

Analysis of Irregular Occupations on Jaguaribe River Margins on The Neighbourhood of Bessa, in The City of João Pessoa-Brazil

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Key words: Land management; Land readjustment; Remote sensing; Risk management; Spatial planning.

SUMMARY

The environment of the city has proven to be the dwelling of the world population. Thus, the city has the capacity, given the multiple opportunities, to attract large numbers of people. With the growth of urban environments in recent decades, many problems became apparent. It is noticeable in most cities of medium and large companies in Brazil, the presence of substandard clusters, areas of high density that often exceed the capabilities of environmental support, the ground taken by rivers, siltation, pollution by domestic and industrial waste from hundreds of other problems that can be listed as the result of an unplanned and uncontrolled occupation. The monitoring of urban space, in both a spatial and temporal, presents itself as a powerful tool for analysis of growth trends and changes within the geographical boundaries of a municipality. An understanding of urban dynamics leads to the possibility of building a policy that consists with the occupational needs of the population and the environment, and thus leads to the promotion of maintenance of the same, contributing to the possible recovery of areas previously degraded from the damage caused by lack of planning and management. This article presents an analysis against the illegal occupation of the banks of the Jaguaribe River, in the city of João Pessoa - PB -. Its main objective is the reconstruction of the occupation process in the Permanent Protection Areas along the river's course. Specifically, this characterization of the population profile of the occupied area, as well as human perception of the situation of irregularity. Finally, it measures the willingness of people to leave squats facing the possibility of relocating to nearby areas and improved infrastructure. To this end, these instruments were adopted: temporal reconstruction of the occupied areas in a range of twenty years, through orthophotos and satellite images of high resolution using GIS software for, performance of on-site survey by questionnaire socio-environmental. The results obtained demonstrate the possibility of recovery of degraded areas, as well as the way people behaved in this case, faced with the reality of the situation of irregularity and the possibility of relocation, therefore showing positive conditions for urban redevelopment.

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1. INTRODUCTION

The urban environment formed in cities, according to Clark (1991, p.61) has proven to be the abode of attracting world population, due to its complexity activities, large numbers of people. Thus, the city demonstrates grow exponentially. The city is, par excellence, the human environment. However, their dysfunctions oppressive ironically transformed in a "inhuman environment." (COIMBRA, 1999).

With regard to the watershed, the concept of urban river concerns that the river has suffered and suffers modifications by man in the process of urbanization, and its potential environmental and landscape tapped or not (Porath, 2003). Unfortunately, the urban rivers in Brazil, in line with Almeida (2007) and Mondardo (2012), have been treated as waste of city funds, batch and local dumps. There is a real denial of nature, especially with regard to water courses in the city. As Vitte; Keinert (2009, p.99), "the big question is that segregation, both social and spatial increases dramatically today" in the confrontation that understands how the city is the site of "effecting rights and duties, the place of the citizen."

This, in turn, comes to penalizing the man himself for the consequences of this form of occupation of urban space. It is noticeable in most medium and large cities the presence of subnormal agglomerates (IBGE, 2012), areas of high density that often outweigh the environmental carrying capacities of rivers taken by ground, siltation, pollution from domestic and industrial waste from hundreds of other issues that may be listed as coming from an unplanned and uncontrolled occupation.

The monitoring of urban space (spatial-temporal) presents itself as a powerful tool for analysis of trends in growth and changes that occur within the geographical boundaries of a municipality. An understanding of urban dynamics leads to the possibility of constructing a policy occupational consistent with the needs of the population and the environment, and thus leads to promote maintenance of the same, contributing to degraded areas before may be recovered from the injury caused by lack of planning and management.

The city of João Pessoa, capital of Paraíba, is not different in the aforementioned general aspects of their occupation. The Jaguaribe river, which runs through the city to a great extent, suffered through years of invasion of their margins and the impact on its original structure which has caused so much damage to the environment with respect to their own environmental issue, as much as its influence social.

