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**DIAGNOSIS, TRENDS AND PERSPECTIVES**

## PREAMBLE

1. The second conference of the United Nations on Human Settlements, Habitat II, should concentrate its efforts on two main goals: (a) sustainable human settlements; (b) adequate housing for all; these goals should be attained through interrelated actions on worldwide, national and local levels.

2. One of the greatest challenges facing sustainable development - either in social or economical or environmental levels - is to overcome problems that cause poverty and environmental degradation, which, particularly in developing countries subject to an intense process of urbanization, pose a threat to the present and the future of new generations. As the population growth is becoming more and more associated to urban growth, the focus of attention on the process of sustainable development should be directed towards the urban areas. It is in the cities that the major part of economic activities are concentrated, and where a big part of resources is consumed and a considerable amount of pollution is generated, although environmental and socioeconomic impacts outgrow urban limits, with serious consequences for rural areas.

3. In Brazil, the above mentioned situation does not show much difference. The urban deterioration and environmental degradation can be evaluated through some indications, regarding the state of the settlements: (A) high habitational deficits accentuated by the absence of alternatives of adequate housing for the poor and for those who live around the urban area; (b) inefficiency and poor quality of urban infrastructure services especially of the sewerage disposal system, which consequently results in significant water pollution affecting public health; (c) predatory occupation of improper areas aggravating the risks of human, patrimonial and environmental loss; (d) urban transportation services with low rates of efficiency, safety and accessibility and with high levels of environmental contamination; (e) social and land conflicts of difficult solution create situations where public and private land are illegally occupied.

4. This situation is the result of a process of urbanization and "metropolization" whose demographic, territorial and economical determinants

generated regional disparities as well as income discrepancy and social exclusion. Although some general social indicators have improved along the 80's (reduction of the infant mortality rate, increase of life expectancy of the population as a whole, reduction of the percentage of illiterates older than 15, increase of water supply - tables I-1, I-2, I-3), the persistency of the economical crisis and the policy of macroeconomical adjustments, which took place as from 1985, contributed to worsen social, environmental and urban problems which have been marking the Brazilian scenario.

5. The federal constitution of 1988 recognized and consolidated, through several specific provisions, important trends in order to revert this situation, e.g.: (a) decentralization of the functions of policy making, coordination and investments of urban policies, thereby reducing the role of the Federal Government in the benefit of states and municipalities; (b) consolidation of community participation - enhancing popular awareness and citizenship, particularly on local level; (c) strengthening of the municipalities, which are recognized as the heart of the federation, and as a consequence an increase of their responsibilities; (d) definition of responsibilities in the areas of urban and environmental management; (e) creation of new instruments on urban policy and the recognition of the social function of property as one of the social functions of the city.

6. The institutional framework in the area of urban development, at federal level, is being redirected within the perspectives of decentralization, democracy and participation with the support and partnership of the private sector, a change which is also taking place in other areas of government action. The National Congress is considering a bill recommended by the Federal Executive, through the Secretariat of Urban Policy from the Ministry of Planning and Budget, which was created during the beginning of this administration. It consists of a new urban policy and it recreates a National Council of Urban Policy among other institutional proposals.

7. Also relevant is the fact that, even with retreat of the Federal government from its leading position in decision - taking levels, states and,

perhaps principally municipalities, based on their newly approved Constitutions and Organic Laws, assumed new responsibilities and worked out management experiences and urban and environmental planning in a very positive way, worthy of evaluation and support.

8. At the same time, the loss by the Federal Government of its capacity of financing its expenditure and social expenses and consequently the slowing down of public and private investments in the economical and social infrastructure, together with economical setback and the increase of urban and rural poverty, put emphasis in the phenomena of social exclusion, social gaps and regional disparities, and contributed to worsen the urban crisis.

9. Now that the Brazilian Government reached economical stability and had the democratic institutions steadied, the revision of social policies, on the one hand, and changes in production and consumption of goods and services established by the globalization and acceleration of the economy, on the other, demonstrate that the issue of human settlements and housing is far-reaching and does not restrict itself to its dimensions in space and size, either technologically or financially.

10. The political commitment from the government and the society and the international co-operation will be fundamental to outline the strategies which will lead the Brazilian nation to overcome the state of poverty, urban deterioration and environmental degradation of human settlements in order to achieve, in the next millennium, the goals of economical, social and environmental sustainability, as set by the preparatory process of the Habitat II.



# CHAPTER I: THE COURSE OF THE URBANIZATION IN BRAZIL

## A. Introduction

1.01 The Conference of the United Nations on Human Settlements - Habitat II - has as its main goal to involve the member countries of the United Nations in a collective effort to formulate a common agenda - the Habitat Agenda - and a global plan of action which will contribute to contain the deterioration of the living conditions in human settlements. In this context, one should ask whether there is a correspondence between the Brazilian agenda and that from other countries that will be participating in the conference concerning human settlements, in order to enable to discuss solutions for our common future.

1.02 On the first sight, common topics of the urban issue of all developing countries seem obvious: nearly all of them are challenged by serious problems of poverty, underemployment, environmental degradation, poor housing and urban infrastructure, conditions worsened as a consequence of the economical crisis and policies of macro economic adjustments. Despite such similarities there are important differences in the nature of the urban issue in these countries which can significantly affect the real perspectives of the solutions for the problems inherent to human settlements, on global and local terms.

1.03 The demographic trajectory of Brazil as well as that of other Latin American countries, lends to it a factor of specific importance not yet perceived in international context. The form and the pace of the vital Brazilian transition, as well as the evolution of its patterns of urban concentration differ substantially from Asian and African experiences.

1.04 During the last decades there has been an occurrence of significant slowing down of tendencies formerly seen as inexorable: the historical patterns related to demographic growth, urban concentration and metropolization have incurred significant changes. The shift from historically high mortality and birth rate levels, to lower levels (table I-4) is being understood as a structural

transformation of the utmost significant importance at the end of this century. These characteristics of the demographic and urbanization processes in Brazil, when compared to the majority of countries of the developing world reflect tendencies typical of the developed world.

1.05 In short, the main characteristics which distinguish the Brazilian demographic course from afro-asiatic experiences are:

- A faster decrease of the mortality rate, especially since the 30's, than in the majority of afro-asiatic countries. This resulted in a faster demographic growth in Brazil, during the period of transition, i.e., while the fertility was not showing a significant decline;
- Also a more accelerated fall of the fertility than in the majority of these countries with the exception of some that adopted policies of birth - control rigorously or others that went through a process of significant economical growth;
- A process of urban concentration and metropolization much more intense than in the afro-asiatic countries, followed by a slowing down not only in the urban rate of growth but also in the process of metropolization itself, despite a significant growth of the middle - sized urban centres.

1.06 There is a significant correlation between all three above mentioned characteristics and a common factor in more ample historical determinants. That is, mortality in Brazil has decreased faster than in many developing countries mainly due to her precocious process of urbanization. Also, the fertility rate has similarly shown a faster decline, in big part due to the level of urbanization reached in the country. Finally, recent years have shown a faster reduction of the Brazilian urban concentration also due to the fast decline of fertility.

1.07 When analyzing the most recent trends of the Brazilian process of urbanization, it may be assumed that both the demographic and of mobility transitions create more favourable conditions for the solution of problems which,

before, seemed to be insurmountable. Such a perspective leads to a discussion about the implications of the urbanization pattern and metropolization for economical, social and environmental future plans of Brazil at the end of this century.

1.08 It should be pointed out, however that the trajectory of urbanization in Brazil, which took into account a specific model of development and the lack of an adequate agrarian policy, has been accompanied, in its different stages, by the increase of poverty, social inequality and regional disparities. As a consequence, the Brazilian urban framework presents characteristics of peripheral urbanization typical of less developed countries: disorganized growth of the urban periphery, spreading of informal settlements, illegal and predatory invasion of urban land, precarious housing conditions and inadequate urbanization patterns. These urban phenomena happen today not only in big cities and metropolis in Brazil but in the entire Brazilian urban network.

## **B. The process of urbanization in Brazil: 1930 - 1980**

1.09 The history of urbanization in Brazil can be divided in two periods of time: from 1930 to 1980 and after 1980. The most remarkable aspect of the occupation of the Brazilian space during the first half century prior to 1980 has been, doubtlessly, the progressive and accentuated concentration of the population in cities, which can be assessed by data concerning the distribution of the population in municipalities in accordance with their size and the number of urban and rural homes (Tables I.5 and I.6) It concerns a period characterized by deep transformations in the economical, social, political and demographic structure of the country. The relation between the patterns of distribution of space of the population and the changes in locations of economical activities explain the origins and shape of the urbanization process.

1.10 Until the 30's, the distribution of the population over the territory reflected the characteristics of various economical cycles. Brazil was a rural society, consisting of populational concentrations more or less isolated and

without connection between them. The cities were small, most of them located on the sea - shore and, in 1940, they held merely 32% of the total population.

1.11           The economical world crisis of 1930 reached Brazil during a period of economical and demographic growth, at the height of the coffee cycle in São Paulo. For this reason, the crisis in this sector caused, then, a considerable scattering of population masses. Part of the population involved in the cultivation of coffee concentrated itself in the hinterland (by doing so steadily occupying several regions in the interior) while another part initiated a migration movement towards the cities. This movement of rural exodus occurred with varying intensity during the process of urbanization, together with the evolution of the agricultural economy. It should be mentioned here, also, an exodus of the population in the North - East region caused mainly by the drought. Its cyclical persistence has lend a tragical contribution to Brazilian urbanization.

1.12           During the time - span 1945/1980, the transformation of the means of production and, consequently, the political and social structures took place - heavily affecting the urbanization. The second world war caused a fast increase of industrial activities which led to the modernization of the process of production and labour relations, the increase in job opportunities which, in its turn, caused the continuation of the migration movement towards the cities, particularly in the Centre - South region. After the war, the industrialization via the substitution of imports created new job opportunities in the industrial, the trade and the service sectors. The investments made in order to strengthen the industrial park had a strong impact on the "locus" of expansion of economical activities, thus increasing the hegemony of the economical region led by São Paulo.

1.13           The resulting economic dynamism and public investments - in order to meet the demand for improvements in urban and social infrastructure - contributed to increase the appeal from the cities, stimulating migratory movements mainly towards the urban areas of the Centre - South region. Those movements have been reinforced by the demographic growth, the increasing disparities within sectors of the economy and within geografic regions and

facilitated by the construction of motorways and by the development of means of communication.

1.14 As from 1965, the combination of intense demographic growth and the modernization of productive sectors accelerated the migratory movement, made easier by heavy investments in the improvement of the infrastructure, particularly of the transportation and communication systems. It has to be mentioned that during this period of time, according to statistics of IBGE, the majority of the Brazilian population shifted from rural to urban (Table I.6).

1.15 During this process of urbanization, the importance of the rural population underwent a significant decline. In 1940, the rural areas held 68,4% of the permanent private homes. In 1980, this participation declined to 29,5% and in 1991 it was 21,8%. In the same period of time we notice that the group of localities with more than 500.000 inhabitants increased its number in the total population from 7,51% to 26,39% (Tables I.5 and I.6).

1.16 Since the migration currents are preferably directed towards regions with bigger economic dynamism, it was inevitable that the progressive concentration of productive activities resulted in a concomitant tendency towards a major density of the urban population in the South - East region, motivated by intra and inter-regional migrations. Although the migration movements which affects Brazilian cities does not as a rule consist of people coming directly from rural areas, there is no doubt that the rural exodus has been a fundamental motive for the urbanization and the urban concentration.

1.17 These patterns of urbanization, however, did not continue until the 80's, as shown in the available statistics from the 1991 Census: the urban concentration slowed down significantly. These recent trends are being analysed in greater details in the following pages.

### **C. Main changes on the pattern of urban concentration**

## C.1 A global view of recent urbanization

1.18 Urbanization in Brazil has already reached very high levels in comparison with the relative level of economic and social development of the country. In 1991, in accordance with the political administrative concept of urbanization adopted by the Brazilian Institute of Geography and Statistics - IBGE - 75,6% of the Brazilian population lived in urban areas (Table I.7). Even if a more restrictive definition of urban is used based on size, i.e., only considering urban the population living in localities with at least 20.000 inhabitants (as adopted by Habitat), the level of urbanization would still reach 59%.

1.19 There was, however during the 80's an important decline in the pace of urban growth, with the urban population growing at a rate of 2.97% p/a (Table I.8), which represents a sensitive reduction in relation to the annual rate of the 70's, about 4,48%. The impact caused by the fall of the birth rate level is, of course, one of the main causes of this reduction, though not exclusively. Looking at tables I-9a and I-9b, it can be seen that the rural population underwent a decline in this decade (as well as in the decade before), while localities with a population inferior to 20 thousand inhabitants had a growth rate of 41.1%, higher than that of any other localities, except those between 250 thousand and one million inhabitants which had a growth rate of 70,0%.

1.20 This decline on urban growth took place in spite of a significant increase in the number of cities with a population of more than 20 thousand inhabitants. These cities increased from 496 to 685 between 1980 and 1991, mostly cities of 20 thousand to 50 thousand inhabitants. However, it is also noteworthy the fact that, even with a reduced growth rate, cities of bigger size had their participation in the process of concentration of the population increased.

