Analysis of Urban Renewal Program and Environmental Valorization and its Applicability in Valley of the Paraiba Region

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KEY WORDS: Urban Renewal, Sustainable Development, Urban Planning, Sustainable Cities, Urban Remote Sensoring, Urban Ecology.

ABSTRACT:

This research aims to guide the public policies actions relating to the urban renewal and cities environmental valorization from historical, cultural and environmental heritage protection policies, in Valley of the Paraiba cities in São Paulo State, Brazil. The urban renewal aims to recover the inhabited environmental quality in order to improve the human life quality. We can't think about it without considering the natural landscape, which always interferes direct or indirectly in this condition. The objective is to develop methodological and technical procedures that establish the elaboration of urban renewal programs and environmental valorization which the guide principles allow the municipalities identify their feature, their critical points and their renewal needs, leading it to introduce a certain limited number of actions that can jointly lead it to a sustainability aim, creating a series of public policies which allows the continuation of this long term development.

1. INTRODUCTION

This paper aims to contribute to the action orientation of public policies relating to the urban renewal and environmental valorization of Valley of the Paraiba cities, Brazilian regions located between São Paulo and Rio de Janeiro metropolis.

The urban renewal is "a kind of performance associated to urban culture and attraction capacity and sustainable development of the territories, bearing in mind the physical and social parts regeneration" (Moreira, 2004).

The inicial reason is that Valley of the Paraiba only will be able to improve and recover its national importance when it gets its biggest natural heritage back, which is the Paraiba do Sul River. Its total purification and the ciliary woods recovery is the desirable sustainability way. The region, because of being between mountain range of Mantiqueira and mountain range of Mar, has a particular geographical feature which is its big territorial extension in Southwest-Northeast direction, around 188 Km, against the narrow land lane in Southeast-Northwest direction, around 59 Km. This region also gathers the biggest part of built historical heritage in São Paulo State, due to its historical importance in the country development. This particularity led the Union, in past time, to build a federal highway, Presidente Dutra Highway (BR 116), connecting Rio de Janeiro city, the Capital on that time, to São Paulo city, national industrial resource producer pole. This highway ended up being the connecting corridor between the valeparaibanas cities which grew in its borders.

In the city space organization search, we always noticed a preoccupation about the urban, the built environment, in detriment to natural environment. An urban division similar to a social one is favoured by a heavy capitalist influence where the fortunate people occupy the best spaces and to the needy is left the empty urban not occupied, the low value trading areas and deteriorated or environmental preservation areas when there isn't inspection. This phenomenon occur in Brazil because the rural migration occurred during the first decades in the second half of last century, that, with the country life economical and philosophical drop - understood here as life quality found by the nature contact and the simple countryside life and the farming production economic value on small scale – and, according to what Cardoso and Valadares (2002) claim, the attraction of the urban life comfort in addition to the capitalist phenomenon led a rural population migration to urban centers seeking for a new life perspective. According to Ferreira (2002), in the 60s and 70s, about 30 million people migrated to the cities, filling them up with the uncontrolled frantic urbanization.
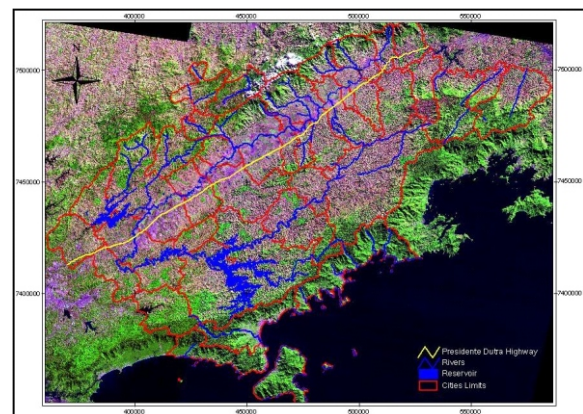

Figure 1 – Valley of the Paraíba – Landsat, 1997 image - Source: Instituto Nacional de Pesquisas Espaciais (INPE).

After this urban population explosion comes the speculative capital appropriation of urban areas or surroundings, imposing an uncontrolled growth, where the beginning of each urban business _ land tenure, habitational areas , among other ones _ ended up being separately analyzed by the municipality public power, with no kind of worry about its integration to the existing urban fabric with nearby areas, often invading countryside. This individualized view of the city, where the lack of a global study, can't anticipate this

establishment consequences, occurring almost always a cut in the urban fabric continuation and a serious environment impact in its surroundings. In addition to it, we have the land appropriation by migrants, close to big centers, almost always in dangerous or environmental protection areas. The lack of a professional qualification of these people lead them to a segregation into the city, since they live in underemployment and in subhuman conditions, so when they come closer to the work places, they form urban mass, slums or not, which are always established by public power with the substructure, even though it is minimum and without a minor technical rule.

