the “National Department of Projects against Drought”

(DNOCS) published an international competition to develop the “Castanhão” project. In the same period the inhabitants started to send letters to the State Government and the President of Brazil, demanding information and the right to participate in the decisions about the project:

“First of all we would like to say that we are not against the aim of the project that seems to be the irrigation of the land and we would not like the next generation to blame us for the non-construction of the dam as it is viewed as ‘the salvation of the state’ (Ceara). We need water and we need irrigation. What makes us worry, Mr President, is that in the debates and conversations we have had with professionals in order to find explanations, the opinions diverge in relation to the facts justifying the construction of the dam that DNOCS presented to us, to such an extent that we do not know the implications of these documents”.

“...We also would like to highlight that our movement of resistance is responsible, peaceful, without any political ideology. What inspires us is the common interest, the decision to be responsible and the desire to have our share of participation and the possibility to discuss the project” (Jaguaribara, 1986).

The arguments above show the indignation of the community of Jaguaribara, who rejected being excluded from the process of decision-making relating to the construction of the dam and its implications. They refused to be threatened as was another landless group in the Northeast of the country, just in order to say yes to the Castanhão project. The letters served as an instrument to claim their rights in the decisions about the Castanhão.

Even with all the barriers to overcome in the process of resistance, the participation of the people continued to be intense in all aspects related to the project. The people followed and discussed all the steps taken by the government. The Castanhão remained the main subject in Jaguaribara every day: meetings with the juridical department, debates, seminars, publication of journals and magazines, videos, elaboration of evaluation reports; visits of tourists and professionals to the city that became famous due to the fact that it would probably disappear soon.

In 1995, the commencement of the construction of the dam was officially announced, regardless of the resistance of the inhabitants and participation of other sectors of society that intensely supported the non-implementation of the Castanhão. Jaguaribara in a way surrendered to the Castanhão. Their struggle did not end, however, and the interests of the inhabitants would continue to be defended, although in another way. Their “conformity” was not completely real, the opposition to the construction of the dam assumed another form of action; the Castanhão was still representing a challenge in the history of the people affected by dams, an experience that could be different.

“From 1985 to 1995 we lived a period of resistance. We did not accept the construction of the dam; there were alternative projects that would be much more viable. Ten years of resistance passed and in 1995 we received the news with the official licence for the construction of the dam, then we started a new process, we organised the movement in two dimensions: we continued to resist but also thinking about what we would like to claim ...all we reached was a

result of our struggle. Our case of resettlement can be considered the one with most achievements in Brazil... We made a big analysis of the impacts of the other dams and we had a huge result, there was a resistance and respect from the society, in the public audiences our voice was strong, people had to hear us, we adopted a dynamic of conversation and negotiation instead of actions of aggression” (Sister Bernadete, 2008).

Resilience meets Jaguaribara

The previous section presented an overview of the political-social context in which the dilemma in relation to the construction of the Castanhão took place. The following section couples the findings from the fieldwork with the literature study order to arrive at an analysis of the impoverishment risks caused by the resettlement as well as the factors that justified the enhancement of resilience among the people.

Analysis of the impoverishment risks

From 1985 to 2001, 16 years passed with much controversy, resistance and negotiations between state and community. The population was resettled in the new city as the government had planned. Nova Jaguaribara, 55 km from the old city was inaugurated in 2001. In December 2002, the Castanhão Dam was inaugurated although only 98% completed.

The first part of the project of the city commenced in 1996 and was structured on three pillars, the first pillar being the characteristics of Jaguaribara (the history, location, demographic, social and economic aspects, and infrastructure), the second pillar the new city (including the characteristics of the area and plan of the city), and the third pillar being the resettlement of the community. The economic perspectives of the new city were exclusively dependent on the Castanhão, namely irrigation for agriculture, fishing, tourism and fishbreeding.

According to the project, New Jaguaribara would combine a perfect harmony between city and the semi-arid region: The inhabitants’ proximity to the river was improved, protecting them from the floods; the “topographic and geologic” conditions of the land were analysed in detail; the location of the city would facilitate the access of the Jaguaribarenses to new economic activities, like tourism and to the other regions of the country, as the Governor Tasso promised: “The population of Jaguaribara has to leave their roots, their origin, history, but will receive from us, public man, this commitment: at the same time that the dam will be constructed, a new city will offer better livelihood conditions, a city with a ‘sewerage system’, with schools for all and most important, a city with job opportunities” (Cardoso, Fernando Henrique and Jereissate, Tasso, 1996).