1.21 Data gathered for the Census of 1980 had already pointed out a certain decline on the course of urbanization and the progressive concentration of the population. The events of the 80's have emphasized and confirmed this change of direction. Moreover, data available from the demographic census of 1991 clearly show that the rural - urban and also the migration between regions

slowed down, as well as the drive towards concentration in big or steadily growing cities, mainly those located in the South - East region.

1.22 Because of earlier trends, basically as a result of the occupation of new agricultural frontiers and the creation and expansion of cities in the Legal Amazon region, the rapid urban growth of the North and Centre - West regions showed a little distortion from the national situation as a whole. But the pace of urban growth of the North - East region has been surprising, particularly among the middle - size cities, which stand out in the overall picture of the region. It is still too early to realize whether this phenomenon of urbanization in the North - East region is due to the economical crisis or to a partial modernization of its economy. It must be mentioned, however, that the South - East region presented much lower urban growth rates than other regions during this period of time, and that represents important changes in the pattern of migration.

1.23 In special Tables elaborated for 1950/80 (Tables I.10a and I.10b) in which the cities remain steady, on the population bands in which they were in 1980, it can be seen that, while the urban population of the country increased 4,37 times over this lapse, the growth of the cities, according to the population bands, took place differently; it can also be noted that, with the exception of big - size cities, the overall growth pattern was not uniform during this period of time and there were no relations between the sizes of the cities and the pace of their growth rates. The population of cities with more than 2 million inhabitants recorded during all these decades demographic growth rates below the national average; the population of cities with between 1 million and 2 million inhabitants, between 1970 and 1980 also presented a growth rate below the national average; the population of cities which recorded the highest rates of demographic growth in former periods of time, between 1970 and 1980 also recorded growth levels below the national average; meanwhile, the population of cities with between 50 thousand and 500 thousand inhabitants recorded the highest growth rates of the country. The population of cities with between 20 thousand and 50 thousand inhabitants recorded a gradual reduction in growth rates along this period of time and the population of cities with less than 20 thousand inhabitants, even though

their number increased, as a result of new urban agglomerations, recorded growth rates below the national average in all the decades.

## C. 2 The Evolution of Metropolitan Regions

1.24 It can be noticed that the participation of the metropolitan regions in the total of the population was practically the same between 1980 and 1991, in contrast with the former tendency where a significant increase of that participation with every new Census (Table I.11) was shown. This means that the pace of growth of the metropolitan regions, in the 80's, was almost identical to that of the country as a whole, which corresponds to a little more than half of the growth rate of the MR's in the previous decade. Because of the decline on the birth rate, a certain reduction of growth from all a spacial units was to be expected, including the MR's, where it happens on much higher levels than those of the country as a whole.

1.25 The most remarkable phenomenon is the fact that the largest and most important Brazilian MR, São Paulo, can be found among the three MRs with growth rate inferior to the national average. The two other MRs in the same situation - Rio de Janeiro and Recife - had already recorded very low levels of growth in the former census and therefore these performances do not cause any surprise. Despite the industrial scattering already detected around the MR of São Paulo, there were no clear signs that its growth rate would suffer a significant decline in the near future. Particularly surprizing is the fact that it continues growing in the same pace as the population growth of the country as a whole.

1.26 In short, Brazil recorded, in the 80's an important reduction in the pace of its metropolization process. To verify that the participation of the nine MR's in the total growth of the country decreased from 41.3% in the 70's to 29.0% in the 80's is fundamental to fully recognize this change, due in great part to São Paulo, to be truthful, but nonetheless the available data proved to be favourable for the whole country.



1.27 This new pattern means a structural phenomenon of major importance to the Brazilian society. For the first time a significant and generalized slowing down of the progressive megalopolization which was threatening the future of the major populational concentrations of the country can be detected. However, this trend is particularly visible in the South East region, led by its two MRs, São Paulo and Rio de Janeiro. On the other hand, it is interesting to verify that the two MRs which recorded the biggest growth rates - Curitiba and Fortaleza - are, coincidentally, those which apparently found the best solutions for urban and social problems. Meanwhile, urban concentration within the poorest region of the country - the North - East region - causes great concerns. With Recife as an exception, the MRs of the North - East region had rather accelerated growth rates, mainly if compared with the rest of their respective states.

1.28 The weakening of the metropolization went together with a peripheral growth of similar importance. In all the MR's the growth rate of the peripheral municipalities was considerably superior to the growth rate of their respective municipal centre (Table I.11). In addition, the growth rate from the municipal - centre from several of the most important MRs has been below its probable vegetative growth, with the occurrence of a negative migration from the nucleus to peripheral municipalities and to the outskirts of the Metropolitan Areas. As a result of this process, 57.6% of the total metropolitan growth verified during the 80's happened in peripheral municipalities, as compared to 43.2% in the previous decade.

1.29 In short, not only the larger mega-cities are suffering from a significant slowing down in their pace of growth, but the increase recorded there is happening ever so more far away from their respective centres. The economical, social and political significance of these trends cannot be underestimated. Nonetheless, almost 30% of all the demographic growth of the country, in the 80's, happened in the nine metropolitan regions, which nowadays shelter 42,7 million people, i.e., today, in Brazil, three out of ten persons live in a metropolis.

1.30 In terms of absolute weight there is no doubt that, in the 80's, the MRs continued to represent, ever so more, big populational concentrations.

However, as for present trends, the reduction in the pace of urban growth and concentration, the relative weakening of the centres and the increase in growth of the metropolitan periphery, are the most important processes that took place in the 80's.

1.31 Some of the factors that could be mentioned for the slowing down of metropolitan concentration are: industrial decentralization, movements against the metropolization, progressive movements towards the interior of agricultural and cattle-raising activities, occupation of border lands on the country's lines, the economical crisis and drop of the fertility.

1.32 In the case of the MR of São Paulo, the main hypothesis for the reduction of the pace of metropolitan growth is the decentralization of middle and large - sized productive units, especially industrial, towards the interior of the state and to neighbour states. This decentralization, fed by factors such as negative effects on the economy of the agglomerations and state policies of Regional development, is apparent since the end of the 60's. The accelerated growth of many cities in the interior of the state of São Paulo and neighbour states could be largely explained by this phenomenon.

1.33 Despite the fact that first signs of industrial dissipation decentralization could already be detected in the 70's, only in the 80's, when the economical crisis slowed down or retarded the spreading of economical activities, a correspondent demographic spreading took place. A first plausible hypothesis to explain this issue could be the existence of a discrepancy between the industrial decentralization and the creation of other economical activities capable of absorbing large populational contingents.

1.34 A second factor could be the so called movements against the metropolization, i.e., the choice to live or work outside large cities. Significant changes in the structures of production and consumption and advancements in the areas of communication and transport could supposedly allow participation schemes in the production process both more decentralized and nimble. Given necessary proportions, it can be assumed that the recent populational

redistribution, as seen especially in the South East region and particularly around São Paulo, shows some characteristics similar to those prevailing in developed countries.

1.35 Thirdly, the development of the Brazilian urban network represents an important alternative for the metropolitan concentration. This is another dimension in which Brazil differs from afro-asiatic countries. Here, the expansion of the agricultural frontier is being used as a counterbalance of the populational concentration. When settling in new spaces and integrating them to the national economy, these new frontiers not only attracted migrations to the rural area, but also caused the birth of new cities, some of which had an extremely accelerated growth. In a certain way the consolidation of these areas delayed the process of urban agglomeration in the regions of older settlement.

1.36 Another important factor in the reduction of the metropolization could have been the prolonged economical crisis. The crisis could have produced a particularly significant impact on the reduction of the migratory movement towards the metropolis thus forcing a certain immobility, avoiding the dislocation of the population. A strong process of return migratory movement could have prevailed, particularly from the MRs of São Paulo and Rio to the North East region.

1.37 In crisis conjunctures, there seems to be a preference for trying to solve the question of survival in familiar surroundings: in the community where there is an established network of friends and relatives. Migratory stretches tend to have a shorter reach, because of difficulties and transport cost, as well as the preference for localities and regions which are closer and more familiar. The network of information of immigrants, although informal, is very swift and helps to keep the population in its regions of origin during periods of crisis.

1.38 Finally, the accelerated fall of the fertility necessarily altered the pace and the form of metropolitan concentration in two ways. Firstly by reducing the pace of growth of potential migrants and the vegetative growth, from migrants as well as from indigenous population, in urban areas. Secondly, through its impact on unequal paces of growth in different regions, localities and

socioeconomic sectors of the country. In short, this differentiated dynamic, bringing together changes in migratory patterns and changes in reproductive behaviour, certainly contributed significantly to the reduction of the pace of urban concentration and metropolization.

### C.3 The division of the territory and the Brazilian urban network

1.39 The implications of the urbanization process in the occupation of the territory led to the recognition of the strategic importance of the space dimension on national development. Thus, National Plans of Development (NPDs), since the 70's, started to deal in a more ample sense with the issue through proposals of urban policy. The NPDs took into account the concern with the division of the territory since the favouring of determined centres - in which comparative advantages because of their natural, human, technological or economical resources existed - would allow more rational use of the space and more efficient exploitation of production factors.

1.40 The Urban policies proposed in that period, 1974-84, were meant to both resolve questions of intraurban nature and to attend to interurban objectives or objectives, i.e., concerning the division of the territory. In 1988, the Federal Constitution took up the issue again, by appointing the Federal Government to formulate national and regional plans of the division of the territory. Such plans would be tools of great importance to orientate and discipline the urbanization and the occupation of the territory, for their goals were a better distribution of the population and the productive activities within the national space and the strengthening of the Brazilian urban network in accordance with sectorial and regional directives and development priorities.

1.41 Despite the fragility of urban and regional policies and the absence of plans of division of the territory as mentioned above, it should be pointed out that the country has an extense urban network, diversified and consolidated, with countless cities in all categories of urban size. Middle sized centres, urban agglomerations, new secondary metropolis - which intend to be institutionalized - and the nine Metropolitan Regions have a strategic role in urban and regional

development in their areas of influence. Given the continental dimensions of the country, the size and complexity of this urban network is a fairly important comparative advantage for the promotion of sustainable development of human settlements.

#### **D Perspectives of Urban Brazil**

1.42 Many countries as well as many sectors of the Brazilian society are strongly biased against urbanization and this will probably be reflected during discussions of the Habitat II. However, the social and environmental problems of the human settlements, which dominate the agenda of this Conference, will have to be dealt with, on broader terms, in a context of urbanization where concentration and urban density are of the foremost importance.

1.43 Whatever may be the economical profile from a country and whatever the role it plays in the new international division of work, the space configuration at this moment, which was formed during the last 60 years of migration and populational growth, is more favourable than it would be had it taken place without massive migration and populational concentration. This assertion, evidently, goes against the aforesaid bias against urbanization.

1.44 In the Brazilian case, the change of a society that used to be rural and primary, to an urban one that depends on secondary and tertiary sectors, has undoubtedly been extremely fast, although achieved under enormous social cost. It would have been better if it had happened in a slower and more planned way, within a process of economical growth less brutal and with a better distribution of wealth. However, the debates on whether there should be some sort of return to the hinterland in order to improve the living conditions of the population face many obstacles in available social indicators.

1.45 There is no reason to believe that the situation of the country or that the social situation of the population as a whole would have been better if urbanization had not occurred. Even disordinate, the urbanization was the central

means for the process of modernization of the country and for the improvement of living conditions of the population. With few exceptions, the mortality rates, the child mortality, morbidity and fertility are significantly higher in rural areas. The access to education, health and welfare is systematically more difficult in those areas.

1.46        Proposals to find a dynamic solution in rural areas for economical, social or environmental problems of the country have a limited reach, either in terms of quantity or in terms of time. It is in the cities that better possibilities to generate and combine technical, economical and human resources, necessary to sustainable development, are to be found.

1.47        The outlook of economical, social and environmental progress are strongly linked to the future of the cities. The great advantage of the cities and the reason for which the "urban boom" has not created the chaos its critics had foreseen, lies in the fact that for some decades they have been generating the major part of the GNP. In other words, the cities are the main source of employment and income\*. Migrants without any knowledge of economy, always knew this and, for this reason, always headed towards urban centres. They knew that employment, income, education, health and improvement of living conditions for their families depended on going to the city. Which does not mean that land reform and the change of questions concerning land property and labour rights of the rural population, to whom social benefits conceded to urban workers should be extended, is not necessary and desirable.

1.48        The relation between urbanization and development gets even more evident in the macro-economical background at the end of this century. The world is being progressively integrated and becoming homogeneous by means of communications, technology, the instant capital flow, consumption patterns and even by the uniformization of cultural and behaviour patterns. But, above all, it is being standardized by universal adoption of the "ethos" of the market economy.

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\* APUD BRAZILIAN REPORT, WORLD SUMMIT FOR SOCIAL DEVELOPMENT, COPENHAGEN, 1995

1.49 As a consequence, in the following years, dimensions, characteristics and trends of Brazilian urbanization will increasingly depend on implications of global economical processes, on the structure and expansion of the national economy. In this new economical international order, the processes of redistribution of space which created the present configuration of the Brazilian urban network are very favourable. In other words, Brazil is in a potentially privileged situation as compared to other countries with similar levels of economical growth.