Therefore, this paper aims to study the occupation in one of the stretches of the river Jaguaribe, whose characterization does consider it as an APP (Permanent Preservation Area), pursuant to Law No. 6938/81 (in which, to the present moment, still in force, despite recent discussions of amendments thereto), in order to obtain the harmony between the need for environmental compliance via master plan and other municipal laws, with the social interests of the community raised.

1.1 Objectives

This paper has as main objective the restoration process of occupation of the river Jaguaribe in Joao Pessoa, Brazil, through aerial photography and remote sensing images as well as perform a diagnostic profile of the residents and their perception of risk and irregularity. Going forward, is to provide information about possible areas for relocation of irregular occupations.

2. ENVIRONMENTAL MANAGEMENT AND URBAN PLANNING

2.1 The Environmental Question

For decades, innumerable discussions about the destructive potential of human actions on the habitat has been woven in many different ways. In the face of a major retrospective of the events that occurred in the last decades, around the world, it can be seen that there is a continuing evolution in the mentality of modern man in relation to the environment. The term "environment" is understood as a set of actions, circumstances, cultural, social, physical, natural and economic involving humans and all life forms. The environment is everything that surrounds life, is the medium in which all living beings are inserted. (ANTUNES, 2002)

In a globalized world don't admitted that society develops without considering the quality of life of its inhabitants. However, this statement appears distorted when associated exclusively designed for comfort guided by a culture of consumption. The quality of life is not only linked to economic power of a nation, but is directly related to the preservation and proper use of natural resources. (CAMPOS, 2004)

Although the current model of development of most nations have as the basic principle of accelerated growth, focusing on technological development, where the capital is the main indicator of development, lot has been achieved in need of care for the environment. The table that follows is a brief timeline of the major events on global environmental issues.

Given the universal need to promote sustainable development, many countries have evolved to incorporate in their legislation questions concerning the maintenance of natural resources and have guided, even if often timidly, the development of its territory ruled this need.

It is understood as sustainable development that seeks to meet the needs of the present generation without compromising the ability of future generations to meet their own needs, meaning the possibility that people achieve a satisfactory level of social and economic development and human achievement and cultural, making, at the same time, a reasonable use of land resources and preserving species and natural habitats (UN, 2011).

In Brazil, the legislation has evolved significantly considering the initiation of discussions on the global environment. You can have as an example of the presence of the environmental legislation in the Brazilian Constitution of 1967 that led, for example, the Union competence to organize permanent defense against public disasters, especially drought and floods (ANTUNES, 2002).

But until then, the legislation had airs immediatists, seeking only the good of the people facing such circumstances, lacking a more comprehensive view that had the man as one of the elements that make up the system, and not something external to the environment. Moreover,

later in the 1988 Constitution, the vision about the relationship between man and the environment changed. Besides treating the environment directly in your Article 225, devoted attention to urban issues, entering urban planning as a tool for environmental management within national territory.

In accordance with Article 225 of the Federal Constitution (BRAZIL, 1988), everyone has the right to an ecologically balanced environment. Puts too well that this is a common use and essential to a healthy quality of life, and imposes upon the Government and society the duty to defend and preserve it for present and future generations. Moreover, Articles 182 and 183 to decentralize urban development policy, delegating to the Municipality the responsibility to run it, with the clear objective of promoting the welfare of the population. Such legal composition culminates in recognizing the importance of the urban environment and its organization, so that the maltreatment of the same condition determines the welfare of the population of the city.

Given that the advocates constitutional legislation, appeared in 2001 the Statute of the City, regulating the articles 182 and 183, bringing a series of general guidelines and specific about the urban land use. According to the first article, the law establishes standards of public and social interest that regulate the use of urban property in favor of the collective good, safety and welfare of citizens, as well as the environmental balance (BRAZIL, 2001) .

One should understand environmental policy in the context of the nation, as the science of the phenomena related to the state structured based on the formulation of principles, objectives and standards of conduct that are defined and articulated to meet the country itself. In the interim, the policy environment is regulatory and is not executing, not operational. Thus, a policy is the definition of objectives and principles, articulated and integrated, that guide concrete action through programs, laws, regulations and decisions, and methods to be used for their implementation (PELICIONI, 2005).