“The social structure of the city will not be changed. The neighbours and friendships constructed during years will be kept, because the resettlement project covers all the requirements to keep the community together and productive after a complex process of relocation of an entire city” (Secretaria de Desenvolvimento Urbano do Ceara, 1996).

However, those services and promises made by the Government were not accomplished. Many other facts were identified during the research, and can be grouped as impoverishment risks. A list follows below:

1. Income and economic problems. The revenue in the new city has not been able to cover all the expenses, on the one hand the government donated the services, but on the other hand there was no plan to stimulate the economy and income to support the expenses that were generated.
2. Unemployment. The fishing decreased and the washerwomen had to give up on their unique way of income generation, both due to the difficult access to the river. Also, work opportunities in the new city were affected, since the projects that the government had promised had not yet been implemented and many workers were not able to develop other non-agricultural activities.

There was therefore a gap between the perspectives of economic development that the government presented and the lack of any real possibilities of economic restructuring. Although the Castanhão represents a solution to the water problem for the state of Ceara, it is still an unfinished project. The government's promises related to the economic development of Jaguaribara were not fulfilled and the inhabitants are facing difficulties in paying for the public services. According to the Mayor of the city, about 80% of the population is unemployed. "This is our main problem. We just have the income generated by the Major city and the local business. The new city was planned to receive 75.000 inhabitants, but the population is less than 10.000 people. It is very expensive to keep the city functional, there is not enough income" (Diogenes, 2008).

The state government has negotiated with the community the implementation of projects that would represent sources of income to the province, but so far they have not been implemented (Secretaria de Desenvolvimento Urbano do Ceara, 1996). Below is a list of these projects:

- Project "Mandacaru": Agricultural irrigation, resettlement of 176 families;
- Project "Novo Alagamar": Irrigation, resettlement of 120 families;
- Projects of agriculture of "sequeiro": Barra II e Vila Mineiro;
- Project "Curupati" (fishbreeding) to reach approximately 7700 tons of fish per year in the Castanhão.

The hazards reflect the difficulty that inhabitants experience, namely to adapt to the new reality of a region that is now dependable on irrigated projects:

"..The impact is much bigger, because for a person that lived all his life in a rural area, with his livestock, suddenly arrived in a city with walls, with other structure, paying for water and sewage, this has been generating obstacles in the adaptation of the people" (Sister Bernadete, 2008).

Apart from the social and economic risks, certain elements were identified as absent due to the process of resettlement. These elements are characterised as emotional grievances:

The symbolism of the house

The fact of leaving a house implied that people break off their relationships with neighbours as well as causing a geographical rupture in the proximity between the inhabitants. There was also an adaptation related to the new infrastructure of the city, services and new spaces.

“We have already worked so hard to construct our small house and a space where we could live with our family... and we ask ourselves if the dam is constructed, will we still have conditions to acquire everything again. My grandmother was saying that all change withers. I am thinking about a change of an old person that already worked so hard” (Vivendo, 1995:63).

“There (referring to the old city), all the houses were close, wall with wall... everybody was on the sidewalks in the evening. Here the houses offered a better quality, but they also make the distance between the people greater. The city is growing, but for the people who spent all their life with the habit of taking only 5 minutes to cross the whole city, suddenly they see themselves in a big space, where to go out? Like for example to the hospital, it is at least two kilometres on foot” (Sister Bernadete, 2008).

The river

Of all the elements that were identified during the interviews, the one element that stood out in all the conversations as the most difficult factor for the people to leave behind was the River. This element can be viewed as a reference that maintained the relationship between the inhabitants and the space of the city. The fishermen, the washerwomen, the retired, small entrepreneurs and farmers all responded with answers related to the Jaguaribe River when they were asked about the houses, the streets and strategies for survival. One comment stated “it was just beside our home door”.

The Jaguaribe River was the most important water resource of the region, born in the hill “Joaninha” and ending up in the Atlantic sea in the province of Aracati. “In the new city the river is now far away, before the river was very close, we went out, and we were immediately beside the river. Here I still haven’t seen the river; there was not yet time to go there” (Sebastião Negreiros, 75 years old).

