# AGRIBUSINESS, URBANIZATION AND SOCIAL-SPATIAL INEQUALITIES<sup>1</sup>

## Renato Pequeno

Federal University of Ceará (UFC) – Dept of Architecture and

Urbanism²

renatopequeno@gmail.com

## **Denise Elias**

State University of Ceará (UECE) – Graduate Student in Geography<sup>3</sup>

deniselias@uol.com.br

#### INTRODUCTION

The acceleration of urbanization and numeric and territorial growth of cities are among the more incisive impacts of the process of economic globalization. In Brazil under the aegis of the technological revolution, an intense urbanization process takes place, transforming its geographical space, the organization, dynamic and landscape of which contrast with those existing before the current transient system, which according to the denomination which Santos gave (1985, 1988, 1996), we classify it as the technical-scientific-informational era.

The expansion of modern systems of objects (SANTOS, 1994, 1996), especially those associated with transport, communication, electrification, and sanitation has equipped the national territory for agricultural and industrial modernization. This expansion has also intensified commercial exchanges, allowing for the territorial integration of the country, connecting areas which were thereto not connected. The result was a significant spatial dispersion of production and consumption, with a consequent process of specialization of production. This refined the relationship between different areas of the country and multiplied the amount

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<sup>&</sup>lt;sup>2</sup> Member of the Network of Researchers concerning Average Sized Cities (ReCiMe) and of the Observatory of Metropolis, vice-coordinator of the Globalization, Agriculture and Urbanization research group, (GLOBAU), all registered with CNPq.

<sup>&</sup>lt;sup>3</sup> Coordinator of the Globalization, Agriculture and Urbanization research group, (GLOBAU) and member of the e Network of Researchers concerning Average Sized Cities (ReCiMe), registered with CNPq ambos. A CNPq researcher.

of 'fixtures and streams' (SANTOS, 1988), of materials and information, throughout the national territory, spreading different productive patterns.

All this has made contemporary Brazilian urbanization a complex and distinct phenomenon, given the multiplicity of variables which interfere with it. The greater the division of work becomes, the more intense and complex the urbanization process becomes. Parallel to that, great population growth is taking place, culminating in a new territorial and social division of labor and thus a new allocation of the instruments of labor, jobs and the allocation of men and women in the country.

In fifty years, a true inversion of population distribution has occurred in Brazil, with a generalized urbanization of society and of the territory. Globalization as led to the re-structuring of the pre-existing territory and production patterns, which has disrupted the former structures, functions and forms. Every time the territory is re-elaborated to meet globalized production, new artificial 'fixtures' are superimposed, which increase the complexity of their technical systems and of their rugosity. (SANTOS, 1988)

The dynamism of the production in Brazilian territory in the last decades can be revealed in many ways: through the restructuring of production in agriculture and cattle raising and that of industry; by the expansion of specialized commerce and services; through the new locations for industry which are party due to the struggle to find locations for productive investments. The dynamism is also revealed by the expansion of technologically based industries; by the increase of quantity and quality of intellectual work; by the expansion of new forms of consumption; by intense migratory movements, among other factors.

One of the means of recognition of current Brazilian society and territory is the study of the restructuring of the production of agriculture and cattle raising which has been taken place over the last three decades in a special way. Since that time, a new economic model of production of agriculture and cattle raising has been organized and has spread, which is called 'agribusiness,' when many new agricultural spaces are made available for this production<sup>5</sup>.

Using Milton Santos' (1996) nomenclature, we could say that in this context, that the semi-arid and drylands in the Northeast of Brazil, which in a certain way compose part of the legions of places of reserve are becoming attractive and were or are being incorporated in agribusiness. This is especially true in the humid valleys (São Francisco, Açu, and Jaguaribe), associated with horticulture and in the drylands (south of the states of Maranhão, Piauí and the west of Bahia), associated with the expansion of soy bean production, which are expanding due to intensive production methods.

Among the characteristics of globalized agribusiness is its strong integration with urban economy, which develops into an extensive gamut of new country-city relationships. This, in part, dilutes the classic dichotomy between the two sub-spaces. The cities which are close to areas where agribusiness is realized become responsible for the supply of their main demands, whether it be for labor, financial resources, legal issues, raw materials, machines, technical assistance, etc. This, thus increases the urban economy and promotes urban, regional restructuring

These cities should be seen as the materialization of the general conditions of the reproduction of capital of globalized agribusiness. Its main functions are associated to the increase in demand for new, specialized products and services. This promotes growth in the number and size of the

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<sup>&</sup>lt;sup>4</sup> The term 'fixtures and streams' is used by Santos to discuss things which include facilities, infra-structure and public works while streams includes ways of distribution, flow of products.

<sup>&</sup>lt;sup>5</sup> Although the issues discussed in this article could be also observed in other countries, we are focused on the Brazilian case.

cities in the new productive agricultural regions in Brazil, in which the restructuring of agricultural and cattle raising production takes place.

Thus, the more capitalism is intensified in the country, the more urban the regulation, management and normalization of agriculture and cattle raising become. The more dynamic the restructuring of the agricultural/ cattle raising production becomes, the more globalized its spatial circuits of production and cooperation become (Santos, 1986a, 1988; Elias, 2003), and the greater and more complex the country-city relationships become. This results in a significant remodeling of the territory and organization of the new urban system, bringing the multiplication of small and average sized cities which hold important places for the realization of globalized agribusiness. In the same way, considering that the spread of this agribusiness occurs in a socially and spatially exclusive manner, its spread promotes the incitement of social and spatial inequalities in the cities of the agriculturally productive regions as well.