In Brazil, the environmental policy objectives concern the most economic, social and environmental aspects. The 1988 Constitution through Articles 225, 182 and 183 established principles and objectives that guide the development and organization of the territory. The municipalities received the legacy, through the City Statute, to manage the urban space, first, developing the Master Plan, and beyond to develop other specific laws, such as the municipal environmental codes. Thus, this legal structure, enabled the formulation of a management structure with responsibility to implement the standards. Thus, it became possible to recognize the definition of the term "Environmental Management" being applied to the context of public administration:

"Environmental management is therefore the implementation by government of its environmental policy, by government, by defining strategies, actions, investments and institutional and legal arrangements, in order to ensure the quality of the environment, conservation of biodiversity and sustainable development."(PELICIONI, 2005, p. 219).

Although there are many other definitions for the term, then it can be inferred that the Environmental Management currently has a direct relationship with the urban planning, the latter having acquired a desire for harmony with the environment from the evolution of the Brazilian legislation.

2.2 Urban Planning

The Urban Planning, according Clark (1991, p. 229) emerged in the late seventeenth century due to the problems evidenced in industrial cities. The Urban Planning and Environmental Planning become inseparable, to the extent that prove to be instruments for the practice of Environmental Management in Brazilian cities, given, according Vitte; Keinert (2009, p.22), with planning makes up the recognition of the problems of diagnosis and the indications for its solution.

The urban environmental issue involves different themes, considering the problems caused by the growth of cities and the difficulty in harmonizing development and quality of life seen the difficulties given by "differences in the levels of demands and aspirations" (VITTE; KEINERT, 2009, p. 89) social groups. Planning is not an end in itself but a means to an end, executed in a continuous manner and permanent. (FERRARI, 1977)

This perspective is found in the Statute of the City, in its constitutional principles guiding the Master Plans, which are:

- Principle of Social Function of Property;
- Principle of Sustainable Development;
- Principle of Social Functions of the City;
- Principle of Equality and Social Justice;
- Principle of Popular Participation.

The Law n°. 10.257, establishing the Statute of Cities is a landmark between a city that grew in a diffuse manner and without an integrated planning and city habitat, which is seeking sustainability and good urban land use, aiming at the welfare of its population. The City Statute regulating urban growth toward a more equitable, sustainable and democratic. According to the City Statute: Implementation Guide for Municipalities and Citizens:

"The statute includes a set of principles - which is expressed in a conception of city and urban planning and management - and a number of instruments which, as the name defines, are means to achieve the desired purpose. However delegates - it could not be - for each of the municipalities, from a public and democratic process, a clear explanation of these purposes. In this sense, the statute operates as a toolbox for a local urban politics."
(BRAZIL, 2001, p.21)

Therefore, each municipality, through its Master Plan, built on the pillars of the Constitution and the Statute of the City, shall manage its urban space and through the instruments provided by law and plan it in order to meet the demands, social, environmental, and any others that relate directly or indirectly on the welfare of citizens and the sustainability of the urban environment.

According Brazil (2001), the Master Plan determines specific areas for each type of activity combining efficiently the various functions of the city. Thus is allowed citizens dispose of growth and economic and social development while not suffer other negative consequences of urbanism current mode, meeting their needs for housing, health, education and a decent environment. The urban planning requires minimal effort knowledge of the area in various ways. For this knowledge is constructed is necessary to refer to the multidisciplinary and integrality.

In terms of environmental management is necessary to have a holistic approach for subsequent analysis application followed by constant monitoring. Just so that there is effective planning the Master Plan must be applied rationally and accurately.

2.3. The city of João Pessoa and its development

Pizzol (2006, p.84-107) argues that for decades the city of João Pessoa grew considerably, so that they can see the expansion of its network in all directions, reaching its geographic boundaries to the east, west and north. The steady population growth, coupled with a lack of territorial planning and effective housing policies, took a portion of the population to seek areas of cities with severe usage restrictions. In many localities the occupation happened without planning and so invasive, damaging rivers and other conservation areas.