The river was part of the identity of a community that could be called “Ribeirinho” (meaning the population living on the border of the river). Even to the inhabitants living further from the river, the new city destroyed the close relationship between the city and the river, modifying the strategies of entertainment and habits.

“Swimming in the river on Sundays... there was a fish restaurant on the bank of the river, we spent all weekend there... here to go to the river is different, now it’s located under the bridge, but it’s not like before, never is. We were close, even a person who did not have transport could walk to the river. Here it takes three kilometres or more” (Gilson Bezerra, 2008).

“Before it was just necessary to open the door to be in front of the river; nowadays the leisure activities are only possible for someone who has a motorbike or car. For the majority of the inhabitants, the Jaguaribe River became a passage place, under the bridge viewed only when people pass by to travel to other villages” (Francilene, 2008).

“In the old city the streets were very nice to play in, everything was close, friends come usually to meet one, the main square was small, everybody could see each other, here I almost do not go out of my house, and everything is far. There the river was close; here it is about three kilometres of distance” (Honorina Fernandes, 2008).

The enhancement of resilience

In the previous section the impoverishment risks generated after the resettlement of the community in the new city, were analysed. As explained, the concept of resilience raises the possibility of going beyond the risk factors existing in an adverse situation, in this case the resettlement of the inhabitants of Jaguaribara. The relevance of identifying and stimulating the protective factors, namely qualities and strengths that create a possibility for the people to deal positively with stressful situations, has been clarified.

Therefore, during the research in the field and throughout the interviews the protective factors were identified that were present during the process of resettlement and it was investigated how these factors could be associated with the capacity of the community to face the adverse situation and be strengthened by it. One of the most important factors identified was the connectedness among the inhabitants of the city. This connection enabled the community to resist and fight for their rights. It is important to highlight that the majority of individuals participated actively in the process of resistance against the construction of the Castanhão, irrespective of gender, race and social status. Moreover, the bond created among the inhabitants during the process of resistance can be identified as a mechanism of protection that enabled the community to recover from the hardships. Other important elements that were identified as protective factors include: the tradition of the “Nordestino” people, the value given to the family; the collective self-esteem constructed during the years of resistance in the history of Jaguaribara, the value given to their culture and their religious beliefs.

As mentioned above in the methodology, the analysis of the enhancement of resilience during the research was not straightforward. During the process of observation an attempt was made to identify protective factors through what interviewees said and their actions during the process of resistance. In this section these factors are grouped together.

The year 1995 was crucial for Jaguaribara, when the end of the city was spelled out. The possibility of stopping the construction of the dam was gone. In the population different feelings emerged: some still could not believe that the project could become real, others started to accept the possibility and some were feeling powerless in relation to the political system, but the people did not completely surrender and continued to take action. The claims did not stop being forwarded to the government and other departments involved in the construction of the dam. They could “accept” the fact that they had lost the city, but they would not abandon their rights until their claims had been given consideration by the state.

“We demand certain claims in order to minimise the effects coming with the resettlement: We like to define our new territorial space in the province of Jaguaribara:

1. We like to define the urban spaces of the new city and the headquarters of the district of Poco Comprido.
2. The urban spaces must benefit from their proximity to the dam (tourism, fishing).
3. The new city must have all the necessary social and economic infrastructure.

4. The new city must have easy access to the main roads (federal and state).
5. The rural population and the people without land should have the option to be resettled in irrigated projects by the DNOCS, with property rights.
6. The people must define the land which will be used for agriculture in the Catchments Basin of the dam in order to ensure that the rural population will have priority in the re-settlement of these areas.
7. Introduction of an agro-industrial district to make use of the products of the region.
8. Introduce an agro school.
9. The islands that formed in the Castanhão dam will be the property of the province of Jaguaribara.
10. All these claims must be approved before the construction of the dam.
11. The federal and state authorities should make all the claims official, with legal status.

To finalise the matter, we assert that our community is aware that the Castanhão is not the best option for our region. However, since we could not make the decision, we have assumed the position of defenders of the interests of our region” (Inhabitants of Jaguaribara, 1995).