2. SUSTAINABLE URBAN PLANNING

According to the Commission of the European Community (CCE) idea, a sustainable urban conception is that in which different areas of the city supply its inhabitants housing, job and leisure needs, avoiding this way, the big urban displacement.

A research made in 1989 by Newman and Kenworthy in American and European cities showed that the bigger soil use density, the smaller private automobile use, this is due to the fact that a great density offers a wide range of trading and basic services to its population daily. Differently from Brazil where the land-use planning division system creates districts with great density but with little different soil use. This causes a traffic overload in our metropolis because the excessive private automobiles use.

Watching the region between São Paulo and Rio de Janeiro metropolis, via satellite images, can be noticed that in the Valley of the Paraiba is found municipalities in several different development levels, some of them in junction advanced process of their urban fabrics. However it can also be noticed a big forest area still preserved on the mountain range that delimits and goes down to its foot forward to the Atlantic Ocean coast. This feature, in addition to its historical importance showed that this is a potential region to this research establishment.

CCE, in its communication COM(2004)60, states that the urban renewal actions might Promote more holistic, integrated and environmentally sustainable approaches to the management of urban areas. Concomitantly, Portugal has been developing the urban renewal Polis Program which has its principal aim to improve the city life quality with the environmental and urbanistic interference. (Portugal, 2002).

In Brazil we have seen some actions through programs, mainly from Instituto do Patrimonio Historico e Artistico Nacional (IPHAN), however with a poor performance, as the most notorious example, it can be mentioned the Urbis Program, which "is a kind of Historical Siege of Urban Renewal, which is strategic to problems resolution relating to cultural heritage in the cities, as it turns to the culture urbanistic heritage development. In this program, the cultural heritage is considered a propeller element to local development." (IPHAN, 2004). This attempts intend to revitalize these cities central areas, however they don't consider deeper changes, as municipal order, dated at the end of the XX century, that sent the unfortunate class off these centers, submitting these areas to the real-state capital (MARICATO, 2001).

3. PROPOSAL

This study is at the end of the first part. In this study area, Valley of the Paraiba was described as a study topic from eight municipalities along Paraitinga river. This micro-region was chosen because it has small municipalities, about 20.000 inhabitants and low urban density - about 49% of the population still live in the countryside (IBGE,2000), the cities have little sanitation urban substructure. About 54% has canalized water and only 46% has sewerage system (IBGE, 2000). Nevertheless, there is 24% of its territory covered by original Atlântica Forest - 124.753ha in total (SOS Mata Atlântica, 2000).
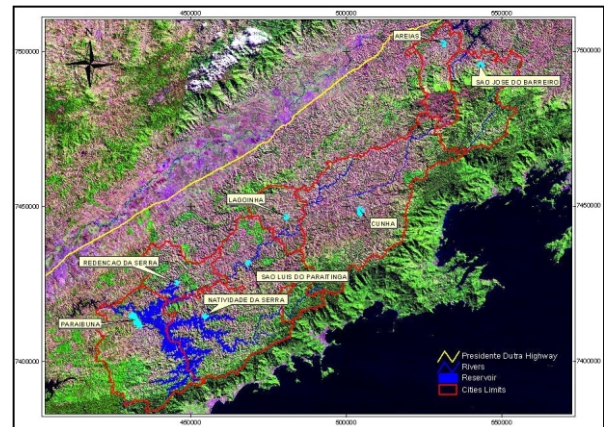

Figure 2 – Municipalities in Paraitinga river basin – Landsat image, 1997 - Source: INPE

Covering polygons on urban parts on Landsat image, we could noticed that these municipalities only occupy 11,21% on average of its territory, what fortifies even more the planned growth possibility, starting from small renewal actions. These features allow us to project a model of sustained growth, based on the local rural talent and ecological tourism.

It was adopted the Program Polis – Urban Renewal Program and Cities Environmental Valorization, currently in progress in Portugal, as reference to the definition of research components. This Program is determined in the Minister Council Resolution n. 26/2000 and it quotes in its text "a new urban regulation and environment strategic view". Polis Program gathers the city in four groups: Green Cities, are the ones which not only divide their sanitation and environmental problems but also valorize the environment in its renewal actions; Digital Cities, are the ones which have good digital communication services and promote its culture and utilization; Entertainment and Knowledge Cities, the ones which are endowed with leisure, apprenticeship and cultural spaces in order to attract, graduate and set young people and; Inter-generations Cities, those ones which worry about avoiding city segmentation in age groups, attributing new functions to historical centers. This segmentation is due to the Portuguese cities heterogeneousity. Here in this study object, cities have similar features and can be named rural-touristic cities. It can be noticed through satellite image that beyond the urban center, they have small rural centers scattered on its territory, what intensifies this evidence. It doesn't mean that at increasing the program it won't appear other groups. This cities have a strong inclination to ecological tourism, even though, only a few of them explore it effectively.

Turning to the Polis Program again, we notice that the intervention are also gathered in elements which are subdivided into action ideas. In these action ideas it is done an adaptation to Valley of the Paraiba and Brazil cultural, financial and political reality seeking the balance in he establishment of these actions.