1.50 The fact that the country is completing both its demographic and mobility transitions, represents an enormous advantage, particularly in relation to countries with an accelerated demographic growth and/or with predominantly rural populations. The history of Brazilian urbanization was such that the conditions of Brazilian competitiveness and, thus, national development, are rather favourable: a progressive occupation of economically practicable spaces; a diversified urban network covering all national territory; a mobility of the population compatible with the needs of economical flexibility; a predominantly urban population; a reversion of trends regarding the threat of megalopolization or uncontrollable metropolitan growth in the near future.

1.51 This long journey has not been easy: although the cities seem to be heading towards chaos, the characteristics of the Brazilian urban profile - in accordance with demographic perspectives and the occupation of the territory - allow us to foresee the possibility of, eventually, solving in an easier way the most important economical, social and environmental problems facing the country. However, when considering the intimate relation between economical growth, urbanization and environment, the main challenge to the country is to conciliate economical development with social welfare and environmental protection. This is the basic dilemma, in this end of the century, as already stated during the Conference of Rio, and which should probably be a background for the Habitat II.

1.52 It should be recognized, however, that the present moment of transition of the Brazilian economy is being a burden for Brazilian leaders in all areas - in the Government, in the Parliament and in the business sector -

attracting the attention of the public opinion towards debates on both financial and economic institutional reforms necessary to resume development. Even though concentrated efforts in order to ensure economic stability, fundamental to improve working and living conditions for all, the Government is trying not to neglect special features of the development itself, as can be noted by the efforts made by the present Government to institutionalize urban policy, through the creation of the Urban Policy Secretariate within the Ministry of Planning and Budget, and the approval of several investment programmes for popular housing and sanitation. The importance of these recent decisions for the future of human settlements in Brazil cannot be ignored, although the treatment of urban policies in the country proved to be mainly by sectors; thus, an effort of integration of actions in these sectors consistent with economic and social policies has to be taken. The course of urbanization in Brazil stresses out some points that should not be disregarded, e.g., to take into consideration spacial dimensions - urban, regional and territorial - in macroeconomic decisions, in order to achieve economic growth and sustainable development without economical, social and environmental problems.

1.53        The inadequate social and political mobilization when dealing with the urban question and the occupation of the territory - due to the inexistence of links with projects of consistent economical and social development - subject the city to short term actions of urgent and palliative character, without long term strategies which might alter the state of poverty, social exclusion, environmental degradation and urban violence. This situation, in its turn, becomes a hindrance to the performance of the economy itself.

1.54        To design modernization processes capable of promoting the necessary social integration of the excluded population from the process of development a collective level of urban consciousness has to be reached - that is, the maturity in political and sociocultural relations of the users of the urban space - compatible with the intensity of the degree of urbanization achieved during the last decades. Taking into account the magnitude and the seriousness of the problems generated by the Brazilian urbanization process and the low level of urban consciousness of urban dwellers as well as authorities, it is necessary to



create processes of social organization to help to conceive new sets of rules for living in the cities.

1.55 An innovative vision of urban development, compatible with the principles of sustainable development has to be put forward and shared by the Brazilian society. The characteristics of the economical reorganization, in order to adapt the society to new technical levels of production and consumption, determine the setting up of public policies to encourage the increase of productivity of quality and of efficiency on all fields of activity, but also to encourage the integration of urban contingents to the new framework of opportunities and resources.

1.56 A solid, democratic and capable public sector and a State with competence and firmness to carry out its tasks of planning, regulation and management of public resources can provide the grounds for new cycles of development, by using the potentiality supplied by the territory and the cities in order to increase social welfare.

1.57 There are experiences all over the world, and also in Brazil of cities that took advantage of opportunities which appeared together with new technologies of information and communication, knowledge coming out of scientific and technological research, mass communication techniques and marketing, processes of flexibilization, contracting of third parties and privatization, and even geographical location in relation to internal and external markets. Cities that reached a high level of urban consciousness and quality of life for its citizens. Cities that transformed the chaos produced by the urbanization and became an essential part for the sustainable development of their countries.

1.58 These are the examples that urban Brazil needs to multiply in order to overcome, habitational, environmental, urban and land property problems accumulated during the last decade and modelled living conditions of 110 million people. Needless to say that the rural population - 36 million people - depends also, in some way, on good performances of urban centres, which supply markets, goods and services for rural areas under their influence.

1.59        To invent the city anew does not preclude an objective knowledge of the accumulated experience in the construction of the Brazilian urban network and the occupation of the territory; when stressing the seriousness of the problems of urbanization in the present one cannot disregard how much the country has gone forward. The challenge lies in the definition of adequate strategies, to be set in urban and environmental policies, so the outlook for the next century becomes more optimistic: the population longs to live in safer, sounder, more efficient, more democratic and sustainable cities.

## CHAPTER II: HOUSING AND LAND PROPERTY POLICY ISSUES

### A. Diagnosis of the urban, land property and housing policy situation

#### A.1 Introduction

2.01 Social differences in the Brazilian society are being made worse by a growing concentration of income during the last 30 years: the country achieved high industrial growth together with one of the world's largest concentrations of income. While the 10% richest slice of the population detained almost half of the total national income (48.1%), 10% of the poorer had only 0.8% of that figure (Table II.1) The intense growth of the GNP (7% p/a between 1940 and 1979), even though with social exclusion, paradoxically contributed to the emergence of a considerable internal market to which access is given to modern goods - refrigerators, televisions, cars - even before basic needs (food, health, sanitation, education, housing) for the majority of the population are adequately met.

2.02 Thus, while the consumption of several modern industrial products is enhanced by the media and made easier by credit, thereby making them accessible even for lower income groups, the same does not happen with housing. The high cost of production factors, the use of inadequate building processes, the cost of financing agents and the conditions offered by the systems of credit, make housing inaccessible products for the major part of the Brazilian population, which therefore does not take part in the real estate market.

2.03 Data show that neither industrial wages allow the purchase of a house in the formal market, nor are public policies efficient enough to guarantee it. More than half (57%) of working heads of families, living in shanty towns in São Paulo, worked in the secondary sector in 1980\*. A process in which the modernization of some segments of the building industry goes together with an extense and fantastic domestic and illegal production of dwellings is taking place: 51% of the consumer market for cement products all over the country relates to

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\* APUD TASCHNER, SUZANA, "PROCESSO DE URBANIZAÇÃO BRASILEIRO: DIAGNÓSTICO GLOBAL", SP, 1995.

informal, domestic and illegal building of popular dwellings, according to the ABCP - Brazilian Association of Portland Cement.

2.04 The evolution of the provision of popular housing shows a tendency to erase from wages the part related to the payment of the dwelling. The building of houses on weekends during spare time, the long hours spent on inefficient transport (because of poor occupation of the periphery) and the inexistence of basic urban services cause an early deterioration of the work force therefore subject to long working days. The strife of the low - waged working force, in order to obtain an appropriate dwelling shows clearly the contradictions between growth and poverty and modernization and exclusion in modern urban-industrial society.

2.05 The seriousness of urban, land property and housing problems which affect millions of people everyday all over the country, is such that the urban and housing question should receive more attention and priority in the formulation of public policies, with the helps of the society. It should be noted, in this context, that the illegal production offers an outlet, thus providing a solution, even though unstable for the provision of homes for the poorest.

2.06 To overcome an urban framework where conflicts over modernization, exclusion and inequality persist, it is necessary an effort of continuity of governmental action, an increase of housing investments, the design of urban, land property and housing policies more consistent and the acceleration of the legislative process which is needed to make the urban intervention instruments better.

## A.2 Urban Structuring and Land Property Market

2.07 The unbalanced occupation of urban space is a problem that calls the attention of the observer of Brazilian cities, where speculative behaviour rules above the social function of the urban land. In Brazilian cities, there is the predominance of a certain pattern of occupation consisting of big number of vacant lots and enormous open strips not yet urbanized, areas with a high incidence of sky - scrapers or intensely occupied by shanty towns and an

excessive horizontal spread of the urban area. This uncontrolled process causes an unmeasurable demand for urban services and infrastructure, which in turn requires an intense flow of investments.

2.08 Several conditions are responsible for this urban situation. On the one hand, structural problems of the country which cannot be overcome on the level of sectorial policies, such as the concentration of income, the migration from the country to the cities, the historically high inflation rate, and the little attractiveness for the productive sectors to invest in real estate, which are patrimonial investments. On the other hand, problems that could be handled by a competent land property policy, such as the priority of the right of property over social welfare, the low taxation on idle urban property and scarce public investments for providing infra-structure, continue to hinder urban development and housing production.

2.09 Peculiarities of the real estate market, like the division of demand and supply on local submarkets, the inexistence of a rationally planned process to produce plots of land - in accordance with the necessities of urban growth - the price differentials of real estate due to the scarcity or insufficient supply of infrastructure and urban services, worsen the problem and cause expectations of quick real estate value gains. In this context speculative behaviour tends to prevail, with lengthened holding back of strips of vacant land and the surge in the demand for land as patrimonial reservation.

2.10 The difficulty or even the impossibility of access to urban land through market mechanisms by the majority of the population in a society that is passing through an intense process of urbanization, causes illegal forms of human settlements, such as shanty towns or slums or other kinds of clandestine or irregular land development. On these locations the self-enterprise of popular dwellings, set up by efforts of the population itself, without technical assistance or official financing, has in a hazardous way made popular housing possible, although with great loss of habitable conditions of the population and of the general urbanization conditions.

2.11 During the 70's, 80's and half of the 90's, within the economical crisis and the increasing poverty of the population, illegal settlements grew much more than the cities. In São Paulo where, since the 40's, the clandestine peripheral land developments and self construction of homes were predominant, the shanty - town population grew from 1.2% of the total population in 1973 to 8.9% in 1987 and 19.8% in 1993<sup>\*</sup> thereby becoming the habitational alternative which most increases. In Rio de Janeiro, a city in which the process of shanty - town formation is older, the same can be noticed: between 1980 and 1991, the total population increased 17.7% against a 32.0% growth of the population living in slums<sup>\*\*</sup>.

2.12 Alongside slums and illegal, already consolidated land developments, and recent invasions or clandestine occupations, in the city of the 90's it becomes distinctive a new kind of unstable housing typical of these times: a sort of "shelter" on the streets. Contrary from the traditional homeless, these inhabitants have regular jobs and the need to be near their working place, but cannot find vacancies within a compatible cost nearby. These families live in sidewalks, public squares or under bridges. It is not only the lack of shelter that causes such serious situations of habitational poverty; it is rather the result of a more complex urban process: the low cost and short time spent to commute between the working place and the peripheral areas where sheltering is possible.

2.13 Available data on invasions in Rio de Janeiro show the existence of an organized process of settlements on lands that belong to others, a fact that puts an interrogation mark on the absolute right of urban property. Within all these manifestations of urban conflicts in Brazilian cities, it becomes evident an opposition between law and order - permanently challenged by imperative needs of the population - and social justice, as a consequence of urban settlements in which the illegality of popular shelter is implied.

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<sup>\*</sup> APUD TASCHNER, SUZANA, "PROCESSO DE URBANIZAÇÃO BRASILEIRO: DIAGNÓSTICO GLOBAL" , SP, 1995.

<sup>\*\*</sup> APUD RIBEIRO, LUIZ CESAR QUEIROZ (ORG), "RENDAS E POBREZA NAS METRÓPOLES BRASILEIRAS", RJ, 1994.

2.14 This situation will not be altered if the access to land property is not democratized and the predominance of collective above individual interest is not recognized, thus securing the respect towards the social function of property as stated by the Federal Constitution. It represents, symbolically, the depletion of a process of peripheral urban and speculative expansion that takes no heed of the social functions of the city and points towards the need to create other means of human settlement.

### A.3 The housing conditions of the population

2.15 The housing conditions of the rural population - 36 million people - are very precarious, especially in relation house conditions and sanitation: 1,645,773 of the dwellings are of rude workmanship, improvised or shared by more than one family (Table II - 4); 47% of the total of rural homes do not have sanitary installations, 67% do not have drains and 90.5% extract water from wells, springs and other sources without any kind of treatment (Tables III - 1 and III - 2).

2.16 It is important to point out, also, that this situation is becoming ever more serious by the expelling of workers who lived in houses provided by employers (situation that represents 20% of the total rural population). These workers so-called "boiás-frias" (temporary), even if still working in farms, have to live in the periphery and in shanty towns of nearby cities, thus worsening their housing situation. This symptom, caused by changes of working relations in the hinterland adds to the habitational deficit in the cities.

2.17 Some available indicators show an apparent improvement in housing conditions of the Brazilian population in the 80's with a percentual increase of adequate dwellings in all regions of the country, surprising numbers given that, during that period of time, there was an increase in the percentage of poverty in the population and in the concentration of income, amidst an atmosphere of strong recession. There are only 1,727,845 dwellings of rude workmanship (4.9%) all over the country, of which 61.5% are located in rural areas\*. Those situated in

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\* APUD FUNDAÇÃO JOÃO PINHEIRO, "DÉFICIT HABITACIONAL NO BRASIL", BH, 1995.

subnormal agglomerations - in communities in which there are more than 50 - amount to 1,575,766, of which the majority (92.3%) are in urban areas (Tables II - 2a and 2b). Besides the aspects referring to the structure and the localization of the dwellings, data related to the basic infrastructure are significant: 70.71% of the permanent dwellings are linked to water supply network and 35.29% are linked to sewerage; 80% of urban homes are served by waste collection systems (Tables II - 3a and 3b). However, these data should be analysed with reservations, because the research did not take into account the quality of equipments and services, but only the improvement of some characteristics of the dwellings, and therefore it does not necessarily stress an improvement of habitable conditions.