With the observation of the city, based on the Brazilian Environmental and municipal legislation could observe the slowness front oversight concerning the occupation of the areas in which they should meet the needs of environmental conservation in order to meet the semantics of collective importance placed by Section 225 of the Federal Constitution.

3. METHODOLOGY

Allied to a range of information collected in situ by means of environmental questionnaires, in addition to information obtained by the studies of SEMAM / DIEP and the Department of Geography of the University Center of João Pessoa-UNIPÊ-represented in the figure of Melo (2001), we could proceed with boundaries as to practice the procedures to be performed in pre-field and field of study location.

According to the above, the following methodology was used to develop this work:

3.1. Initial Delineation of the study area and geographic data collection.

The river Jaguaribe has great extension and holds importance for municipalities encompass as João Pessoa / PB and Cabedelo / PB. The section of river Jaguaribe used in the development of research ranges from the neighborhood of Manaíra, where begins the stretch in a natural division of the river to the neighborhood of Bessa, where Jaguaribe flows into the Atlantic Ocean. This area of town is an area of recent occupation, which began in mid-1970. (OLIVEIRA, 2006; PIZZOL, 2006).

With the objective of equip the research area of spatial data, there was a survey of basic data for the construction of the first elements spatialized in public agencies, data as the central axis Jaguaribe River, the boundaries of existing communities in the passage in question; satellite images, aerial photographs from different years.

This information formed the initial collection of data.

In order to describe the process of occupation on the stretch in question were collected spatial information such as data obtained by aerial photogrammetry.

Such data contain information about the main course of the river and other relevant information. For a better visualization of the temporal evolution of occupations throughout the stretch was divided into three smaller chunks described in Figure 1.

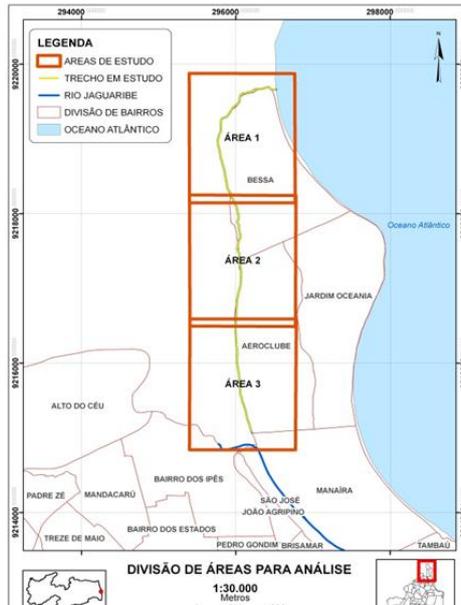


Figure 1 - Delimitations of areas in research

3.2 Delimitation of the community being studied

Starting from a specific area can construct a methodology for analysis location that can be taken as a basis for future analysis in any way. Therefore, one should observe a stretch that has the most diverse forms of invasion and impact. Thus we chose the São Luís community, to application of a questionnaire by being located in area 2 (two), approximately half of the studied stretch (Figure 2).



Figure 2 - Aerial Photo of Study Area (target N-S)
Source: SEMAM / DIEP

3.3. Survey documentation about the area

As a way of basing further methodology, the survey was conducted environmental studies carried out in previous years, such as the Department of Environment of João Pessoa (SEMAM) and the Department of Environmental Studies and Research (DIEP) to endorse the investigations that later came to be made.