Thus this article has as its main objective to discuss some of the principal social and spatial inequalities which are being reproduced in urban, non-metropolitan spaces in the new agricultural, productive regions of the Brazilian Northeast. These regions have experienced, starting with the new tendencies of Brazilian urbanization, a process of urban restructuring, with the expansion of new economic agents. In this text, as an object of analysis, the city of Mossoro was chosen. It is an average sized city, located in the state of Rio Grande do Norte (RN), which has agribusiness in horticulture. It has been one of the main vectors of economic growth and the urban restructuring in the last three decades.

It is well to note that Mossoro polarizes a sizeable region, assuming a place of leadership in the networks of cities which have already been consolidated. It brings together those cities associated with agribusiness, such as the extraction of salt, of petroleum and of natural gas, as well as others which continue with traditional ways of production. This creates intense intra-regional disparities. Housing is the principal variable chosen for analysis, presenting a group of adjacent processes and showing specific details which distinguish it from other urban situations.

## NEW ECONOMIC AGENTS AND THE URBAN DISPERSION

In Brazil, the intense urbanization process over the last three decades contrasts with the country of the pre-technical-scientific informational period, having been essentially agrarian. The phenomenon of metropolization was implanted from the 1950's and has greatly supersedes the initial classification of nine metropolitan regions.

At the beginning of the Brazilian urban acceleration there was an increase in the concentration of economic activities and of the population in a few cities. These grew in an unorderly fashion. The new forms of production and consumption associated with the new economic and cultural standards could only establish themselves in the larger cities, which became metropolises as a result of the acceleration of the modernization and urbanization process. This process attributed the role of being macro organizers of the economy and of the territory to these cities.

Between 1950 and 1980, an increase in the concentration of the economic activities and of the population took place in a few cities. A quite substantial part of the demographic increment of the country took place exactly in these metropolitan areas, to which large groups of migrants headed. This was especially true in the 60's and 70's, since the agglomeration of the economy had reinforced the role of these metropolises as the main focus of economic activity in the country.

Considering the predominant tendency in capitalism of some areas, they accumulated the largest part of technical and economic resources, which is the current base of organization of Brazilian production. It resulted from historical inheritance and the speed of the spread of innovations. One can see that the productive restructuring occurred more intensively in the southeast and southern regions. There, the spread of innovations was faster and more complex, with a continual renovation of the productive forces and of the territory. These responded quickly to the needs put forth by the economic agents.

In these two regions, from the first moment of the mechanization of the territory, a progressive, efficient adaptation took place in the interests of hegemonic capital. This reconstituted the image of the present, making it into the area with the largest expression of artificial 'fixtures and streams' of all kinds. This would be the area of the country where the technical-scientific-informational field (Santos, 1988, 1996) is seen in a more consistent form. But, even in these areas, there is an accumulation of resources in certain ones.

However, since the 1980's, according to Santos (1993), in his book, Brazilian Urbanization, true urban transformations take place in Brazil, when average sized and local cities grow. Since that time, urbanization is not only a coastal process but moves into the interior of the region, with a strong tendency of occupying the outskirts of the territory. This thus generalizes the process of urbanization for society as well as the territory and unfolds an incommensurable number of metamorphoses in the most distant areas of the Concomitantly to the processes of urbanization metropolization, with the construction of large cities, medium sized and small cities also developed, making the Brazilian urban network even more complex, since they increased the concentration factors, as well as those of dispersion. The resulting division of labor, which was more intense and more extensive, ended up confirming the tendency of occupation of the outlying areas of national territory. Some authors call these phenomena 'dispersed urbanization,' others 'diffused urbanization' or 'extensive urbanization' and still others 'diffused city' and 'dispersed urbanization.'

In light of all this, during the process of acceleration of the spread of innovation, the migrations began to occupy not only the metropolitan regions but also the smaller cities, especially in the areas which more quickly reorganized production and territory

The productive restructuring of agriculture and cattle raising and the organization of the agro-industrial networks forced the spread of the technical-scientific-information field into the agricultural space. This partly explains the move of urbanization to the interior (away from the coast). Thus, there is an increase of urbanized areas in the new productive agricultural regions as well. This was due to, among other reasons, the fact that the management of globalized agribusiness needs socialibility and urban spaces. (ELIAS, 2003, 2006).

Although the large cities find themselves at the heart of the globalized economic dynamic, other agents begin to arise with strength to receive and issue flows of various types and intensities. This resulted in the creation of a gamut of new relationships about territory. Today a series of activities is known, including agricultural and cattle raising activities and agro-industrial activities. These have created relationships which slip out of their immediate surroundings and seek more distant links, forming a true web of globalized spatial circuits of production and circles of cooperation (Santos, 1986a; Elias, 2003). Many of the "stitches and knots" of this

tapestry of circuits and circles are found in the productive agricultural regions spread throughout the entire Brazilian territory.