Among all the claims made by the population related to the impact of the dam, the submersion of the city by water was the one most assumed by the Government which, as a solution, proposed the construction of New Jaguaribara. If the actions in defence of the city could not stop the construction of the dam, at least they could postpone its concretization and bring certain benefits to the population specially related to the construction of the new city. During 10 years of resistance the people recognised the importance of their struggle with the government: “We learned one lesson in this process that we would be in a very different context if we had not followed up all the facts related to the construction of the dam. Even if the dam had not reached our province, we as citizens, should assume our historic roles. We knew all the details of the project. We know that the government does not take the people as their priority. We did everything we could. These 10 years of struggle prove that the government does something when the people participate, fight” (Maria Irinete de Sousa Brito, 2008). “We, from Jaguaribara that started this fighting, have been resisting until now. I think we should be strong, not give up. We need to trust in God and believe we can’t be weak otherwise people will just forget us. We need to be strong!” (Rosa Fernandes Queiroz, 2001).

“The Memory House”

The feelings related to what the resettlement would represent to the inhabitants of Jaguaribara were followed by the hope of maintaining their bonds despite the time and the space that started obliterating them. The hope stimulating the population was to create a Memory House (eventually founded in 1998), with the support of IMOPEC: A place with objects, domestic instruments, photographs, old type-writers, radios, bikes, folkloric objects and many other items. Through such symbols the people removed from Jaguaribara could preserve the memory of the old city that was inundated by the waters of the Castanhão Dam. The connectedness of the people and the wish to preserve their bonds were essential to making this project real:

“After all the visits that we made to the other dams that inundated cities, we found out that in any of these places there was the worry about how to preserve the culture. There was a vague idea in the other cities with dam projects... We started to collect the objects that could represent each inhabitant. On 21 August 1998, the Memory House was ready for the inauguration” (Jeso Carneiro, 2008)

The personal belongings had acquired through the years a symbolic meaning that could be used to capture lifestyles, beliefs, emotions and memories. The Memory House is a place where it is possible to retreat to another time and get to know how the people lived before. Some objects in the Memory house spanned generations, like the seat of wood donated by Amarilio Felix:

“The seat was from my great-grandfather, and then passed to my grandfather. From him, it was passed to his son and then to their grandchildren. In 1941 my cousin told me that he would sell it. I said: ‘no, the seat of dad! If you will sell it, I will buy it. I bought it for 20 thousand ‘Reis’ and then donated it to the Memory House” (Jaguaribara, *Resistendo e vivendo*, 2001).

Among the cultural symbols, some enabled one to perceive the feelings the inhabitants had for the place where they had lived before, like the cemetery, the monument for Tristão Gonçalves and the river. “The Memory House of Jaguaribara has a big importance to the ‘Valley of Jaguaribe’, it encapsulates the culture of this region. We started with a small collection that is growing with the support of the community that participates actively” (Jesus Jeso, President of the Memory House, 2008).

The Memory House is also an important instrument of popular education that covers educative interventions for groups of the population and mainly the youth. The educative process is based on a formation that acts through the cultural rescue of the memory of the population of Jaguaribara (the old city). With this project the people from Jaguaribara started to debate *the right of memory* as a new right to be defended and conquered, especially to allow the new generation to preserve their history and references. “The Memory House is very important to me, because it brings culture to my people and memories from the beautiful city that went ‘down under the water’. I mean the water should represent life and not death” (Aline Almeida Peixoto- 12 years old, 2008).

When an individual faces an adverse situation, he often asks himself “why me?” putting himself in the role of victim, becoming dominated by negative emotions. This way to deal with the situation is based on the question: why has this problem happened to me? When the individual replaces the question with “For what purpose am I involved?” he is immediately adopting another position and subsequently the emotions can be transformed and move the individual forward. **Why?** tries to explain the past, while **For what purpose?** tries to comprehend the future and attribute a meaning to it. Therefore, there is a redefinition in the perception of the reality. With this shift, the individual begins to leave the condition of victim to become responsible and an agent in the situation he is facing (Assimakopoulos 2001).