3.4. Survey information surrounding area

Perform a search for information of urban voids near the river course, in order to investigate possibilities of reorganization of space. (Figure 3)



Figure 3 - Examples of buildings near the river

3.5. Population sampling

The methodology for defining the object's spatial sampling encompasses (the houses) was based on a count of households through the use of the tool Google Earth (updated to the area in October 2011), which served as an alternative tool in: pick of the population in purpose of defining and counting the total homes in the areas and for the application of the statistical technique of sampling population intentional (NETO, 2012), expressed by equations (1 and 2) below, as Andriotte (2009, p.65); Gotelli , Ellison (2011, p.) Gerardi, Silva (1981, p. 18-19):

$$n_0 = 1/E^2_0 \quad (1)$$

Where "n₀" represents the first approximation of the sample. And "E₀" represents the tolerable sampling error (defined as the acceptable accuracy).

$$N = (N \cdot n_0) / (N + n_0) \quad (2)$$

Where "n" is the sample size, and "N" is the population size.

It should be noted that as Barbetta (1998, p. 61) defines the sampling error parameter error value of the selected data.

3.6. Cartographic production

Produce, from the information collected, use maps, type of coverage, impacts, socioeconomic status, among others.

4. RESULTS AND CONSIDERATIONS

Before the development of the methodology exposed was reached interesting results. Regarding the occupation process of the APP were studied stretch possible the following considerations:

4.1 Considerations of the evolutive study of irregular occupations

Based on spatial data acquired in the Town of João Pessoa, was possible to construct maps that show the evolution of the occupation process of APP Jaguaribe river on the stretch in question. Scanned orthophotos were used, the years 1989 and 1998, plus a clipping satellite image of 2008, resulting in a temporal profile of approximately twenty years, a few years after the beginning of the occupation process.

With the aid of software GIS (Geographic Information Systems) were built with the orthophoto mosaics of each year.

All scanned images were georeferenced building on the outline of a Quickbird satellite image of 2008. Then vectorized areas were occupied in each year respectively and generating maps of the three overlapping areas bounded initially.

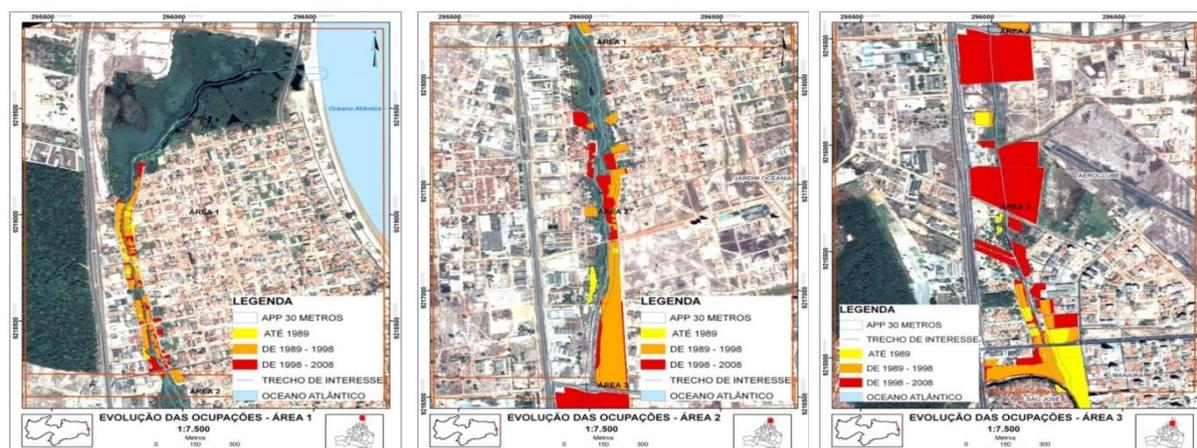


Figure 4 - Evolution of irregular occupations for areas 1, 2 and 3 respectively for the years 1989, 1998 and 2008.

Thus, one can clearly observe that the first interval, from 1989 to 1998, there was a frenzied growth of irregular occupations in this part of the APP Jaguaribe, even with the already present Master Plan Joao Pessoa in the 90. In the second interval, 1998 to 2008, the irregularity continued happening. Irregular occupations were not enough, other interventions were performed gravity equivalent.