This is how Brazil enters the XXI century, with a generalization of the phenomenon of urbanization of the society and the territory. The consequence is the generation of a territory which is highly differentiated and much more complex in its definition than it was in the pre-technical-scientific-informational period. Practically makes the continuation of the traditional separation between urban Brazil and rural Brazil unfeasible. It also creates the downfall of the classic schemes of analysis of the urban network, the definition of metropolitan regions and the regional division in the country. This shows the need for a revision of a series of criteria, which in part, are still greatly used today and which open the understanding of the complexity of the current situation. In light of the above, we agree with Santos (1993) when he highlights that a division between urban Brazil with agricultural areas and an agricultural Brazil with urban areas would better reflect the contemporary situation of the country.

In all of Brazil, it is possible to identify various areas in which urbanization is directly due to the achievement of globalized urbanization. The restructuring of these activities accelerates the process of urbanization and of the production of urban, non-metropolitan space. Their important links are due to the ever increasing inter-relationships between the countryside and the city. They developed links to agricultural activities in the surrounding countryside and depend, to different degrees, on these activities. Their production and consumption take place in a globalized manner (ELIAS, 2003, 2006, 2007).

In this way, the productive restructuring of Brazilian agriculture and cattle raising is among the processes which promote the deepening of social division and territorial division of labor, contributing to a complete remaking of the territory. This takes place through the regional and urban restructuring which results in the organization of a new urban system. The new country-city relationships imposed by globalized agribusiness represent a fundamental role for the expansion of urbanization and for the increase of the medium sized and local cities. These relationships are strengthen whether in demographic terms or economic terms. Their structural elements can be found in the expansion of the new relationships of agriculture and cattle raising work. These promote the rural exodus (ascendant migration) and the descendent migration of specialized professions in agribusiness. It promotes the spread of the consumption of agricultural production, stimulating outsourcing and consequently, the urban economy. It shows that it is the city which regulates, manages and normalizes the transformations which occur in the countryside, which spread agribusiness participation throughout the spatial circuits of the globalized agricultural economy (ELIAS, 2003, 2006, 2007).

The success of this agribusiness is due to the formation of globalized agro-industrial networks which bring together the following: agricultural and cattle raising companies, suppliers of chemical raw materials and mechanical implements; biotechnological research labs; service providers; agro-industries; commercial distribution companies; agricultural and cattle raising research companies; marketing companies; supermarket chains; fast food companies, etc. This results in the intensification of the division of labor, in the inter-sectorial exchanges, in the specialization of production and in different productive agricultural territorial organization, including the rural areas and cities which are nearby. This shows the deepening of the territorialization of the capital in the countryside and of the olygopolization of agricultural space.

The impact of all these transformations on the dynamic of the population and on the demographic structure has been intense. Concomitantly to the productive restructuring of agricultural and cattle raising and agro-industry there is a demographic and urban revolution marked by large population increases. A characteristic of the process of modernization of the agricultural and cattle raising activities in Brazil is the development of a more extensive gamut of new relationships between the countryside and the city, given the increasing integration of agriculture and cattle raising in the circuit of the urban economy. This is mainly due to the fact that the globalized agribusiness has the power to impose territorial specializations which are ever deeper.

In this way, the more globalized agribusiness is spread to agroindustrial networks, the more urban its regulation becomes. It produces urban restructuring in the new productive agricultural regions and the cities there begin to take on new functions, being transformed in places, in every way, of cooperation which was raised by globalized agribusiness, resulting in many new territorial groupings.

Many cities in the productive agricultural regions of Brazil have developed links to the agricultural and agro-industrial activities of the surrounding countryside and depend, in varying degrees, on these activities. Their production and consumption are by and large carried out in a globalized manner. Throughout the country there are various examples of cites which have agribusiness at the heart of their economies. (ELIAS, 2006, 2007). (map 1)

We could site some inherent examples of a recent occupation of restricted areas in the northeast region, whether associated to the expansion of horticulture in the humid valleys or the expansion of soy bean in the drylands. These are in unison with the implantation of international, hegemonic companies in the field, de-structuring the former social and spatial formation, bringing new territorial, political and socio-cultural dynamics to the surrounding areas. Examples are cities such as Barreiras (BA), Luis Eduardo Magalhães (BA), Petrolina (PE), Balsas (MA), Mossoro (RN), Limoeiro do Norte (CE), among others.

## THE NEW FRONT OF SOCIAL - SPATIAL INEQUALITIES

The diffusion of globalized agribusiness in the Brazilian northeast, be it tropical fruit or soy bean, which has expanded the process of territorialization of capital in the countryside, has been promoting innumerable types of metamorphoses. The new territorialities are visible in the countryside and in the cities. These are points of transformation of nature, of the creation of a new horizontality and verticality (SANTOS, 1988) and articulation between the local scale and the global scale of things.



Map 01 – Some examples of Brazilian Cities of Agribusiness

But the productive restructuring of agriculture and cattle raising accents the historical social and spatial inequalities, besides creating many new points of inequality. In this way, production which regulated by the market associated with the new patterns of food consumption is taking place. It is commanded by the large hegemonic groups of the food system, resulting from a change in the function of agricultural and urban spaces. This restructuring spreads specialized production, which maintains structural, traces of the region, unassociated with any goals of a fairer, and more well-balanced and sustainable society.