2.18 The process of domestic housing production (self-enterprise) partly explains this apparent improvement. The substitution of wooden houses by masonry houses in shanty towns and clandestine land developments leads to a reduction of dwellings classified as rudimentary. However, this process of informal construction of the city could be adequate for small localities, never for large urban agglomerations with high levels of density. Thus, other aspects of this process cause negative effects for the city, such as the uncontrollable expansion of the urban perimeter, the occupation of areas improper for settlements, exhaustive building, destruction of infrastructural network, and the incidence of natural disasters and public calamity situations.

2.19 Independently from arguments about the relative improvement or not of habitable conditions of the Brazilian population, the truth is that the deficiencies in housing infrastructures are appalling: 10,7 million homes are not connected to the water supply network, 5,4 million urban homes are not serviced by urban waste collection systems and 16,5 million do not have adequate sanitary installations (Table II - 3a). Under these conditions, if this situation does not revert, a progressive deterioration of environmental conditions is inevitable and could become dramatic in the future.

2.20 With regard to the environmental question, there is a clear relation between the deterioration of housing and the depredation of the natural



environment. In areas where housing cannot be arranged because of restrictions of environmental nature (preservation areas of natural springs, areas alongside streams, areas of forest protection, mangroves, swamps, etc.), slums and urban invasions appear. On the other hand also land development sites destined to the middle class disregard environmental parameters. The fact is that the environment problems cannot be dealt with in the cities without considering the housing problem, vital for any consistent intervention of environmental preservation of human settlements in developing countries.

2.21 Finally, as a diagnosis, it should be pointed out the need to create new parameters and urban and habitational indicators - which would improve and complement data gathered by the IBGE. It should also be mentioned that the Secretariate of Housing Policy, in co-operation with the IBGE, is creating a system of habitational and urban statistics, adopting a methodology recommended by Habitat, and using indicators more adequate to support the formulation of sectorial urban policies.

#### A.4 Housing shortage: Myth and reality

2.22 Only recently data about housing shortage released by governmental offices, private enterprises or enterprises linked to the housing situation are being questioned. Those statistics covered some 10,12 or 15 million dwellings. These doubts are not brought around in order to conceal the problems but, on the contrary, to pinpoint them so that it becomes clear that the deficiencies in housing infrastructures can be dealt with together with the housing shortage.

2.23 The shortage is not always related to new dwellings but rather to habitable conditions, that is, better sanitary conditions, habitational dispersation, salubrity, regulation of land property and of urban infrastructure. Thus, it is necessary to understand the reality of the domestic production and the real city and to try and recover or invest in the improvement of already occupied areas. The necessity to build new dwellings, in this point of view, would be considerably below the supposed housing shortage.

2.24 The reinterpretation of the housing shortage is important, because it implies a new vision of habitational policy, thus overcoming the tradition of the federal housing policy, which always gave priority to the production of new homes. A new policy, intimately linked with the urban policy, that takes the real city as a starting point: shanty towns, slums, areas with unstable urbanization, areas without sanitation, areas of risk, etc. and re - directs investments in order to improve habitable conditions.

2.25 According to a survey from the João Pinheiro Foundation, using data from 1991, of a total of 26,528,683 urban homes, 13.3% within the income range of up to 5 minimum - wages lack infrastructure; 8.53% have inadequate infrastructure; 5.05% are saturated and 2.37% of urban lodgings are hired out at prices 30% above the family income. The lack of infrastructure, in this income range, are higher in the North - East region, although the situation of populational saturation might be more extensive in the South - East region. According to the same source there are 146,535 improvised dwellings in Brazil, 1,727,845 rudimentary dwellings and 3,128,978 homes shared by more than one family. The housing shortage related to improvised and rudimentary homes and to families living together is of 5 million units, of which 25% in metropolitan areas, 42% in other urban areas and 33% in the rural areas (Tables II - 4, 5a and 5b).

#### A.5 Exhaustion of financing sources

2.26 Independently from any interpretation of the facts related to the shortage, the relative scarcity of resources is the main restriction for solving the habitational problem. There are no resources available for investments on long term with costs and conditions of return compatible with the capacity of payment of those requiring homes. Problems still persist as a result of the crisis in the financing system for housing in the 80's making it difficult for the recovery of habitational financing. The debt generated by residual balances of the old contracts, the debt generated by the indebtedness of states and municipalities and the recovering of the main sources of credit - the Worker's Savings Fund - FGTS and saving - accounts, have proved to be problems particularly difficult to solve.

2.27       Against this background, it becomes indispensable to look for new sources of funds on long term to finance the habitational policy, pointing out that both the government and the private business sector have been studying new alternatives in order to setting out resources aimed to enlarge the supply of habitations. However, the setting down of a new financing system for housing depends on the success of the economical stability and, in part, on the structural reforms now under study at the National Congress. In this sense, the revision of the strategy for habitational financing depends on the willingness of the political leaderships, on all levels of government. Only efforts on the political level will make possible the creation of a more consistent policy for the provision of housing, with the participation of the public and private sectors and of the society.

2.28       However, the financial resources supposedly needed for housing could be below those normally assumed, if the costs of investment per capita are reduced by means of a more efficient management of the production factors - land, capital, labour and technology - and another way in dealing with the housing problem is adopted. Dwellings should not be provided only in the periphery of the cities. There are several fields open to actions for the government - mainly through regulations, planning and management - which aim towards more efficient and effective public policies, consistent with the social, economical and political context that determines the urban and housing situation of the country.

## **B. Actions of the Government and the Community**

### **B.1 Actions of land property and urban interest**

2.29       Even though if the need of new instruments for the control of the use of the land might have been felt before by those responsible for urban management, only with the creation in 1973, by federal legislation, of the nine Metropolitan Regions, the opportunity came to make further progress on this issue. Since the use of metropolitan land was legally considered as common service to the municipalities of a same region, in order not to interfere with municipal autonomy it was clearly defined what was understood by the use of

metropolitan land, which aspects of the use of the land would be fundamental to control and who should do it: either the municipality or the metropolitan entity, by delegation of power from the state government. Even more important, was the creation of instruments necessary for an efficient control of the use and occupation of the land, by federal law, since the right of property would be in question. From these thorough considerations, associated to the incipient experience of São Paulo and to studies developed in other countries, different innovative ideas emerged and among them that of the created land, introduced in 1975, and the following year, adopted by the local government of São Paulo, and by doing so initiating the discussion about the topic among technicians, politicians and those involved in law making in the country.

2.30 In May 1977 the bill of urban development elaborated by the National Commission of Metropolitan Regions and Urban Policy - CNPU, was set forward. It incorporated the concept of created land and announced several important instruments such as the right of preference of the government to purchase property, compulsory urbanization, land reservations, and the decreeing of areas of special interest for several purposes.

2.31 This bill met strong opposition from real estate entrepreneurs and was not passed; however, it created a favourable atmosphere for the approval of bill n° 6.766/79 which disciplined the development and division of the land and caused important changes in the occupation of urban land, particularly in the periphery of larger cities. Bill n° 6.766 already requires a revision and an improvement to overcome the difficulties and the unexpected effects for the habitational policy, which came to surface in more than one decade of its implementation.

2.32 A new bill - 775/83, more moderate, was elaborated by the Executive in 1983 and sent to Congress. In it the concept of created land was not present anymore, but it created the right of land, land division, compulsory edification utilization and the right to pre-emption. This bill also caused much discussion and was not passed, but it was overcome by the constitutional process and by the

promulgation of the Federal Constitution which established a new basis for the debate of urban and land issues.

2.33        The Constitution made the Directive Plan for the Municipalities with more than 20.000 inhabitants compulsory, and defined it as the "basic instrument of the development and urban expansion policy", expressing the "fundamental needs for the ordination of the city", and as a standard to ensure the social function of urban property. The constitutional text also created sanctions (yet to be regulated by federal law) to owners of urban land not built upon, under- or unutilized, which become subject to compulsory division or building, to taxation on building and urban territorial property and to expropriation with payment via titles of the public debt, on the terms of article 182 and paragraphs.

2.34        As from 1988, the urban land property question has been dealt with according to the necessity of regulating of what was provided in the Constitution, through a federal bill of urban development. At municipal level, the effort was made to include proper provisions in new municipal Organic Laws, create or reinforce municipal systems of planning and give a new content to the Directive Plan.

2.35        At federal level, almost a dozen law proposals dealing with urban matters went to the Parliament. These bills, with more or less extension and depth, included the following instruments of control for the use of the land: the progressive tax on real estate property; the compulsory division and construction; the right of land property; the right of pre-emption; the urbanistic requisition; the transfer of the right to build and reurbanization by partnership.

2.36        There are several perspectives for dealing with the urban property question. For some, the Directive Plan turned out to be the basic instrument for the intervention over the city, transforming itself from a technical and neutral tool, that prevailed in the 60's and 70's, into a sort of negotiated pact between the several agents that participate in the production process of the city, where plans for the future are settled. Therefore the idea of a political instead of a technical-urbanistic process is introduced. In this sense the Directive Plan becomes the

basic instrument of definition of the social function of urban property, which could become a true instrument for urban reform in the future.

2.37 Others are of the opinion that at a moment of shortage of resources, in which one recognizes the necessity to reconsider the role of the State and reduce its size, in which the order of the day is to enable the private - business and community - sectors to perform many of the functions today under responsibility of the State - through privatization, contracting of third parties and partnerships - new forms of controlling the use of land should be foreseen, and certain prerogatives and advantages that the Government always considered as to be its legal right are not any more justified.

2.38 As an example, it could be mentioned experiences by the Municipality of São Paulo, where the local government established new partnerships with the private sector, through the so called Urban Operations and interlinked operations, through which, after a competent urbanistic analysis, special prerogatives of more profitable use of the land than those made possible by the zoning law are offered to real estate businessmen, in exchange for resources aimed at the setting up of housing and urban programmes. What in truth is being done, with the agreement of the private sector, is the selling of created land, without directly mentioning it.

2.39 Nonetheless, the utilization of resources extracted from the real estate process to finance the habitational and urban policy cannot be used as an excuse for not committing funds for housing in municipal budgets. The alternative of seeking funds for the financing of housing by expensively granting the right to build - a present trend in some directive plans elaborated since the adoption of the new Constitution - underlines how local governments still resist to use their own resources for habitation. A word of caution should be mentioned, however, on the economical limitations of such operations. The low or inexistent tax collections in these operations, in weak real estate markets, leave those who need a home in a hopeless situation, as for instance what has happened at João Pessoa.

2.40 At this moment, the National Congress retakes debates on bills that deal with urban matters, and the Secretary of Urban Policy from the Ministry of Planning and Budget has taken the initiative to present a bill dealing with the general objectives and directives of urban policy. Such facts indicate that the Federal Government recognizes the importance to improve the political institutional situation of the sector and can be brought to commit itself to speed up the longed institutionalization of new instruments to regulate the use of urban land, which can alter the urban profile and allow the implementation of more effective land development policies.

## B.2 Actions in the Field of housing

### B.2.1 The National Bank for Housing and the Financing System for Housing

2.41 During the period 1940-1960, home buying was an option put at the disposal of families because of the availability offered by Saving Banks and the Retirements and Pensions Funds (IAPS), or through private banks and building societies. In 1946, the Federal Government decides to centralize the public promotion of social housing by creating a first specialized federal department - the Foundation of Popular Homes. But the building activity during that period of time was clearly insufficient to meet the housing needs of the population, especially in the 60's when the urban growth accelerated. On the other hand, the inexistence of correction mechanisms on instalments compromised the economical recuperation of the loans on the long term, thus wearing out the capacity for reinvestment of available funds.

2.42 In 1963, the Meeting on Housing and Urban Reform held by the Institute of Brazilian Architects, a historical milestone for the evolution of ideas on Brazilian urban questions, suggested a radical change in urban and habitational policy for the country. Taking advantage of the proposals formulated at that occasion, the Castelo Branco government in 1964 created the National Bank for Housing - BNH, the Federal Service for Housing and Urbanism - SERFHAU and

the Financing System for Housing - SFH. These aimed to create possibilities for workers to buy homes, therefore establishing a strong social commitment to retake development, in accordance with the then prevailing ideals.

2.43 Two main resources were then created to help the Finance System for Housing: the above mentioned FGTS, consisting of compulsory savings from workers, and the Brazilian System of Savings and Loans, which consisted of openings of voluntary savings accounts. The success of the mechanism for generating resources under the management from BNH was surprising, surpassing all expectations. In 1985, BNH controlled 1/3 of all property in the country - excluding moneys.

2.44 For 22 years, the BNH financed 4,8 million homes, or practically 25% of the increase in number of homes built in Brazil between 1964 and 1986, the year in which the BNH was extinguished. For all income categories homes were financed through Popular Housing Companies and mainly through private building corporations. However, not more than 20% of the financings were aimed at families of low income. Projects of urban infrastructure and social equipment were also financed and linked to those enterprises.