Were identified based on orthophotos, plumbing, landfills small and large figure, shifts in the natural course of the river, among other modifications that do not correspond to the proper practice of spatial planning law. The "assaults" on APP succeeding to reduce significantly its area. Results reached the necessary calculations to the following results in loss of area of APP.

table 1 - Table area reduction of APP

PERIOD	AREA APP	APP CCUPIED AREA (m2)	LOSS (%)
< 1989	343218,0229	12966,5042	3,64
1989 - 1998	296163,8394	60020,68762	16,85
1998 - 2008	232780,1559	123404,3711	34,64
ÁREA IDEAL DE APP	356184,5271		

4.2 Considerations of applying environmental questionnaire

To be able to apply the principles and objectives of urban environmental planning and management and, together, manage cities get more sustainably are necessary joint actions involving social mobilization, integrating society as a whole in the struggle for an urban environment appropriate.

Besides a different way of producing and appropriating urban space, so there is a reorganization ideological, emphasizing natural processes / Physical and leaving aside the current, directed only to the economics.

4.2.1 Difficulties of Collection

The sampling error of the study was 15% compared to a population of 100 dwellings on the banks of the River Jaguaribe APP. The choice of such a conformation sampling took place value of some parameters, such as:

- Uniformity locational (situation where the population has locational and infrastructural characteristics very close).
- Lack of security in the area (which despite contrary ratings given by some questionnaires, recommendations, found himself not deepening the relevant community).

4.2.2 Of Questionnaires

The questionnaire also underwent spatial analysis. Through the collection of coordinates using GPS technology in front of each property surveyed, the questionnaires were unable to locate within the analysis of the evolution of occupations, demonstrated that the community follows the profile of the rest of the occupations presented along this stretch of river, as shown Figure 5.

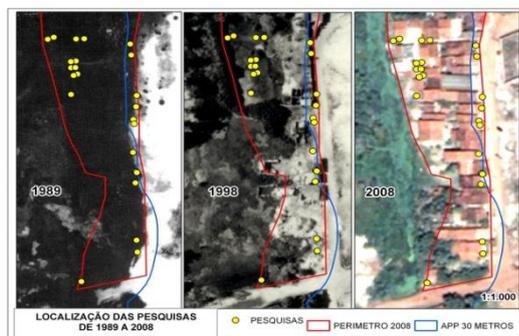
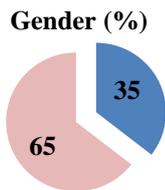


Figure 5 - Location of research and contrast with the

With the questionnaires were evaluated characteristics of the inhabitants of both houses as the characteristics of the property and infrastructure across the site as it provides spatially. Therefore, we obtained the following results:

Raised the population, there is a predominance of persons in the presence of females (Figure 6). Following the country's population profile for the population of



■ Masculino ■ Feminino

Chart 1- Percentage by gender

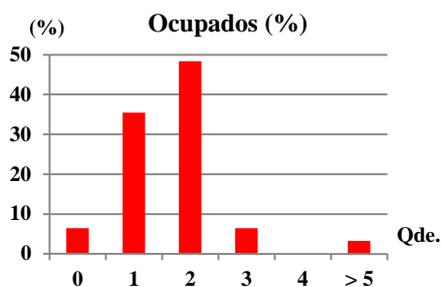


Chart 2 e 3 - Occupational profiles of the resident population

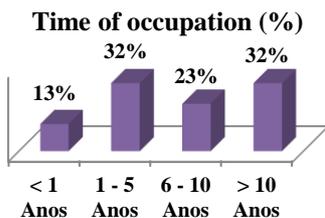
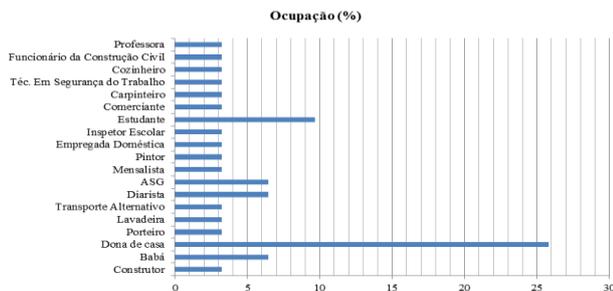


Chart 4 - Time of occupation in houses

classes C and D. With regard to the situation of the residents regarding employment and functions developed was found the following situation (figure 7):

Thus it was found the predominance of women who are still household chores and some of them accumulate the function of head of family.