Among the negative impacts of this process, we highlight the following: an increase in the disintegration of subsistence agriculture as well as an increase in the participation of agricultural-cattle raising companies in the total agricultural-cattle raising production of the region; the expansion of monoculture and consequently the decrease of biodiversity thus speeding the process of genetic erosion; the change in agriculture technical systems with the diffusion of a technological packages dominated by oligopolistic production which is often inappropriate for the regional environmental conditions and destroys knowledge and methods which have been historically created; the increase of the concentration of land, with a expropriation of farmers who do not detain ownership of the land; the incitement of the land market where prices are increased which even further contradicts any aspirations of Agrarian Reform; the incitement of the privatization of water with the new forms of normalization of its use which forms a hydro-business scenario; the formation of a formal agricultural labor market with the expansion of salaried workers, whether manual work or specialized jobs; the fragmentation of agrarian space which differentiates even more, the spaces for production, composing distinct productive agricultural territorial setups, among other negative factors (ELIAS, 2006. PEQUENO, 2006).

All of this has been reflected in the main non-metropolitan, urban spaces which are inserted in the new productive agricultural region in the northeast region. The analysis of the research which gave birth to this study took place in the cities of Barreiras (BA), Petrolina (PE), Balsas (MA), Mossoro (RN), and Limoeiro do Norte (CE), among other. These cities are

going through regional and urban restructuring processes, reproducing the same urban problems of larger cities.

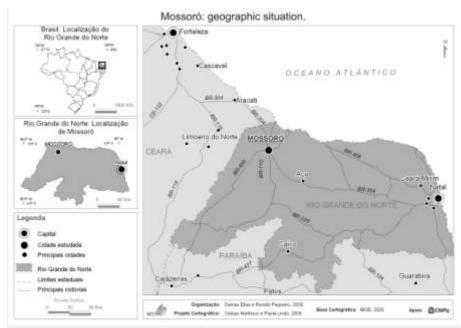
In spite of the diversity of the economic, social-environmental and cultural situations present in the semi-arid and drylands, various processes which are repeated were identified. We can cite the unorderly growth of some cities, increasing the population on the outskirts of the urban areas as well as the lack of infra-structure; the absence or insufficiency of public facilities (daycares, schools, health centers) in the areas inhabited by the lower income population; areas at environmental risk being occupied; growth of shanty towns in spaces designated for institutional use or green spaces; dissemination of urban empty spaces which promotes real estate speculation, illegal lots on the outskirts having no infra-structure; congestion of downtown areas with the movement of loading and unloading products, among others.

These factors are found to be directly related to the intense, rapid demographic growth, which the municipalities have gone through. This also relates to the spatial redistribution of the population in their respective regions, thus accelerating an intra-regional migration. Besides this, it is well to note that the greater migratory flow coming from neighboring regions and other states incites, in this way, unorderly urban growth. This is visible in the way the cities expand along their regional road systems or even following the intra-municipal arteries of access to district headquarters and rural localities. Out of this a series of problems linked to urban and regional circulation and mobility arise, which touches the downtown areas of the cities as well as the outskirts, the transition spaces and the most distant rural localities

The fact is that unequal access to public facilities and the networks of infra-structure between populations in the urban and rural areas, as well as the centralization of public institutions and services in the central offices of the municipalities polo, reflect an urban growth which is predominantly excluding and is associated to the unequal form by which access is granted to the benefits which urbanization brings. They also bring conflicts and incompatibleness of use and occupation of land, leading to the rise of compromising marks of environmental degradation on housing conditions at different scales.

However it is in the construction of residential space, whether those be formal or informal, legal or illegal, stimulated by public authority of by the private sector, whether they are have proper technical assistance or are self-built that one can perceive the more predatory form which urban expansion takes on. This is true in the central areas as well as the middles areas, surrounding areas or even in the transition zones between urban-rural. We chose the city of Mossoró (RN) for the detailed analysis. (Map 02)

It is possible to recognize a worsening in the social and spatial inequalities in Mossoró on the regional and intra-urban scales, using an analysis of variables associated with housing conditions. The processes herein dealt with, with the intent of showing these disparities, are directly associated to the transformations taking place in the economic structure of the municipality and in its region of influence. An understanding is evident that the urban space, in the manner that it is produced, reflects the historical changes in productive processes (CORRÊA, 1995).



Map 02 – Mossoró: Geographic situation

Aiming to identify the main processes associated with the social and spatial inequalities present in the intra-urban space in Mossoró, we sought to associate them, in the first analysis, to the agents which produce urban space, notably those working in the production of residences. In this sense we analyzed the different 'cities' which super-impose themselves on the intra-urban space of this city. They were distinguished in the following manner: a) the city of public policy where the localization of social interest housing groups prevails; b) the spontaneous and informal city which corresponds to the forms of housing which are predominantly precarious; c) the city of the real estate market, grouping the areas under the influences of the real estate market which target those with greater buying power.

However, it is well to note that we clearly recognize the presence of intersections derived from the associations between the various agents producing space, some of which are not always explicit. These sometimes become visible through the analysis of instruments of planning and management of urban land, formulated by local authorities.

## The city of policies for social interest housing

When we analyze the process of urban growth in Mossoró, in its various phases, it is possible to verify its strong link to spatial distribution of the economic activities of greater importance in the region, throughout the period. Thus, each change in the productive structure brings alterations in the city's morphology, historically defining the fragments which represent the unequal process as well as the intra-urban space in Mossoró which has been being produced.