2.45 SERFHAU, in its role of technical body of SFH, lent technical and financial support to activities of planning, management and training of human resources aiming to strengthen the capacity of the Municipalities for the promotion of local development, within an integrated vision of housing and urbanism. SERFHAU, despite the institutional difficulties that appeared because of its subordination to BNH and resulted in its dismemberment in 1975, had an important role in the development of instruments and techniques of urban planning in the country in a period of intense urbanization. It was also thanks to SERFHAU that the first studies towards the creation of the metropolitan areas were promoted, an initial step in the direction of facing the metropolitan question in the country.

2.46 The performance of BNH consolidated in general lines the former trend of acquisition of homes, the sector of building corporations and of financial



capital. But many things thoroughly changed besides the urban scenery: the profile and the amount of housing demand, the size and volume of the operations, the production of materials and equipments destined to the building industry, the land property market and the real estate market, the investments in the expansion of infrastructural and road networks - the latter basically to allow the growth of the fleet of vehicles and individual transport.

2.47        The social actors involved in the housing question also did undergo a change, apart from public and private agents: (A) the workers, within the formal work market, emerged as a political force through unions, and began to inquire about the use of resources from the FGTS; (B) those who were contractually linked to SFH, pressured by difficulties to repay their debts in a conjuncture of high inflation, wage deterioration and unemployment, organized themselves to defend their interest in movements of great political repercussion; (C) consumers of middle class were putting pressure on the market demanding housing projects within new patterns of comfort; (D) the specialized private agents - from financial, real estate, civil construction and insurance sectors - strengthened or even were created with support from the SFH.

2.48        Interests from real estate capital and large contractors, together with interests of those who took benefit from the distribution of funds, caused distortion in the execution of the national housing policy, mainly in regard to population of low income. The workers organized in unions, whose representation in the Council of the FGTS was unable to defend their interest, were, without doubt, those who lost most, for the profile of applications from the SFH did not correspond to the profile of income from the population. The "modernization" of the building corporations took place in the form of a production aimed towards the groups of higher incomes, a sort of luxury artcraft, thus without changing the material and social bases of the housing production. In this way a dual characteristic is established in the housing provision in the country: on one hand, the capitalist production, coordinated by the businessmen and fed by state intervention; on the other hand, the appearance of slums and illegal land developments.

2.49 The economical world crisis of 1979 reflects itself in Brazil through high rates of inflation, recession and unemployment, requiring efforts from the government to adopt policies to fight inflation. As a result of the policy of wage devaluation of salaries, of the unemployment and of the fiscal restraint in states and municipalities, the level of indebtedness of the SFH increased, consequently restricting loans for housing and sanitation. A series of economical policy measures, taken since 1980, caused serious unbalance in the accountancy of the BNH, which ended in the institutional crisis that led the government, in 1985, to the creation of the Work Group for Reformulation of the Financing System for Housing - GTR/SFH.

2.50 The GTR/SFH, a body formed by representatives of the government and organized society directly involved with housing policy, made a thorough and ample diagnosis of the situation and formulated alternatives to solve main problems of the system. Regarding the BNH, two recommendations should be pointed out: (A) loss of the status of coordinator of the Brazilian System for Loans and Savings, to be transferred to the Central Bank; (B) its transformation into a National Bank of Urban Development directed to solve urban and housing problems. Coherently with the new political - institutional context of redemocratization of the country, it was recommended to increase the social control and participation of the beneficiaries in the decision making process, in order to maintain social priorities.

2.51 Attending to a recommendation of the Work Group, the final report on the SFH was submitted, in the middle of 1995, by the Ministry of Urban Development and Natural Environment to an ample public debate organized by the Institute of Brazilian Architects all over the country. The national debate confirmed, in broad lines, the diagnosis and the recommendations from the Work Group, and by doing so expressed a relative criticism from the government and from the society towards the SFH and the BNH.

2.52 The main points of criticism were the centralization of the credit operations and the rigidity of the System and its main manager, incapable of adapting itself to economical institutional and policy changes, required constantly

according to the national situation. The diagnosis pointed out mistakes in the formulation of the finance system and the housing policy and also in the way it was carried out. The principle of self-management of the SFH was itself questioned, since the internal mechanisms of crossed subsidies were not adequate nor sufficient to attend the population with low income. As a result the established social priorities were not met. The diagnosis shown that the BNH had more success in creating resources than in applying them.

2.53 With regard to the production financed by the SFH, the absolute priority given to home - buying, the emphasis placed on the construction of new units, the priority on big projects, and the progressive giving up of programmes aimed at the population of low income, were strongly criticized. The inadequate location of housing projects, the disrespect towards urban norms and local construction, the lack of knowledge about the environmental and urban impacts, the excessive increasing value on the land property market and the unnecessary and anti-economical growth of the urbanized area, were problems pointed out, interfering negatively in the creation of urban space. Other diagnosed problems related to the low quality of projects - whose pattern did not respect the local peculiarities - and the building process - the lack of quality control of materials and of competent inspection, and technological lag of the production. It is questionable whether all these shortcomings could have been avoided in case the BNH had operated in a decentralized way, since the projects of popular housing, where the major problems are concentrated took place under orders of promoting and financing state and municipal agents.

2.54 Despite the recommendations of the GTR/SFH, when facing the persistency of the economic - financial problems that were affecting the SFH, worsened by court decisions favourable to the beneficiaries in disputes with the BNH, and without on political, parliamentary or popular support, the Bank was closed in 1986 by the Federal Government. Since then, successive changes in the institutional situation, taking place in a very short space of time, disrupted almost completely the sector of the government responsible for urban and housing policy. Despite several attempts made in recent years, political and

institutional adjustment has not yet been achieved, almost one decade after the extinction of the BNH.

## B.2.2 The search for alternatives

2.55 The absence of interested parties to give continuity to the debates aiming at a reformulation of the housing policy disoriented the current efforts and disorganized the movements for popular housing. Only some years later, in 1992, the debate on housing policy would find new ways of expression, through National Congress, mainly starting with actions of some sectors of the society: the movements for housing, the business associations and entities and the Forum of State Secretaries for Housing.

2.56 The most positive aspects to be pointed out during this period of transition are in the leadership of the union movement aiming at the reformulation of the Head Council of the FGTS with the support of the Federal Government, in the period from 1989 to 1994. As from 1989 first steps were taken to create a sound and transparent management of the Fund, strengthening the role of the Head Council on planning and controlling the use of the available resources, and surveying the carrying out of the housing policy.

2.57 The insufficiency of resources to finance public and private production of homes, during this long period of transition, led the business and Public sectors to search for new alternatives in order to meet the housing demands successfully. The Federal Government continued to work basically in the hope of recovering the FGTS and improving the use of its limited available fiscal resources. Some states like São Paulo, Santa Catarina, Minas Gerais and Rio Grande do Sul started to grant towards housing a certain percentage of their income created by Tax Collection on the Circulation of Merchandise and Services - ICMS. State authorities have been making efforts to invest their own budgetary resources in programmes and projects of habitational improvements for low

income population, and also seek resources with the World Bank and the Interamerican Development Bank.

2.58 The municipalities, pressured by the increase of the informal settlements, clandestine invasions and occupations of public areas, have developed, with creativity, successful low cost experiments designed to improve living conditions of the poor. For almost two decades and specially during the period 1979 - 1984 when BNH directed huge amounts of resources to the urbanization of slums and the production of urbanized plots of land, Brazilian Municipalities have been dealing with the urbanization of slums and irregular land parcels. In this sense, the Brazilian experience is already vast and diversified, with interventions more or less successful all over the country, offering valuable contributions which deserve to be better known and evaluated.

2.59 The investments in urbanization of informal settlements are concentrated at first on the improvement of equipment, services and public areas of collective use for the community. The investments in construction, increase and improvement of habitational units, normally done by self - construction or community building, and taking advantage of local materials and know - how, are done by the dwellers themselves, who, in some cases, can have access to subsidized credit for purchasing construction material. The families who occupy areas of risk, generally have had priority in access to benefits of the state intervention.

2.60 Some municipalities have been trying to complement these interventions with the regularization of the land for the settlements, although they still do not have important instruments included in the constitution such as urban land prescription for example, because of the lack of competent regulation. There are some experiences of innovative use of existing juridical instruments such as the concession of use, the collective property of land through constitution of partnerships and the creation of areas of special use subject to urbanistic and construction specific rules.

THE IMPLEMENTATION OF LEGAL INSTRUMENTS OF PLANNING AND URBAN POLICY WHICH WOULD GUARANTEE THE INTEGRATION OF UNDEVELOPED SECTORS OF THE CITY AND THE HANDLING OF LAND PROPERTY PROBLEMS, AS WELL AS THE FORMULATION OF HOUSING PROGRAMMES AND PROJECTS, HAS PROVEN TO BE AN ABSOLUTE MUST FOR LOCAL ADMINISTRATIONS. THE "PREZEIS LAW" HAS BEEN IN EFFECT IN RECIFE - PE - FOR THE LAST 10 YEARS. IT INCLUDES THE REGULARIZATION OF THE OCCUPATION OF THE LAND ON SPECIAL ZONES OF SOCIAL INTEREST, CALLED "ZEIS". IT ALSO INCLUDES THE INSTITUTIONALIZED COMMUNITY'S PARTICIPATION IN THE PLANNING, IMPLEMENTATION AND INSPECTION OF PUBLIC AUTHORITY ACTIVITIES IN THESE AREAS. THIS PRACTICE IS COMPLEMENTED BY THE "LONG-LIVE THE SHANTY TOWNS PROGRAMME" WHICH HAS ALREADY REACHED 200,000 INHABITANTS (EQUIVALENT TO HALF OF THE CITY'S POPULATION THAT INHABITS ENDANGERED AREAS). THIS PRACTICE IS THE TRIUMPH OF THE LOCAL POPULAR MOVEMENT AND HAS BEEN MAINTAINED THROUGHOUT VARIOUS LOCAL ADMINISTRATIONS.

2.61 Many projects include the support to activities which generate sources of income aiming to improve the conditions of life of the population and increase its capacity to pay for improvements and services. But in general terms, all projects try to stimulate the popular participation indispensable to the success of the enterprises, while some city councils have been stimulating self - management or joint management in the production of homes.

**INTEGRATED PUBLIC INTERVENTIONS (FORTALEZA - CE, DIADEMA - SP, BELO HORIZONTE - MG, LONDRINA - PR)**

THE FORM OF INTERVENTION IN LOW INCOME PLANNED SETTLEMENTS HAS BEEN ABANDONING THE PRECISE AND SPECIFIC METHODS OF THE PUBLIC AUTHORITIES, IN ORDER TO ADAPT OTHER POSITIONS THAT SEEK NOT ONLY PHYSICAL IMPROVEMENTS, BUT ALSO THE SOCIO-ECONOMIC INSERTION OF THE POPULATION INTO THE CITY AS A WHOLE. FOR THIS PURPOSE, THE PROGRAMMES (APART FROM ENVISAGING ORGANIZATION AND HOUSING RENOVATION PROJECTS, THE CREATION OF JOBS AND INCOME) OFFER PROFESSIONAL PREPARATORY COURSES AND THE TRAINING OF COMMUNITY COMMITTEES.

FORTALEZA (CE), DIADEMA (SP), BELO HORIZONTE (MG) AND LONDRINA (PR) ARE DEVELOPPING THESE PROGRAMMES, INVOLVING STATE GOVERNMENT, TOWN COUNCIL, SCHOOLS, RESIDENT ASSOCIATIONS, AND NON-GOVERNMENTAL ORGANIZATIONS, THROUGH CREATIVE INSTITUTIONAL ARRANGEMENTS. IN ADDITION, THEY EMPLOY NEW JUDICIAL INSTRUMENTS SUCH AS THE CONVERSION OF THE NOYAL RIGHT OF USE.

IN BELO HORIZONTE, THE PROGRAMME SPREADS OVER TEN SHANTY TOWNS IN THE METROPOLITAN AREA, WITH AN ESTIMATED POPULATION OF 40 THOUSAND INHABITANTS. IN DIADEMA, IN THE LAST 3 YEARS, CLOSE TO 14 THOUSAND FAMILIES IN 130 SHANTY TOWNS HAVE BENEFITTED FROM URBANIZATION. IN LONDRINA ONE

2.62 The examples are many and any inventory would turn out incomplete. The know - how which is available, however, is sufficient to confirm that there is a permanent search on local level - of the municipalities, the non - governmental organizations, welfare and religious entities or the communities themselves - of alternatives to deal with the problem of popular housing. However, the lack of continuity of the interventions, resulting from administrative changes and political tendencies of municipal leaders, has proved to be a burden to achieve expected results. This is one of the major challenges of the municipal administrations in Brazil, because the social and environmental conflicts demand growing response from the local authority, therefore not allowing that these problems continue to be ignored or passed on to another government level, as was always done.

2.63 The task to be dealt with has not been an easy one since, except for the companies of Popular Housing - COHAB, in great part under the command of state governments and still imbued with old mentalities and experiences, the City Councils do not have a specific organizational structure nor qualified personnel to handle this type of intervention, and no experience in handling credits. And even though they might have started the creation of municipal funds for housing, by following recommendations from the Federal Government, whose functioning in the short-term is unstable, Municipalities do not have enough resources to keep up consistent actions on necessary scale.