The occupation time of the dwelling on the river Jaguaribe, given the study population as can be seen in chart 4, presented the following conformation: equivalence of time for those who live 1-5 years (32%) with those living 10 years or more (32%). The period of considerable housing shows up, the display is made by the slowness / disability municipal oversight as the occupation of the area.

Should be also understand the need not only municipal and national level, regarding the issue of control of several actions proceeded against the laws which confirms situations of "illegality". Another major issue, the location of the river upstream ventures as: Malls, Supermarkets, building sets, among others, the existence of which stimulates the proximity and thus the feeling of belonging to housing as these developments have permission, there is the converse to the people downstream, despite knowledge of illegality they understood by only a matter of "paperwork" and not because affront to municipal legal parameters (Master Plan) and federal (law 6938/81).

As can analyze the chart 5, the condition income of residents of the community has a percentage of 84% with values of salary / income between 1 and 2 minimum wages, where 13% and 3% flee default arising from activity performed (chart 3) or even the existence of one or more people contributing to total family income (Chart 2).

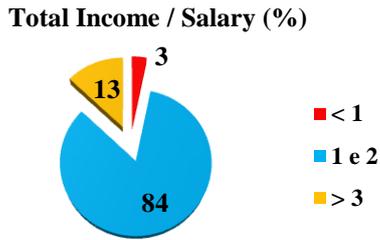


Chart 5 - Percentage of workers and their salary ranges, based on the Brazilian minimum wage of R\$ 622.00.

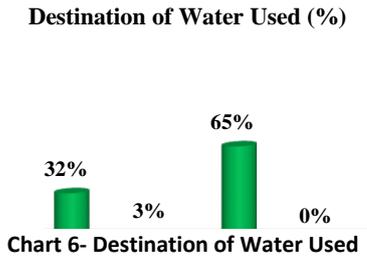


Chart 6- Destination of Water Used

Besides data on families living on the banks of the river were raised about the information habits of hygiene, health and structure that relate to the possible contamination of the waterway. As for the final disposal of the water used for various purposes chart 6 presents the situation of 65% of the water is destined at local underground deposits, and 32% to the river course Jaguaribe.

It is understood that the proximity to the river channel and the type of structure arranged to collect water (local underground deposits), all liquid wastes are scattered in the river, even if it is "unaware" of action. However, through field visit could be seen that there are many links on the site for the riverbed. Regarding solid waste, confirmed the presence of periodic collection in all areas surveyed.

With respect to the most common diseases in the study area in question was obtained by viruses most frequently, with 71% (Chart 7). These viruses are

characterized by several types of pathogens can fit in the upper part listed range of diseases listed, but is still just guesses as to the possible conformations of health in the local population directly or indirectly where the river will provide.