Mossoró is consolidated as an urban nucleus due to its location as the crossroads of roads coming from the drylands where commercial relationships associated to cattle raising, cotton and the extracting of natural resources from the drylands grass are established. The city had a salt culture as the driving force, capable of attracting large population contingents and gained a place of prominence in the regional urban network. Considering the large number of jobs originating from the artisanal phase of the extraction of salt which caused progressive migratory flow, residential areas formed

which were recognized as homogeneous to their socio-occupational content, and were found mainly to the north of the central area. This established, during the urban evolution, a differential between one part which encompassed the commercial downtown area and the surrounding districts which had access to better public services and the other part to the North, where the salt workers lived. This area was filled with predominantly inadequate housing and urban precariousness.

The decade of the 1970's was a mark in the history of Mossoró. The population movement from the countryside to the city intensified, driven by the recurrent problems in subsistent agriculture, which was the predominant activity in the semi-arid northeast up until that time together with the substitution of the manual labor force by machines in the salt extraction. Beside this there was the decrease in these opportunities due to the decline of agro-industries in benefit of oleaginous companies principally from the crisis in the production of cotton caused by pests in the crops. This brought a not very encouraging scenario to the city and increased the space occupied by poverty.

However, in this same decade due to its position as the second largest city in the state, being half way between Fortaleza (the state capital of Ceará) and Natal (the state capital of Rio Grande do Norte), it became a consolidated regional center. Mossoró became the target for national programs of urban development, and was included in the National Program of Urban Development for Medium sized Cities in the 1970's.

During this period, public authority began to intervene in the area of housing production at the different levels: a) federal - granting funds from the Financial System for Housing (SFH), which were obtained through the National Bank for Housing (BNH); b) state level - through the State Campaign for Housing (Cohab-RN), which built thousands of homes and implemented networks of urban infra-structure; c) municipal - through the approval of the use of public lands for the implantation of housing complexes, as well as through the formulation of the Master Plan of the Organization of Urban Space in Mossoro in 1975. This plan began to define, in zoning, which uses were compatible given the possibilities brought with the policy for national urban development which had been established by the federal government.

One can observe the location of these housing complexes being on the outskirts of the city. This occurred all over Brazil and took place in Mossoro from the first complex built in the 1960's. In this case, the first complex was built in the district of Alto São Manoel to the east, on the other bank of the Mossoró River, which runs through the city. Cheap land was the justification which was given for these choices. With this, authorities wanted to induce the expansion of the city to the southeast, towards Natal, the state capital.

In the middle of the 70's, due to the State Housing Program, City Hall began to interfere more directly in the urban expansion of Mossoro by defining which areas would be given up, by decree, which were situated to the northeast and the southeast. Housing complexes were implanted in these areas.

It is possible to affirm that this choice of lands for social interest residential areas began to favor the owners of neighboring feudal lands which were between the downtown area of the city and these outlying areas where the housing complexes were implanted. The benefit came in that these areas now had access to networks of urban intra-structure and services. Besides this, the Master Plan of Mossoro contributed as a factor of choice of these outlying areas especially to the northeast, the location of the industrial

district which was being implanted at the time, next to the Interstate highway BR304 following the logic of the binomial: the location of the industry and the policies for public housing projects.

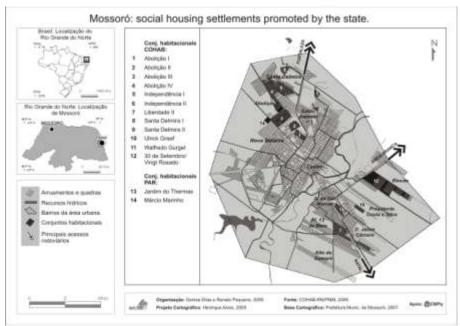
Although they were distant from the downtown area and urban services, factors such as the presence of basic infra-structure and the motivation of 'owning one's own home' made these complexes attractive to the local housing demand, especially to those associated with the lower middle income classes. It is well to note that in this period funds coming from the state were used not only for lower income classes but also for middle class housing, by obtaining financing for building one's own home. These loans used interest rates which were below the market, as well as giving a long time to pay them off.

With this, one can observe that in Mossoro, as in the majority of Brazilian cities, the population in social exclusion is only not complete forgotten by housing policies because of their inclusion in the labor force needed to build houses and infra-structure networks.

Upon analyzing the urbanization process in Mossoró , Pinheiro (2006) highlights that the housing production with funds from the Financial System for Housing through the BNH programs, executed by Cohab-RN and Inocoop represented the main urban interventions in the 1970's and 80's. They directly influenced the configuration of a new axis for expansion of the city towards Fortaleza to the northeast and towards Natal to the southeast.

Please note that the differences of the target public of Cohab-RN and Inocoop influenced the definition of the location of each. The lower income complexes were farther away, sponsored by Cohab-RN, aiming at the social segments of lower middle income class, situated to the northeast, while the other linked to Inocoop, sheltered segments which were quite superior. These were closer to the areas of interest of the real estate market, to the west of the downtown area. Later this would be the place of the formation of a residential segregation axis.

In the 1990's, other complexes were built. In part, the new residential nuclei reinforced the northeast sector, but were on land even farther away from the downtown area. Others were implemented to the east and southeast, but having as a target public the lower middle income sectors associated with the neighboring uses of land, such as public universities and Petrobras (Fuel Company) along the BR304 highway. (Map 03)



Map 03 – Social housing settlements promoted by the State

Due to the implantation of these housing complexes, the city began to experience a process of unstable growth. However, we should highlight the fact that the location of the majority on the outskirts of the city led to a situation of social and spatial disparities concerning the access to social facilities, which were concentrated mainly in downtown and neighboring districts. As we are dealing with a medium sized city where public transport is not present, inhabitants of these new sectors faced daily problems with urban mobility which echo still today as challenges for municipal administrators.