2.64 Meanwhile, the private sector sensibly reduced the supply of houses for the middle class because of the lack of financing of the production and the commercialization of property. Consequently the real estate market conditions have been restraining the access of this social segment to homes, pushing up the prices of the renting market also choked by the lack of new investors. An alternative for consumers has been self - financing by the purchasers themselves, a solution of evidently limited reach.

### B.2.3 Evaluation of the land property and housing policies

2.65        Except for the diagnosis prepared by the GTR/SFH in 1985, above mentioned, the evaluation of the housing and land property policy, during the last decades, has been the object of many studies and research projects - on academical, professional and government level - and caused debates on different fora on business, popular and political fields. Although the evaluations adopt distinctive perspectives and are often fragmented and partial, they are a valuable starting point for correcting directions, aiming to fight mistakes which marked the state intervention in the provision of housing.

2.66        The available evaluations showed the existence of a certain degree of agreement on what are the main topics to be dealt with by a housing policy that does not restrict itself, as in the past, to privilege only financial aspects - these are:

- The question of the market: a new attitude of the state is necessary to deal with the difficult task to enlarge and democratize the market so that the masses that nowadays are illegally and informally settled in cities can progressively be inserted. To deal with this question implies deep transformations in the appropriation of urban space and in the social appropriation of the benefits of economical growth, in order to overcome the problems generated by the excludent urbanization that hinders the formation of a housing market compatible with the necessities of the development of the country.
- The urban question: it will be difficult to solve the housing problem without setting a link between urban and regional policies - which orientate the occupation of the space - and the integration of the sectorial, housing, sanitation and urban transport policies. Housing depends on norms that regulate the use and occupation of urban land, the availability of infrastructure and urban equipments, the conditions of circulation and transport and the distribution in space of economical activity and working centres - all matters of urban policy. Particularly important to the housing policy are: the improvement of norms and urbanistic and construction patterns and the adequate use of planning instruments and management of the cities.



- The land property question: to facilitate the access to the land for all is one of the major challenges to be dealt with in order to achieve the goal of Habitat II - adequate housing for all. The urban land property question affects the living conditions of a much larger number of families than the situation in the hinterland of those without land. However, since this question is not considered of high priority, important provisions in the constitution designed to guarantee the social function of the property have not yet been set. Without competent juridical instruments and resources for de - possession, the municipalities lack conditions to regulate and increase the supply of urbanized plots of land for the poor population that has no access to urban land. The land property regulation of the informal settlements was also delayed by the absence of more efficient and adequate instruments of intervention in the urban and land property structure. The issues of technical order, which prevail in the land property regulation of slums, require, from the public administrator, creativity and flexibility in the adoption of legal norms. Information systems on urban property, with maps, real estate registers and plants of reliable value, of good quality and permanently updated are basic instruments to deal with the land property question at local level. The estate patrimony of the Federal Government, without social or economical function, should be utilized for social housing, thereby contributing to attenuate the problems of scarcity of urbanized land. That measure depends on energetic and swift action of competent authorities.
- The economical question: The economic equation of housing must be solved. The increasing disparity between the acquisitive capacity of the population and the cost of housing and infrastructure, is one of the factors that does not allow the access to better living conditions for all. The question has to be faced considering the demand - by improving the employment and income situation of the population and facilitating housing credits, and considering the supply - by reducing the production cost of the units and the setting up and operation of the infrastructure. The macroeconomical and industrial incentive policies are an important instrument for the introduction, by the Government, of measures to change the economical and technological bases of housing production. Low budget technological alternatives and the production of construction material of

better quality for mass consumption, the rationalization of constructive processes and waste reduction, are important factors to reduce the costs of housing and increase the supply.

### **C. Trends and Perspectives of the National Housing Policy**

2.67 The dismemberment of the operational structure under the command of the BNH and the closing of the SFH, during the period of institutional vagueness that followed, alerted different segments linked to the provision of housing for the necessity to mobilize their efforts in order to supplement government action in the formulation and carrying out of a new housing policy of social interest, thus recognizing that the state alone cannot handle the overpowering task of reducing the housing shortage. In this sense, different proposals to reformulate the SFH, in the form of bills, were sent to the Parliament.

2.68 The different proposals had many points of coincidence: creation of a specific fund for resources destined to social housing, creation of a National Council for its management, necessity for budgetary resources for the subsidies (exclusively for the population with low income) and decentralization of operational activities involving other levels of government. In this sense, the Member of Parliament responsible for putting the matter together committed himself to make the proposals compatible and to consolidate them in one Bill. However, with the beginning of a new legislative period, the Secretariat of Urban Policy initiated talks with the Commission of Urban Development aiming to replace those proposals of sectorial origin by a more enlarged Bill with provisions about urban policy. With the objective to improve the legal text and, where possible, incorporate the contributions of all the segments interested in the urban and housing question, maintaining the process of democratic participation, different meetings were held with the presence of congressmen, authorities, business representatives and movements for housing.

2.69 This meaningful participation in the legislative process points towards a trend of different governmental and society segments to search for common points of understanding which would allow the negotiation of conflicts and

interests between the different parts. On the other hand, a political maturity of all urban leaderships can be observed in the sense of recognizing the importance of the institutionalization of public policies through national Congress. This trend, if reinforced by competent congressional action, could achieve very interesting developments for the democratical administration of the cities, and mobilize the popular participation in legislative projects on state and municipal levels.

2.70 It is important to recognize the merits of organized action of the entities linked to popular movements for housing which were capable, in this decade, to change their demanding attitude in an effort directed towards the formulation of new proposals for government action. With the assessment of the National Forum of Urban Reform, congressmen and professional entities set the proposal for the creation of the National Fund for Popular Housing, forwarded to the National Congress as a Bill originating from popular initiatives, subscribed by 800,000 voters from all over the country. This new attitude of popular movements, a trend that is being observed worldwide, can result in deep changes in the process of formulation and implementation of urban and housing policy on all levels.

2.71 The housing policy that is now being implemented by the Federal Government incorporates the trend of decentralization which has been present throughout in state and municipal interventions. The aim is to reduce the centralization of decisions in allocating resources and strengthening the role of the state and municipalities in the execution of the housing policy. The National Savings Bank, which is operating the FGTS, is also being restructured on national level, so that it can operate through its regional units with more technical and financial autonomy, and by doing so reinforcing the process of decentralization.

2.72 The housing programme recently created by the Federal Executive - Pro - Housing - strives to avoid problems of the past, confirming the trends of the last decade. Apart from establishing as target - population families with an income up to three minimum wages to take benefit from the resources of the FGTS, the programme ceases to give priority to home buying, produced by contractors, as the main product to be financed. The municipalities and states are given more

flexibility in the definition of the alternatives which are to be adopted, in accordance with priorities and local peculiarities. The Pro - Housing leaves to state bodies, integrated by representatives of the government and the society, decisions regarding programmes and projects that should be financed. The intention is to guarantee large popular participation and to make the contract of loans easier. These are projects yet to be checked up as for their operation capacity, since new methods were introduced in the relation between agents and beneficiaries and in the processes of analysis and approval of the projects. It is important to recognize that efforts are being made to consolidate, on operational level, the tendencies of decentralization, democratization and more social control on housing investments.

2.73 Regarding the question of resources, new resources and mechanisms of financing are being studied, aiming to increase and make easier the access to housing credit for social segments, with priorities for those with a low income. Apart from the Fund for Real Estate Investments, of the Linked Savings and the letter of credit already approved, the feasibility of the creation of a secondary market of mortgage, the Mortgage Companies, larger use of funds for pension and larger access of external resources are under study. The government is also considering the application of resources of the federal budget, by directing, as from 1996, more consistent fiscal resources, with a major fiscal effort on state and municipal levels, resources which are indispensable to maintain the necessary subsidies in order to attend the poor population. Finally, it is important to emphasize that the situation, even the existence and the destination of the FGTS, are being the subject of specific studies by the Federal Government. In this sense, it can be confirmed that the trends regarding the housing financing are: to increase and to diversify the sources and the mechanisms of obtaining resources; to stimulate a larger fiscal effort in all government spheres; to improve planning, application and management of the resources; to avoid the concentration of available resources through decentralization and to operate with a large number of public and private agents - from business, social welfare and community sectors.

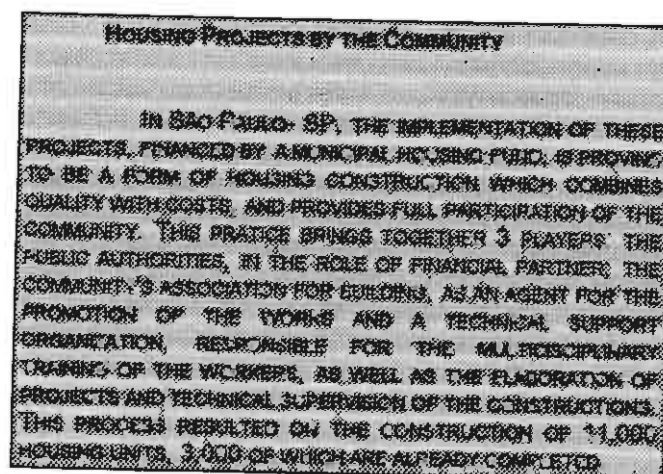
2.74 A movement which is shifting from speeches to practical action, mainly in the capitals, is the revitalization of central areas of the cities aiming to preserve the existing patrimony. These interventions do not limit themselves as in the past anymore to exemplary spaces and constructions. Although discreetly, efforts are being made to recuperate existent homes and attract new business of mixed use - housing and commerce, in order to restore the residential functions of historical centres. The result can be rewarding for public and private investors and for the population in general, as it is being demonstrated in other countries, with environmental, economical and social significant impacts, thus reducing the cost of housing and transport.

2.75 Overlooking the experience of other countries particularly that of France, the Secretariate of Urban Policy carries on with the studies on social letting initiated in the former administration, as an alternative to solve the housing problems of families with a low income. The option for letting residential property, in face of the difficulties of access to home owning, went against the very functioning of the leasing market. In the present situation, the tenants are in disadvantage, pressured on one hand by the excessive regulation of the formal market and on the other hand by the total liberty of the informal market. Even though the ideal of home owning is overcome, either by option or by absolute impossibility of realization, the question of renting property deserves revision by the competent authorities. Not one housing policy can be complete without taking the leasing into consideration, an option chosen by an increasingly number of people.

2.76 The Brazilian Institute of Architects (IAB) which, historically since 1963, has played a relevant and an even pioneer role in the field of housing and urban development, chooses to place the principles of a new housing and urban policy together with those of the rights of citizenship, coherently with the spirit of the 1988 Federal Constitution. Rights that express themselves particularly in the access to benefits of adequate housing, urbanization, and natural environment - goals of the Habitat II - but also in the recognition of the necessity of services from professionals of architecture, democratic administration of the city, democratization of information and know - how.

2.77 - Just as the IAB, the National Forum of Urban Reform calls attention to the question of the right of citizenship. The urban reform is understood as the synthesis of a constant process of action and reflection about urban space, aiming to fight against all forms of exclusion - economical, social, cultural, and spacial - that characterize Brazilian cities. The urban reform bases itself on the rights of citizenship recognizing that all humans have the right to influence the courses and destination of their cities so that they can recognize themselves as citizens. The forum reinforces the necessity of the government to democratize its management, through collective mechanisms of decision making, access to information and the social control of tax collection and public expenditures.

2.78 With regard to the administration, it can be pointed out the importance of stimulating, in the housing policy, self managing processes of production, transferring taxes from the public sector to community associations or cooperative - a form of public management not coming from the state. Self management, in accordance with the current experiences, can significantly contribute to increase the possibilities of supplying the needs for housing of the poor population, with less economical and social costs.



2.79 A proposal should be clearly lined out in the sense of helping the University in confronting the problems of human settlements, in view of the expansion of University actions in the technical aid to the community, thereby making possible the effective participation of the population in the development of

projects of sanitation, urbanization and architecture. The importance of the proposal lies not only in the support the community receives, but also in the formation of trained professionals to deal with the real problems of housing of the low income group.

2.80 In keeping track with the trends that are observed internationally in public policies, the suggestion is that topics of the kind should be dealt with through proposals and plans of action within the Habitat II. Considering the importance that housing has for the woman, whose presence is of great importance in the struggle for access to adequate homes, particularly in the poor communities, and the specific difficulties she meets as a consequence of the distinction of sexes, the conditions of supplying to the housing needs of the population in order to guarantee the principles of equality between men and women should be revised.

#### **D. Conclusion**

2.81 To assume the commitment, proposed by the Habitat II Conference, to pursue as an objective adequate housing for all, requires, in the case of Brazil, political determination and collective effort in the sense of financing adequate solutions for the multiple economical, social and urban questions that make it difficult to respond to the housing needs of the country.