Furthermore, the case of the resettlement of Jaguaribara could prove that despite all the difficulties faced by the population, the community could show through its resistance the capacity

to overcome the hardship. Through their struggle and actions they mobilised attention and cooperation with wide sectors of the “Cearense” society. On the one hand the government spread the typical kind of speech sustained for years: The people of the Northeast are vulnerable, they need the government to support them and we politicians can save them from their misery (hard situations); on the other hand the people of Jaguaribara assumed the role of agents of their history, showing through their struggle and participation the necessary strength, creativity, resistance and resilience, as their dialogue reveals: “Nova Jaguaribara can be constructed and reconstructed as regards work, entertainment, religion, economy, corners, and parties. The inhabitants will need to transform the reality they are living every day and I believe that they are already doing that, but this is a gradual process that requires time to be concrete. Be aware that the value of the historical and cultural aspects is a way to rescue the identity that cannot be perceived immediately by the people that come from other cities, maybe because they do not feel like belonging to a place, these people have not yet acquired linkages and therefore do not give value to the history as do the old inhabitants of the region” (Jesus Jeso, 2008).

“The resistance did not finish, as many affirmed. Signs appeared in the tears shed on the occasion of the removal of the images from the church; in the hurt silence during the transfer of the death relicts of families and friends; in the anxious look that contemplated the demolition of the main church; in the pain that they felt walking through the debris of the city that was becoming dust. Resisting is not only a way of saying: From here I do not move” (Celia, 2008).

“In the first days of August before the change, the spontaneous farewell to each street of Jaguaribara reproduced the happy spirit of the people and showed an original form of resistance. Without giving up and still courageously dealing with the situation, the people together kept their strength to deal with the last phase of the transfer process, without leaving behind their roots and memories, a way to reaffirm their collective feeling” (Celia, 2008).

“Fighting for neighbourly relationships or links in the new city was a way the population found to preserve the unity of the group and keep the continuity of their lives that had to be segmented. The neighbourly bonds were breaking up in some cases, bringing sadness and a feeling of rejection to some inhabitants who felt the resettlement even more forcibly than others” (Aparecida, 2008).

“I spent all my childhood hearing that the city of Jaguaribara would disappear, spent 16 years of my life living a feeling of expectation... On the day to move to the new city I could not sleep, the bus passed, I closed the house with my father and I said: now we really go, the old city will not exist anymore!” (Francilene, 2008).

“The decision to move everybody together made us stronger, since all were living the same changes and expectations...but we need time, all is a question of adaptation” (Francilene, 2008).

“About the future: I am optimistic, I believe in Jaguaribara. If the projects of the government are implemented Jaguaribara will do well ...” (Dida, 2008).

“The biggest impact of the resettlement was on the people. The technical project was perfect, but there was no project for the people, there was nothing related to continuity. The positive results should all be attributed to the interference of the community, to our struggle” (Sister Bernadete, 2008).

“The children wrote all the history of the resettlement. We also made a movie of the demolition of the city; we took pictures from the church, square, houses...I felt pain, not for me, but for the people...we had a beautiful city, with a wonderful sunset seen from the river, the women washing clothes...the water flowing...all of this was hard to leave behind” (Sister Bernadete, 2008).

“There was strength to re-establish, go forward, Jaguaribara is a resilient community” (Francilene, 2008)

Conclusion

This paper began by highlighting the impoverishment situations that are produced by the resettlement of communities and the importance of identifying them to generate adequate interventions, although they could not be viewed as the only factors that affected people in an adverse situation. The case study of Jaguaribara has shown that even though there are risk factors in a situation of adversity there are also simultaneously protective factors that help the community to perceive the situation in a different way to enhance their capabilities and overcome the hardships. The case study highlighted the existence of those protective factors among the population of Jaguaribara. The resettlement (viewed as an adverse situation) of the inhabitants of Jaguaribara has stimulated the enhancement of resilience among the people. This mainly proved that by keeping the connectedness among the inhabitants and practising resistance, the inhabitants brought about the construction of the Memory House, a place where the inhabitants can preserve their history, references and culture. Indeed, the majority of individuals participated actively in the process of resistance against the construction of the Castanhão as well as in all decisions concerned with the changes they would have to make as a result of the resettlement.