More recently, public works of social interest housing have become means for inferior housing, such as shanty towns and in risk areas. The main indicator for quantification of demand is this. It shows the process of fragmentation of housing provision which is proven by the reduced numbers of housing units in each intervention.

#### The informal, spontaneous city

In the way in which they were implemented, the social interest housing policies in the 1970's and 80's led to the consolidation of pre-existing areas of social exclusion where the manual labor workers from the salt extraction plants lived. They also led to the rise of dozens of areas being illegally occupied, bringing new sectors to the city marked by unequal access to the urban infra-structure networks, directly associated to the distribution of public facilities.

With the extinction of the BHN in 1986 and the consequent reduction in public authority intervention in the production of popular housing, shanty towns become the predominant alternative to provide housing for the more needy social classes. From then on the shanty town areas began to be more densely populated. At first there was an expansion into empty lands of the surrounding areas which were still available for occupation. Then these illegal settlement lots were completely full and began to grow up through self-built upper floors. Tile roofs were substituted by slabs on which new compartments could be built. However, these spontaneous settlings have been more numerous and more precarious on the southern edges and places close to strips of environmental protected lands. This has made the shanty towns, the preferred target of public housing policy recently.

Concerning the location of the shanty town areas in the urban space of Mossoró it is possible to perceive the presence of two groups: a) first,

north of the downtown area to the northeast, agglutinating itself on the edges of the low income districts to the north of the city center (which before were poverty stricken districts) towards the northeast, where housing complexes were placed in a later phase of BNH programs; b) another group gathers in the areas close to environmentally protected strips of land to the south and others to the southeast, serving as the lintels to the low income lots and housing complexes situated in that direction.

The presence of the illegal city, which is exactly the most unequal, unites, however, the housing projects of different agents which produce urban space. Data from the Municipal Secretary for Territorial Development for City Hall, obtained in 2008 show the presence of fifteen illegal allotments, stimulated by the private real estate sector and designated for low income families, ever since the 1990's. It forms a perfect arch between the northeast and the southeast, going through the most distant parts of the districts to the north and to the east of the city.

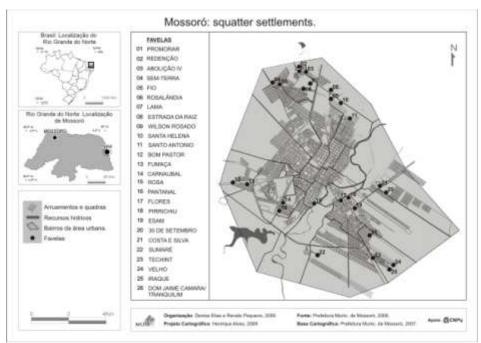
The irregularity of these low income settlements relates to the lack of urban infra-structure as well as a non-definition of institutional public lands, which, are included although, in the federal law for the division of land, Law 6766/1979 as obligatory, were not complete taken into consideration.

With the intent of reducing costs and maximizing profits, businessmen see this model of production of the city as a way of meeting demands of the common people which were not met by public policy. However, due to the precarious and inappropriate manner that these settlements are implanted, there is consequently the production of outlying fragments which do not have basic sanitation. The open areas end up sheltering shanty towns, uniting the poorest groups.

Paradoxically in the case of Mossoró, the illegal production of housing is also confirmed caused by the housing production of the state, which joins fifty low income settlements. Part of these represent small housing groups aimed at areas which were shanty towns and have been urbanized or removed, but where the conditions of relocation did not meet legal requirements. We are dealing with emergency measures to meet the social demands or even the use of pulverized resources in the years after the extinction of the BHN and Cohab-RN. These more recent nuclei of low income housing ended up not meeting the minimum parameters of municipal urbanistic legislation which, itself did not change in light of new situations. As the municipality is its own controller and inspector, ways opened or the implantation of illegal ways with the acquiescence of municipal organs.

The process of the growth of shanty towns, which is recognized in blocks, however disperse and fragmented by the outlying edges of the city, has represented a principal demand for the most recent public policies. When dealing with small shanty towns, with a small number of families, the local authorities have sought to make their removal feasible especially in two situations: a) those strategically located associated with future investments of public-private partnerships; b) those in areas of environmental preservation.

In other cases, it is observed that the alternative has been urbanization of the area with a minimum of permanent removal of houses. This gives preference to the implantation of networks of infra-structure, to the reorganization of parts of some of the houses in order to open streets and install basic sanitation systems. As a cheaper measure and progressively adopted in administrations ever since the middle of the 1990's, urbanization practices allowed the municipality to establish a horizontal future in which shanty towns would not exist. The question of the land ownership after urbanization still remains in most cases. This requires a program to supplement and make the sustainable legalization of these areas viable. (Map 04)



Map 04 - Mossoró: Squatter Settlements

Field studies done in 2008, when we visited outlying areas of the city, made us conclude that the situation of urban inequality in relation to the expansion of areas of settlements is in geometric proportions, which broadens the challenge for local authority to face the housing issue. Even though there was the attempt to eradicate houses made of mud and sticks, every day new houses are built using this material. This reflects the situation of modernization which excludes and which is predominant in the city. The opportunities of the city attract many, but effectively few can take advantage of them. The majority of these new houses have been built in high risk areas, whether on the banks of water resources or along the high voltage transmission lines.