2.82 The commitments that the nation will be assuming in Istanbul should be translated into a new urban and housing policy which considers the competent evaluations of the dimension and the characteristics of the problem and the availability of human, technological, natural and economical resources in a perspective of short and long term. The design of the Habitat II is that the countries fix goals to be achieved in the next five years, as a first step to revert the housing deficit, thus changing the housing conditions of all in the next decades. If the nation understands that it is not desirable to reach the end of the century with the housing and present urban indicators, incompatible with the objectives of development of the country, it will have to direct its efforts towards

the revision of the priority conceded to the housing question within macroeconomical and social policies.

2.83        The diagnosis of the urban, land property and housing question points out to the mistakes and adjustments of government action during the last 30 years. To take advantage of lessons from the past, to respect the trends which surfaced along the last decade, to identify the perspectives of solutions to the housing problems and act according to principles, objectives and directives established by a new urban and habitational policy, require a spirit of co-operation and solidarity between government and society.

2.84        The international co-operation on the field of housing also deserves a revision and deeper discussions within the Habitat II Conference, since, notwithstanding the commitments assumed during the First Conference on Human Settlements (Vancouver, 1976) and the efforts made by the countries and the international co-operation, the world housing situation only worsened in the last decades, in accordance with the paper prepared by the Habitat. Brazil is counting on adequate and competent international co-operation, with the aim of, while recovering its development course, having necessary means to provide adequate housing conditions for all in sustainable human settlements, according to the principles of Habitat II.



## CHAPTER III: URBAN ENVIRONMENT, SANITATION AND TRANSPORT

### A. Introduction

3.01 The intensity and characteristics of urbanization all over the world created two major problems at the end of this century: the urban question and the environmental question. The environmental deterioration either of the city or of the hinterland is an ancient problem and always existed in the history of humanity. New facts are that, at the end of this century the intensity of the processes of environmental degradation go together with urbanization, resulting in a growing vulnerability of the cities, a problem worsened by the intensity of urban concentration. As from the United Nations Conference on Natural Environment and Development (Rio, 1992), initiatives aiming to associate both questions were reinforced. The Habitat II Conference emphasizes the urban environmental question by defining the sustainability as a principle and sustainable human settlements as an objective to be pursued.

3.02 The most acute environmental problems are mainly a result of urbanization on ecosystems, thus causing a growing contamination of natural resources, especially air and water. They contribute significantly to environmental degradation - which consequently have its reflections on the health conditions of the population - the scantiness of the sewerage system and water supply, the disposal - still poorly controlled - of industrial waste, the insufficiency in the waste collecting system, in the treatment and final disposal of solid residue and the emission of polluting gasses of industrial and vehicular origin, worsened by inadequate use of energy resources. The atmospherical pollution of vehicular origin is made even worse by the intensive and indiscriminate use of individual transport.

3.03 Predatory urbanization is a recurrent picture in middle- and large-sized cities, especially serious in the Brazilian larger cities, thereby affecting intensely the poorest sectors of the population. In Urban Brazil the socio-

environmental reality of a large part of the population is characterized by the dimensions of exclusion, risk, lack of information and sanitary and environmental education. This picture is worsened by the serious damage to the quality of life resulting from urban changes done in order to solve problems of traffic circulation which result in the loss of identity, legality and rigidity of urban spaces.

3.04        The diagnosis shows an enormous shortage of infrastructure in urban and rural areas that seriously compromises the quality of life, placing at risk not only human health and the ecosystems, but the very character of sustainable development. This shortage of sanitation not only has an impact on the conditions of health of the population, but affects the entire ecosystem, made worse by the absence of treatment of the water supply, causing the contamination of the water and the deterioration of the productive land in the hinterland and in the city. In this sense, the sanitary situation equally affects urban and agricultural economy and urban and rural development.

3.05        The diagnosis quantifies and qualifies this situation of shortage of infrastructure and analyses its implications on natural environment. The causes of this lack of public services, fundamental to the maintenance of the health and to the protection of the natural environment can thus be resumed:

- The institutional and financial crisis which affected the capacity of investment of the public sector, in general, and particularly of the sectors of sanitation and public transport;
- The ageing of the infrastructural networks and systems, which require replacement, enlargement and modernization;
- The diversification and quantitative increase of sanitation necessities of the urban population and the demand for services;
- The increase of the demand for public transport as a result of economical growth recovery;

- Necessities of political-institutional adjustments to regulate the social relations between the producers of services and the users.

3.06 Although the governmental action of protection of natural environment and of conservation of the natural resources might have intensified on the field of environmental management, during the last decade, the concern with environmental problems (brown agenda) has not yet received the same attention as the green agenda. The clarity of the environmental component in urban and sanitation policies is very recent.

3.07 Thus, the Brazilian urban environmental crisis represents a very favourable theme to bring into debate the necessity of new commitments with the development of sustainable human settlements, urban or rural. Such an objective can only be achieved if conditions which favour new investments in infrastructure, promote necessary institutional changes and allow changes in behaviour are created. Joint responsibility, solidarity and collaboration between government and society could bring the constant process of environmental degradation to an end.

## **B. Diagnosis of the Urban Environmental Situation**

B.1 The urbanization and its consequences on natural environment

3.08 During the last decades, the accelerated and disorganized urbanization, the spacial concentration of the population and economical production and technological patterns have reinforced an environmental situation highly deteriorated as a result of a style of development that leads to the predatory use of natural resources. The cities are in the centre of this question: as production and consumption centres, cities are major explorers of natural resources such as water, fossil fuel and cultivable land thus concentrating the more serious problems of environmental degradation.

3.09 The Brazilian urban framework shows unstable human settlements, where the poor live, and environmental abuse causing increasing degrees of

deterioration of the quality of life. Inundations, erosions, landslides, water and air pollution, as well as a steadily diminishing vegetation cap, affect the daily routine of the population, particularly the poorest sectors. A model of development and urban planning marked by exclusion and segregation forced the poorest groups of the population to illegally occupy improper spaces for settlements such as steep slopes, marshlands, river margins and water courses, areas of protection of water sources, areas of risk for the type of precarious housing of this population, risk worsened by the absence of infrastructure.

**COORDINATION BETWEEN HOUSING, SANITATION AND ENVIRONMENT (SÃO PAULO - SP, JABOTÃO DOS GUARAPUAVES - PE, VITÓRIA - ES)**

CREATIVE INITIATIVES ARE BEING UNDERTAKEN IN ORDER TO COORDINATE THROUGH PUBLIC INTERVENTION HOUSING IMPROVEMENT PROGRAMMES WITH THE REGULARIZATION OF LAND OCCUPATION, EXPANSION OF INFRASTRUCTURE, ENVIRONMENTAL RESTORATION AND POVERTY OF FAMILY INCOME. THE MOST IMPORTANT PROJECTS IN THIS AREA ARE: A. THE GUARAPUAVA PROJECT, (IN THE CITY OF SÃO PAULO) WHICH BENEFITS CLOSE TO 15,000 FAMILIES. IT ENSURES THE REMOVAL OF THE POPULATION, WHENEVER THE SETTLEMENT IS LOCATED IN AREAS OF RISK, AND INCORPORATE ILLEGAL SETTLERS INTO THE CITY'S DEVELOPED AREAS; B. THE REVITALIZATION OF THE "OLHOS D'ÁGUA" CREEK, IN JABOTÃO DOS GUARAPUAVES - PE - INHABITED BY CLOSE TO 25,000 PERSONS. THE PROJECT DEALS WITH HOUSING AND ENVIRONMENTAL ASPECTS, SEEMS TO DEVELOP THE ECONOMIC POTENTIAL OF FISHERMAN. OTHER 6,000 FAMILIES OBTAINED SEWERAGE FACILITIES THE AREA, AND CLOSE TO 11,000 RECEIVE TREATMENT FROM COMMUNITY HEALTH AGENTS; C. THE SÃO PEDRO PROJECT, IN VITÓRIA - ES - DEALS WITH THE REVITALIZATION PROCESS OF URBANIZATION, GENERATION OF INCOME AND IMPROVEMENTS OF HEALTH CONDITIONS OF THE POPULATION, BENEFITING 15,000 FAMILIES.

## B.2 Cities: size and density

3.10 One of the causes of the degradation of the urban environment is the uncontrolled densification of the cities. The situation in Brazil is paradoxical: while the majority of the cities has an average density varying between 50 and 80 inhabitants per hectare, which causes the per capita costs of infrastructure to be extremely high, there are urban areas with very high densities, particularly in the large urban centres, but, nonetheless, there still exist large empty urban spaces. Several examples of cities all over the country that resemble this picture of inefficiency in the occupation of the land could be mentioned: according to estimations, even in the mid-sized cities the proportion of vacant lots lies around

50%, similar to the rates found in Rio de Janeiro, while the central area of São Paulo reaches 27% of underutilization\*.

3.11 This situation, together with inadequate urban plans and housing, historically induced by transport policies that disrupted the urban space, leads to very low patterns of quality of life. The combination of these factors with the economical limitations in the production of popular housing and provision of services of infrastructure generates, as an obvious consequence, an urban space of low or no quality of life at all.

3.12 The question of the size of cities also has effects on the quality of the natural environment. There is a strong correlation between urban size and environmental degradation, as seen in most countries including Brazil. The available knowledge allows to infer that all the indicators of health and environment are worse in larger urban concentrations and particularly so in the Metropolitan Regions.

3.13 This picture can be explained by a number of factors, among them:

- Technical and financial difficulties to expand the network of sanitation services to the urban periphery, of more recent occupation, and to replace the network installed in older centres, where unplanned growth accelerated the deterioration and the obsolescence of equipments and services;
- Absence of public policies of urban transport able to reduce the environmental impact by the use of collective transport and the use of renewable resources of energy;
- Problems generated by the low capacity of urban and environmental management over a space in continuous expansion and changes and subject to unlinked actions of a great number of public bodies and entities;

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- Difficulties faced by the cities to finance the supply of infrastructural services, as a consequence of the economical crisis which affected, on the one hand, the capacity of Federal investment, and on the other hand, the capacity of the population to pay for the high costs of the services.

3.14 Taking into account the speed of the process of urban growth and the intensity of the Brazilian metropolization, as well as the absence of urban, territorial division and public transport policies, the question of the size of the cities is, and will continue to be, critical when dealing with urban environmental problems.

### B.3 Poverty and natural environment

3.15 The relation between poverty and environmental degradation is a recurrent theme and a concern manifested in all discussions about development. The Programme of the United Nations for Natural Environment - PNUMA points out two basic causes for the environmental crisis: the property and the bad use of wealth. The poor are compelled to destroy, in a short period of time, precisely those resources on which they base their perspectives of subsistence on the long term, while the patterns of consumption of the rich minority cause demands based on natural resources.

3.16 In Brazil the consequences of poverty go together with the consequences of environmental degradation. Even the environmental problems caused by the concentration of industrial activities affect the poorest in greater degree, since such sources of pollution are generally located near the dwellings of the segments of the population with lower income. The probability of the populational segments with lower income to settle and work in unhealthy environments, with breathing difficulties and drinking water contaminated by industrial residues is much higher. It can be also added that the poor population pays a higher social cost for transport, if taken into account its lower mobility and accessibility and bigger exposure to risks of atmospheric pollution.

3.17 It is important to remember, however, that even though environmental damages directly affect the poorest groups, they also indirectly affect the entire population of the city. A clear example of this situation is the water pollution. The physical and demographical expansion of the cities, without planning or any form of adequate control, has caused indiscriminate and even criminal advances of the urban area over protected areas thus causing contamination of the sources of water supply for the whole population - urban and rural, poor or not.

3.18 Although the indicators of sanitation show an expansion of the services during the 80's, they reflect a picture of precarity and unequal distribution in urban areas, since the poor and peripheral areas were discriminated in the supply of services for drinking water, sanitation, sewerage system and waste collection. The available data also shows the disparity of the situation between urban and rural areas, which is worsening the unsafety of housing conditions in the country.

3.19 The indicators of access to services of basic sanitation gain importance in their relation with the problem of infant mortality. Taking as reference families with a monthly per capita income of half the minimum wage, the infant mortality rate, comparing families that dispose or not of basic sanitation infrastructure (access to the public network and of sewerage or cesspit) varies from 51.6 to 107.9 per thousand newborns\*.

3.20 The diagnosis leads to the conclusion that the sustainable development of the human settlements is seriously threatened by not only the environmental degradation and uncontrolled urban growth but also by poverty. If the economical, social and environmental questions are intimately linked, any serious and realistic initiative of facing the urban environmental question will depend on the sustainable development of the social and economical bases of the country.

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#### B.4 The provision of water, sewerage and waste collection to the population

3.21 The access to the services of water had a considerable expansion during the last two decades, as a result of the priority conceded to the service by the Nation Plan of Sanitation - PLANASA executed by the BNH. In 1991, in accordance with the Demographic Census, 65% of the total of permanent homes were integrated in the general water supply network, whereas this rate reached 85.87% in urban areas and 6.8% in rural areas. The difference of providing of services between the urban and rural population equally reflects the strategy of the sanitation policy of BNH, since the data demonstrates that if we take into account the dwellings without drains, but are integrated in the general network, the number of dwellings serviced were 70.71%, of which 87.81% are in urban areas and 9.84% in rural areas. (Table III-1).