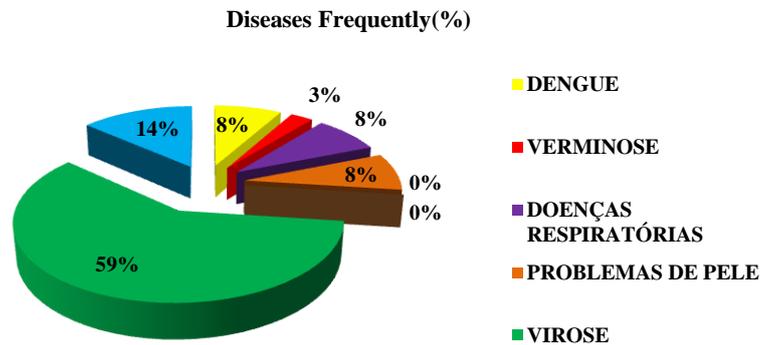


Chart 7 - Diseases Frequently

Regarding the importance of environmental awareness and resident population, were asked about their perception of the situation of irregular occupation and possible risk, as well as the disposition to be relocated will forward a situation of proximity to the place where they would be relocated and deployed infrastructure. When questioned regarding the Jaguaribe river showed that 65% consider the important river, but do not know predominance in, report on what and for what / whom the river is important. With regard to challenges related to flooding (seen here in context and better understanding of the local population, in fact regarded as floods) noted that there was unanimity regarding the absence of flooding so far. Thus, it can be observed that there is, first, an awareness by the population of their illegal

status. This is evidenced by the responses indicate that over 70% have science on your situation. Second, it is concluded that they mostly accept the possibility of relocation, however, much of it conditions its relocation to an adequate infrastructure that meets your needs. When asked about the possibility of relocation, 39% accepted the possibility, while 45% rejected and another 16% did not stand. As for those who responded negatively, if at all attribute their response to lower quality of housing offered by the city or distance from one place to another. When asked if the distance influenced your decision more than 70% of respondents answered yes, the distance from the current place of residence to the place of removal influences in his decision to leave the place or not. It was noticed during the research and using the parameters mentioned above, that the obstacles to the settlement of the area and recover the same bump in the form of housing programs currently offered.



Figure 6- Proposition relocation to the community: the areas bordered in red correspond to those without occupation, with great value in m², and near the site. The green areas are unoccupied areas.

At the site confirmed the presence of buildings for commercial use, usually not covered by the current practices of urban redevelopment, ie the vision of the relocation on the part of the manager, contemplates only to dwellings and not the "bread and butter" of many residing in such areas. Finally, the proximity of relocation is also present as conditioning of popular acceptance. In most cases the proximity of where it is suggested relocation directly *influences the popular acceptance. It is*

worth noting that, as this section of river Jaguaribe, is a municipal boundary, it is necessary that a policy is developed integrated land management between the municipalities of Cabedelo and João

Pessoa, in partnership with the State, such positioning should include, the availability of land to promote the reduction of irregularities, using the mechanism of expropriation provided for in the Statute of Cities. This position shall include the provision of land to promote the reduction of irregularities, using the mechanism of expropriation, under Statute of Cities. From the John Person, based on satellite imagery and field visit, we determined the availability of open spaces, empty urban community near Sao Luis, as shown in Figure 6.

By way of suggestion, we selected three areas that can be subject to the expropriations to compose designs of houses that serve as an alternative to relocation community Sao Luis (Figure 6). Currently the areas are in urban voids and does not compromise the APP Jaguaribe River. With a joint effort of the ones responsible, several other mechanisms could be used to complement the relocation process. Much has questions about the process, which removes people from a situation of non-payment of certain fees as property tax and TCR to places where they will have different financial needs, such as rates of energy and water, for example. Thus, it is necessary that besides the relocation, other providences are taken with the aim of complementing the action taken to obtain ultimate success in protecting the places once

occupied. The state government, for example, could promote partnerships with companies in reducing ICMS's for overtime, for which they offer courses that enable the population to engage in the labor market and so they were able to keep the new structural conditions and not return to areas taken before the APP. Given the above, due to the knowledge of the evolutionary process of irregular occupations in Permanent Protection Area Jaguaribe river, in the studied, as well as on the evaluation performed in St. Louis community, it becomes evident that, using legal instruments needed, as well as a thorough study of each case of illegal occupation, it becomes possible to reverse the process of occupation, sheltered cases irreversible changes in the river, such as landfills concreted.

Instar the need for cooperation between local governments responsible for maintaining the APP in order to remedy the impacts caused by irregular occupations in an area so important to the urban ecosystem. Therefore, it is believed, however, it is necessary to remodel the current housing programs to enable the popular acceptance by meeting the needs of each family involved and provide structures that add quality of life to them. So with the political effort and the necessary tools, you can build a healthy city, respecting the environment and meeting the needs of its inhabitants.

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