One should note the importance that the housing issue has been having to local authorities, who have shown an understanding concerning the actions which must be taken in this sector from the municipal point of view. In spite of the extinction of Cohab-RN, the municipality has sought out funds to execute interventions which aim at minimizing the housing situation; even elaborating in 2003 a Strategic Plan for Housing is subnormal settlements (PEMAS). It aims at the formulation of a municipal housing policy tougher with Program Habitar Brasil, with funds from the Caixa Economica Federal (CEF – federal bank) and the Inter-American Bank for Development (BID)

However, we find that to date there has not been a planning process to conduct these actions which are but 'one off' interventions executed using resources obtained from various sources, showing what Cardoso (2001) calls a perverse logic of the putting housing policy in municipal hands.

#### The city of the real estate market

The understanding of the social, housing inequalities in Mossoró becomes clearer when one seeks to identify the areas in which there have been large investments by the formal real estate sector. Although the companies in the real estate sector are few and have only recently arrived, the dynamism of the sector is perceptible in the city. There has even been room for companies coming from Fortaleza (CE), Natal (RN) and João Pessoa (PB). The dynamic is notable through the concentration of projects to the west of the traditional downtown area towards the new center which is forming. There is already a shopping center, a large department store which brings international capital (Atacadão), a private university and some private

residential estates. Among others the most recently released estate is Alphaville Mossoró, part of the famous chain of real estate projects which originated in São Paulo.

The vertical growth of the city is mainly found from the traditional downtown area going west, where the private residential estates have been implanted. The vertical apartment complexes are aimed at upper middle class families. They are on lots which are remnants of the first phase of occupation in the district Nova Betânia, which was marked by single family homes built on large lots.

Here we highlight the growing presence of horizontal complexes as a different form of private estates. Most are located in the same district as the concentration of tall apartment buildings. These residential estates cover approximately a city block but with fewer houses which are similar in their layout. Leisure areas are pubic for those living in the estate and services are shared (use and costs).

More recently, the real estate market began releasing some private estates which are larger and have private streets all within the walls. It is observed that they are located for the most part in two sectors of the city, to the west of the city close to areas which have not been built up and to the east towards Areia Branca.

Added to the tall apartment buildings and private estates present in the district Nova Betânia, these forms of dividing the land are presented as great targets for real estate speculation, inducing the implantation of urban infra-structure such as waterworks and sewer and road systems in those directions, all this in detriment to the vast number of people on the outskirts without adequate urban living conditions.

If one begins from the spatial point of view of the process of housing production for families with greater buying power, such as the verticalization of that and the production of horizontal estates and private estates, it is possible to identify the intense presence of the real estate sector, beginning in the downtown area moving towards the west. This forms a real axis of residential segregation where, as Villaça affirms (1998), the logic of appropriation by the dominating elite through public investments made in infra-structure.

Other districts to the southeast were the target for private real estate investments aiming at building single family homes, however, in light of the existing conditions of urban infra-structures, they ended up not 'catching on' with the public with the same intensity and the implantation of more inexpensive lots began to prevail.

Having the best locations in the city, with the best situation of mobility and access to urban services, this axis is divided into three distinct parts: a) the initial part with high rise buildings closer to the downtown area, together with traditional housing which still remain close to the downtown area; b) the middle part where one can see larger, better quality, single family homes next to the new high rise apartment buildings and the horizontal housing estates, and which stretches to the BR304 highway; c) the last part, from the BR304 highway going west where the new wave of the real estate market expansion is found forming a triple group trinomial: private housing estates, the shopping center and a private university. It is well to mention, however, the complementariness between this new center and the traditional downtown area in light of the easy access road system between the two by the structural avenue of the segregation axis. Both become accessible to the more privileged sectors which appropriated the best locations in the urban space.

An analysis done of the classified ads contained in local, daily periodicals in 2007 and 2008<sup>6</sup> proves the above. One can see the presence

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<sup>&</sup>lt;sup>6</sup> Data collected from archives of local periodicals: *Gazeta do Oeste* and *O Mossoroense*, studied between the second semester of 2007 and the first semester of 2009.

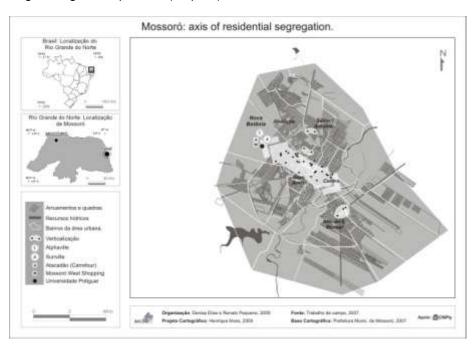
of residential property for rent or for sale which are located in these districts at prices which are lower when compared to property with similar characteristics in the districts through which the axis of residential segregation runs.

We believe that in light of the local situation, similar to that which occurs in the majority of Brazilian cities, there is no demand with sufficient buying power for the two distinct areas to be the target of real estate investments, which leaves some real estate projects to the southeast with many empty lots and with urban infra-structure which is unfinished, even though they were built for the middle class market.