4. PROGRAM ACTION IDEAS

The action ideas in this research are divided into:

4.1 – Mobility, Urban Transportation, and Soil Uses

The new alternatives study of individual municipal transport, in private automobiles decrease expectation is an initial reason in this item. Municipalities should motivate cycling, walking and invest on involving substructure to reduced locomotion people. Using georeferenced images, rules as urban automobile restriction, can be broached in the urban renewal policy application.

4.2 – Cultural, Environmental and Urban Valorization

Valley of the Paraiba is a region which colonization ascend XVII century. The existing architectural collection needs to be salvaged like its cultural roots. The popular culture rescue must be a part of the rescue policy of the native people self-esteem and dignity, so that it could, at the same way, get attached to its habitat, first condition to be aware of the cultural and environmental preservation importance. The historical centers recuperation, their most important architectural models are renewal factors. Big green areas constructions such as squares, and with wide pedestrians circulation area are actions that can contribute to these regions quality improvement. Green areas recuperation in which vegetation is of special interest will be seek into each municipality. Urban fabric must follow its renewal, intending to contribute extremely to the traffic flow. In addition to this city road system organization, the hierarchizing use, however, without create social exclusion, trying to avoid use superposition or antagonistic activities social contact must be of the urban renewal. The basic urban substructure creation in the suburbs and professional activities fomentation in this areas will contribute positively to the improvement of this condition.

4.3 – Monitoration System and Environmental Management

The cities must invest in the monitoring of the water and air quality in their territories. Concomitantly it is necessary the adoption of an environmental management system which stimulate its preservation, both inside and outside urban mesh.

4.4 – Sanitation and Hydric Resources

Past public policies had the river as an obstacle to urban growth and then the canalization was the current idea. Action study that salvages the local rivers, valorizing them, are objects of this intervention line. Georeferenced images are the indicated tools in this actions as guide to conflicting points. Reopening steams wrongly canalized must be considered as well as longitudinal parks creation in their banks with native landscape adoption, recovering the protecting ciliary woods in order to purify them, because the sewerage system in municipalities and these effluents treatment is another objective of this action line.

5. CONCLUSION

By surveys and analyses which have just been done, it's concluded that the research area, the micro-region study in Valley of the Paraíba based on Polis Program directions are greatly in favour of the urban renewal program application.

The research next step will be the urban and environmental indicator creation and with the use of remote sensing tools create methodological process of program application in the region.

6. BIBLIOGRAPHICAL REFERENCES

BRASIL, Instituto Brasileiro de Geografia e Estatística (IBGE), 2000. Censo Demográfico do ano 2000.

BRASIL, Instituto do Patrimônio Histórico e Artístico Nacional (IPHAN). Programa Urbis, Brasília, 2004. In: <http://www. iphan.gov.br/proprog/urbis.htm>. Access in Jun, 20 2004.

CARDOSO, W. B. O.; VALADARES, J. C., 2002 O Ritmo das Transformações, a Exclusão, a Legislação Urbana e a Condição Humana na Cidade. Ciência e Saúde Coletiva, 2(7), pp. 313-323.

COMISSÃO DAS COMUNIDADES EUROPÉIAS (CCE), COM(2004)60 final. Comunicação da Comissão ao Conselho, ao Parlamento Europeu, ao Comitê Econômico e Social Europeu e ao Comitê das Regiões: Para uma Estratégia Temática sobre Ambiente Urbano.

FERREIRA, Y. N., 2000. Metrópole Sustentável?: Não é Uma Questão Urbana, . São Paulo em Perspectiva, 14(4), pp139-144.

MARICATO, E., 2001. Metrópole Periférica, Desigualdade Social e Meio Ambiente. In: VIANA, G.; SILVA, M.; DINIZ, N. (Orgs.). O Desafio da Sustentabilidade: Um Debate Socioambiental no Brasil. São Paulo: Perseu Abramo, pp. 215-232.

MOREIRA, M. , 2004. Programa de Licenciatura em Arquitectura do Urbano e Territorial. Porto: Universidade do Porto, Portugal.

NEWMAN, P.W.; KENWORTHY, J.R., 1989. Gasoline Consumption and cities: a comparison of US cities with a global survey. Journal of American Planning Association, 55(1), pp24-37.

PORTUGAL, Direcção Geral do Ambiente, 2000. Programa Polis.

PORTUGAL, Conselho de Ministros do Governo, 2000. Resolução do Conselho de Ministros n.º 26/2000, de 15 de Maio de 2000. Aprova o Programa Polis – Programa de Requalificação Urbana e Valorização Ambiental das Cidades, Lisboa.

SOS MATA ATLÂNTICA, 2000. Atlas da Mata Atlântica. In: <http://www.sosmatatlantica.org.br/?secao= atlas>. Access in Jan, 11 2005.