Another issue that was discussed during the research was the position of the government in relation to the Dam construction and the arguments used to justify the project. This led us to reflect on the kind of development the public policies in the Northeast of Brazil had brought about. On the one hand, the dam is providing water to the capital as well as bringing about benefits through the industrial development of the state. However, the Government's arguments for continuing the construction of the dam assumed a tendency to perpetuate the image of the Nordeste as a victim in order to sustain the public politics of “assistance” that in fact are used to defend the interests of the high classes of the society. Therefore the case of resilience in the community of Jaguaribara raises the possibility of breaking this categorised way of seeing the Nordestinos as victims instead of as agents and protagonists of their history. To sum up in the words of Guimarães Rosa in “Grande Sertão Veredas” and to illustrate how the *Sertão* and its people are visualised: “The *Sertão* has the size of the world... and the Northeast is a place with excess of mysticism, ethics, creativity and courage”.

References

- ASSIMAKOPOULOS, P-A. 2001. The Pivotal Moment: A Qualitative Investigation into Resilience. Dissertation Abstracts International: Section B: The Sciences and Engineering.
- CARDOSO, FERNANDO HENRIQUE E JEREISSATI, TASSO.1996. Transcrição dos discursos proferidos no canteiro de obras do Castanhão, Alto Santo, Ceara.
- CERNEA, M.M. 2004. Impoverishment Risks, Risk Management, and Reconstruction: A model of population displacement and resettlement. Paper presented to the UN symposium on Hydropower and sustainable development, Beijing.
- DNOCS ESPECIAL. 1997. O pioneirismo na luta pelo desenvolvimento do Nordeste. BRASIL.
- JAGUARIBARA. 1986. Carta da Comunidade de Jaguaribara ao Presidente Jose Sarney. Jaguaribara, 18 May, Ceara.
- JAGUARIBARA, RESISTINDO E VIVENDO. 1995. Fortaleza, IMOPEC, 96p. (Memória do Ceara). Fortaleza.
- LUTHAR, S.S., CICCETTI, D. and BECKER, B. 2000. The Construct of Resilience: A Critical Evaluation and Guidelines for Future Work. Child Development.
- OJEDA, E. Nestor Suarez, 2000. Actualizaciones en Resiliencia. Buenos Aires. Universidad Nacional de Lanus.
- PIMENTEL, S.V. 1997. O chão é o limite- a festa do peão de boiadeiro e a domesticação do Sertão. Goiânia: Editora UFG.
- REBOUÇAS, A. da C. 1997. Água na Região Nordeste: Desperdício e Escassez. Estudos Avançados.
- ROSA. J.G. 1968. Grande Sertão Veredas, 6th ed. Rio de Janeiro: Jose Olympio Editora.
- SECRETARIA DE DESENVOLVIMENTO URBANO DO CEARA. 1996. Nova Jaguaribara- versão preliminar. Fortaleza.
- YUNES, M.Â.M. 2003. Psicologia Positiva e Resiliencia: O foco no Individuo e na Família. Psicologia em Estudo, v.8. Especial Maringá.

Researcher Oral Archive:

- INTERVIEW. 2008a. Sister Bernadette. Research notes in possession of researcher.
- INTERVIEW. 2008b. Maria Emilia Diógenes. Research notes in possession of researcher.
- INTERVIEW. 2008c. Sebastião Negreiros. Research notes in possession of researcher.
- INTERVIEW. 2008d. Gilson Bezerra. Research notes in possession of researcher.
- INTERVIEW. 2008e. Francilene. Research notes in possession of researcher.
- INTERVIEW. 2008f. Honorina Fernandes. Research notes in possession of researcher.
- INTERVIEW. 2008g. Maria Irinete de Sousa Brito. Research notes in possession of researcher.
- INTERVIEW. 2008h. Rosa Fernandes Queiros. Research notes in possession of researcher.
- INTERVIEW. 2008i. Jeso Cerneiro. Research notes in possession of researcher.
- INTERVIEW. 2008j. Jesus Jeso. President of the memory house. Research notes in possession of researcher.
- INTERVIEW. 2008k. Aline Almeida Peixoto. Research notes in possession of researcher.

INTERVIEW. 2008l. Celia. Research notes in possession of researcher.

INTERVIEW. 2008m. Aparecida. Research notes in possession of researcher.

INTERVIEW. 2008n. Dida. Research notes in possession of researcher.