The oligarchy which runs city hall has for decades opted to make huge investments in the construction of some facilities in order to hold large events. This has been done by clearly following a path of polarization and making some traditional festivals a spectacle in the city and region as a way of legitimizing its power. In a society in which culture acquires market value, this process has fed the reorganization of urban space (BEZERRA, 2007).

Thus, Mossoro has been able to count on large public investments in the downtown area. These have formed a process of beautifying public areas, restoring some socio-cultural facilities and even the implantation of new buildings and facilities to hold large events. All of these are located in the downtown area. It is well to mention an urbanistic intervention along the downtown part of the train lines, which has brought new life to this sector of the city. It joins, in one complex, a museum, theater, memorial, children's park, food court among other things.

We found that there is a bipolarization of the main centers of the city which has been consolidated. These points are connected by an avenue which constitutes an axis of residential segregation where, on one end, the traditional downtown area was supplemented with public investment with this new facility and at the other end a new center of activity is consolidated with each new residential real estate project, whether inherent or tertiary. The ease of access using regional roads, such as the BR304 highway also confirms this hypothesis, since the two centers of activity, when connected assume a regional nature, meeting the demands of various other neighboring municipalities. (Map 05)



# Map 05 - Axis of residential segregation

One can also perceive that on the edge of this urbanistic intervention in the downtown area, the outline of future real estate investments in high rise buildings is present. This is due to the new residential buildings which have been built or are under construction. This accumulation can be associated to the increase of land prices in the real estate market, which leads to the intensification of the use of urban land, the progressive homogenization of the population and to residential segregation. With this situation, the path is open for speculation projects in this sector, which could mean the slowing of the implantation of public investments in infra-structure and public works in outlying, low income districts. This then widens the gap between the different social groups which are present in the city.

#### FINAL CONSIDERATIONS

It is important to mention that the restructuring of agriculture and cattle raising did not make production or agricultural space, or the urban spaces which have grown from the process homogenous. What occurs in counter point to the globalization of production and agricultural/cattle raising consumption is the intense process of fragmentation of production and of agricultural space. Thus, as a resource for a way of understanding Brazilian urbanization, agricultural space and the cities which have strong inherent functions in agribusiness, one must consider this fragmentation which makes the agricultural spaces and the cities in agricultural producing regions more and more distinct.

In light of the identified processes and the elements associated to the problem of lack of housing and the inadequate housing conditions in the cities and regions of agriculture production, one can affirm the need to adopt measures which deal with the housing problem. Years ago, the problem of shanty towns springing up was associated with large urban centers. But in these regions it is not only present but is measurable, being directly associated with the migratory flow into the middle sized cities in the productive agricultural regions. In the same way, these cities become the target of real estate projects due to the wealth generated by the restructuring of productive activities of agriculture and cattle raising. This makes construction a potential investment

Local authorities, in turn, dependent on resources coming from state and federal governments, continue with sporadic actions which are not connected to any housing policy of municipal public interest, non-existent on the various scales. It is observed that due to the magnitude of the problem there are already actions emerging from civil society and non-governmental organizations to present sample projects as alternatives capable of generating positive impacts on public policies.

In a deeper study on the available data concerning the housing deficit and inadequate housing conditions, it was possible to affirm the contradiction between the housing deficit and the existence of empty residences being nearly similar in quantitative terms. However, if one considers the data on inadequate housing, it is perceived that the lack of a public housing policy, whether on a national scale, in the formulation of programs, providing viable, designated funds, or whether on a state or local level in the promotion of its implementation and execution in the way it was planned, the problem herein shown tends to grow and thus compromises the capability of providing housing in urban areas.

The problems associated with land irregularities, the concentration of ownership of urban land and the unequal manner in which the infrastructure networks are implemented, beside the unevenness of the production of housing, concerning the balance of supply to demand, leads us to believe that the housing issue will not be resolved through sectorial housing policies, but rather through the integration of policies concerning urban and rural development territorially. So, considering that the housing problem is linked to the conflicts of the use and occupation of the land, once the needs for transport and mobility are articulated and connected to the demands for networks of infra-structure and public services, we believe in the need to take up urban planning once again as a strategy to improve the current situation.

Having the available legal means in mind, given by the Statute of the City, and the value given by the Statute to the Master Plan as an instrument of urban policy, including broadening its reach to the entire municipality, not only the urban area. The hypothesis that the middle sized cities in the productive agricultural regions be an appropriate context for the formulation of new propositions seeking solutions in the city for the issues in the countryside, and in the countryside the answers for urban problems.

There is the interest that the research we are doing now offer consistent elements for analyzing urban, non-metropolitan spaces in the productive agricultural regions, verifying to what extent they establish identities with other cities of the same size, with distinct functions. This, since the movement for the expansion of capitalism tends to promote homogeneities. On the other hand, we know that the same variable has different impacts according to the place where is it shown, and thus depending on the group of relationships between the most different possible dialectic pairs (Santos, 1988) for the analysis of space and society. This finding stimulates the study and analysis of the role of the various actors which alter the processes of urban and regional structuring in different ways.

In this way, this study reflects, on one hand a path which has been opened and is being used, while at the same time it shows that these is much work to be done so that the changes can be understood. These changes have been taking place in the roles played by the urban, non-metropolitan spaces, in the new productive agricultural regions in Brazil. This will occur as the movement of inhabiting Brazilian territory widens and as it is integrated in a deeper way to the globalized economy.

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