3.22 With relation to the areas covered by the sewerage system, the situation is extremely unstable, since merely 35.29% of the total population is serviced. The variations between regions give a dimension of existant disparities, in conformance with the following data. While in the North region merely 1.33% of the dwellings are integrated in the general networks, in the North - East region this number represents 8.88 %, while in the South - East region, which is in the best situation, the total of dwellings serviced is 63,46%; in the South region, only 13.65% and in the Centre - West region 27.24%. These indicators show the level of existing precariousness, for 17.11% of the Brazilian homes have septic cesspits, 32% have rudimentary septic cesspits and 14.68% do not have any sort of drainage. (Table II-2b and III-2).

3.23 In Brazil, in 1989, 47.25% of the municipalities had some form of public service of sanitary sewerage, of which only 12.2% utilized drainage channels to expel the collected waste in bodies of water and 7.79% underwent some kind of treatment, in most cases a pond of stabilization. One can observe that, apart from the 52.75% of the municipalities which do not have waste collection, the largest part of those who have, proceed the collecting but do not treat the collected waste. The regional disparities are incontestable: in the South



East region only 15% of the municipalities treat collected waste, in the South region 7%, in the Centre - West region 3.69%, in the North - East region 3.63% and in the North region 7.7% (IBGE, PNSB/1989).

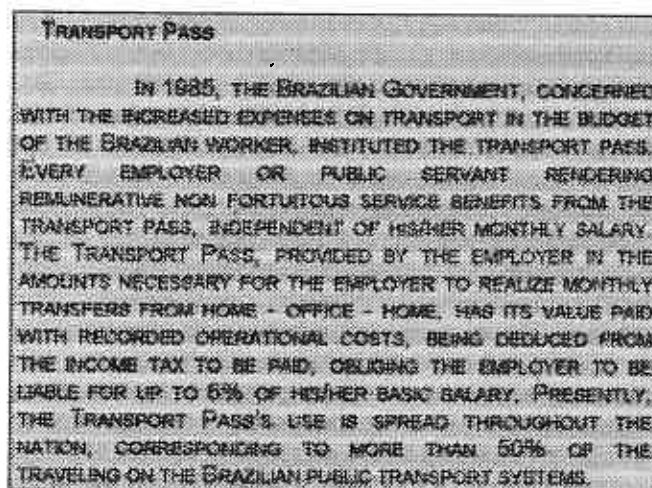
3.24        Still using data of the Demographic Census of 1991, one notices that 80% of the Brazilian urban dwellings have waste collection, which means about 22 million homes covered by these services. It can be verified though that a considerable part of the urban homes gives an inadequate destination to the produced waste. Of the total of the urban dwellings 8.51% burn or bury the waste, 11.5% deposit the waste on unused plots of land and other locations and 0.72% deposit their waste elsewhere. These numbers indicate that a significant part of produced waste does not receive adequate treatments (Table III - 4).

3.25        In accordance with the National Research of Basic Sanitation from IBGE in 1989, in all the regions of the country the problem that is put forward is a very serious one. The largest part of produced waste is dumped in open air. The majority of the Brazilian municipalities so proceeds, totalizing 72% of the collected garbage and only 47.14% of the collected garbage receives adequate treatment: 24.66% is used as controlled landfill, 6.72% as sanitary landfill and 5.73% in the compost industry, incineration and recycling. Only 52.55% of the Brazilian Municipalities have a specific waste collection for hospitals, of which, among them 74.63% get rid of hospital waste in open air dumps and in the rest of the municipalities the garbage from hospitals is incinerated or disposed of in places specially made for this purpose.

3.26        The adoption of an open air dumping site as a solution for the final disposal of residues is a serious risk that does not limit itself to the area where it is located. Because of the fact of not receiving any kind of treatment or fiscalization, the waste disposals release highly toxic gases and liquid substances that pollute the air, the soil and the rivers and the underground water and reservoirs. Besides causing environmental problems, they contribute to the degradation of the urban landscape, affecting directly and indirectly the population from the surroundings. These problems happen mainly in peripheral areas, where the poorest stratum of the population live.

## B.5 Attending the needs of urban transport

3.27 Besides the characteristic factors of populational growth and the ever growing trend of urbanization in Brazil, the economical stability has been causing a strong increase on the demand for transport in the cities, accentuated by the increase of the purchasing power of the population. Part of this increase is attributed to the return to the system of transport of users which, economically incapacitated, commute walking.



3.28 The precarious situation of the urban public transport, particularly in the large Brazilian cities, originates from the prevalence of dislocation by individual private transport, a situation that proves itself damaging to the enhancement of collective transport. The cost of implantation and maintenance of the transport infrastructure, traffic signs and the operation of traffic aimed at automobiles, in face of the present state of incapacity of Federal investments, has made it impossible to adequately meet the necessities of transport for the majority of the population.

3.29 The production of the automobile industry leaped from 914 thousand automobiles per year in 1990 to almost 1,8 million in 1995. The enormous contingent of private vehicles resulting from this expansion circulates today in the cities without the settling down, on one hand, of the preparation, equipment and

good management for transports, nor, on the other hand, increase of necessary public investments.

3.30 The automobile, although it supports an important industrial sector, has proved itself a disturbing element of urban life, be it because of the waste of non renewable resources, be it the fact that it constitutes an active agent of atmospherical and acoustic pollution, and should therefore be replaced as a main form of urban transport. The continuity of the model of urban development which favours individual transport, through the diffusion of the automobile, besides harming the natural environment, reduces the capability of citizens to reach employment and living centres, especially those categories of lower incomes.

3.31 Until 1990, Brazil had a national system of urban transport. Today each municipality is responsible for the management of its system and there are 400 municipalities with more than 50,000 inhabitants that have organized and significant transport systems. The transport systems by bus are being operated, through concessions or permission, by approximately 2,000 private enterprises responsible for the transport of 95% of the passengers, the remaining 5% being transported by public enterprises. The Brazilian fleet consists of 70,400 vehicles, with a national average age of approximately 5.8 years (according to the Ministry of Transport).

3.32 The underground systems, of state responsibility, and the metropolitan trains operated by the states and the Federal Government, responsible for 8% of the total of metropolitan journeys, have not succeeded in enlarging their services due to the discontinuity of necessary investments and substantial cuts in their budgets. With exception of the underground system of São Paulo, which has benefitted from regular flows of resources, the remaining systems of high capacity, implanted in Brazil during the 70's, were not expanded nor concluded, and therefore could not fulfill their role of principal means of transport where they were implanted.

3.33 In short, the systems of available urban transport are neither sufficient nor adequate to meet the demand, mainly in large cities and the

Metropolitan Regions. Less polluting transport, safer, more comfortable and accessible to the whole of the population could contribute substantially to the improvement of the quality of life and of the urban environment.

#### B.6 The pollution of the air and the water

3.34 The atmospheric pollution ranks among the most important urban environmental questions in the Brazilian case. The environmental problems generated by the pollution of the air in the large Brazilian cities have two sources: industrial and vehicular. But the main source of atmospheric pollution is still the carbonmonoxide produced by the fleet of vehicles, whose growth resulted from the development of the automobile industry, the low price of oil and the expansion of motorways and urban networks. Such factors led to wrong options which gave priority to individual transport instead of collective transport and the motorways systems to the detriment of the railways and waterways transport in large cities.

3.35 In some cities the problems of the quality of air are directly related with the proximity of industrial areas and other sources of contamination (mining companies, quarries, compost plants and of incineration of garbage, etc.) of occupied urban areas. The environmental problems created by industrial activity are mainly the result of the lack of control of their polluting effects. Few are the existing institutions, away from the more developed regions, capable and equipped to detect the degree of pollution of the air and water in the more developed Brazilian cities. The industrial concentration contributed to worsen even more the problems of atmospheric pollution in densely populated areas, thus being specifically pinpointed in urban and regional terms.

3.36 The inexistency of adequate systems of treatment of liquid and solid residues, resulting not only from the economical activities (agricultural, industrial and mining) but also from domestic activities, has also caused high levels of water pollution. In relation to the industrial sector, we can distinguish that the major part of the establishments with a high water polluting potential is located in the South - East region and represents 52% of the total, 21% is in the North - East region and 19% in the South region. The higher concentration is in the states of São Paulo

and Minas Gerais and represent respectively 31% and 12% of the country\*. As in the case of air pollution the big industrial and urban concentration represents high organic and inorganic loads in relation to the assimilative capacity of the receptive bodies and turns their water improper for most uses.

3.37 Although the pollution of the waters associated to the lack of basic sanitation might be relevant, it takes place together with the diffuse pollution, which refers back to the problem of water contamination by agricultural pesticides, heavy metals, toxics and fertilizers from agricultural mining and industrial companies, that affect the ecological balance of hydrographic basins.

3.38 The number of state and municipalities which have conditions to effectively control the process of degradation of the bodies of waters caused by the urban non-industrial activities is very small, a fact that gives the dimension of how serious are the problems and the difficulties to deal with. Deposits from domestic sewer systems in natura compromise the sources of supply of water, thus reducing the capacity of utilization of these bodies of water. The superficial urban drainage system contains several pollutants which deposit themselves in the soil and are carried away by rain to rivers, creeks, etc. therefore becoming a source of pollution that gets worse proportionately to the deficiency of the public systems.

## **C. Strategies of Intervention of the State and the Society**

### **C.1 Agenda 21: Proposals to improve the quality of life**

3.39 The Agenda 21, approved by the United Nations Conference on Environment and Development (Rio, 1992), has as its goal to improve the quality of social, economical and environmental life of the human settlements and the conditions of life and work, particularly for the poor. As from 1992, the Agenda 21 became the point of reference for governmental actions directed towards

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sustainable development. Its recommendations, referring to human settlements, reflect the trend to give a comprehensive treatment to urban environmental problems, taking into consideration the nature of the urban functions and the links between urbanization and natural environment. With regards to this report, the following recommendations can be pointed out:

- provide the homeless with adequate dwellings;
- improve the management of urban human settlements;
- promote the planning and management of sustainable use of the land;
- provide sound environmental systems of infrastructure (water supply, quality of the air, drainage, sanitary services and disposal of solid and dangerous waste);
- promote technologies of more efficient energy and sustainable systems of transport;
- promote sustainable activities of construction industry;
- promote the development of human resources.

3.40 The document also focuses on the necessity to guarantee and protect freshwater resources in order to solve the problems of its increasing scarcity and gradual degradation, all over the world. Apart from suggesting a pattern of supply of 40 litres of treated water per day, the Agenda 21 recommends the establishment of drainage patterns for domestic and industrial effluents and that the collection, recycling or the dumping of 75% of the solid waste from the urban areas happen in an environmental sustainable form.

3.41 Specifically with regard to the administration of solid residues, the Agenda 21 focuses on four problem areas:

- the reduction of garbage and the necessity of modification of the patterns of production and consumption; the necessity of enlarging programmes of reutilization and recycling through the creation of economical, market and legal incentives;
- the environmentally sound treatment and dumping of waste through the monitoring of waste disposals and their environmental impact;
- the expansion of waste collection services;

3.42 In principle, if those recommendations were followed, the environmental situation of human settlements in Brazil would not be so serious. The delay in the implementation of the Agenda 21, particularly at local levels is object of concern of the Ministry of the Natural Environment, the Hydric Resources and the Legal Amazon Region, which operates linked to the others Ministries, states and municipalities. One hopes that the Habitat II Conference, when revising the propolsals of the Agenda 21, will stimulate inciatives that seek, through intergovernmental and international co-operation, to overcome the urban environmental picture diagnosed in this Report.

## C.2 Government action

3.43 The restrictions to a more agile implementation of the Agenda 21 in Brazil, originate from four determinants.

- The negative impact of adjustment policies regarding the continuity of investments in infrastructure of basic sanitation and environmental protection;
- The institutional disorganization and indefinition regarding the role of the Federal Government in conducting public policies related with environmental management;
- The seemingly insoluble problem of administrative discontinuity;
- The disarticulation of sectorial policies and the inexistency of integrated policies, sectorial subdivision and the superposition of competencies between the several levels of government concerning the services of environmental control and sanitation.

3.44 It should be remembered, however, a governmental action on federal level that will continue acting progressively to overcome the earlier mentioned separation of environmental and urban policies. This concerns the Programme of Economical Ecology Zoning of the National Territory - ZEE, coordinated by the Secretariate of the Presidency of the Republic and carried out by the states, in accordance with the directives of decentralziation. The Programme handles the natural environment and the social and economic infrastructure with its inter - relations in a systematic and globalizing way. The

product of this governmental effort form an essential base for the integration of environmental and urban management, pointing out the potentialities and vulnerabilities in the territory.

3.45 It can be observed that, on the one hand, there are difficulties for the allocation of financial, technical and human resources for concrete actions on the three levels of government, aiming to slow down or reduce the impact of environmental degradation. On the other hand, the existence of certain corporate and private interests in decision making processes, cannot be denied, causing considerable delays in the institutional activities of planning, managing and financing the urbanization and the infrastructure of sanitation and transports.

3.46 This is why the separation between the public policies of sanitation and the natural environment still persist, a question extensively dealt with during the National Consultation on the Management of Sanitation and Urban Environment, held in 1994 by the Brazilian Institute of Municipal Administration with the support of the Programme of Urban Management (PNUD/HABITAT/World Bank), involving representatives of the government and the society all over the country. The conclusions of this National Consultation point, among other, towards a trend of creating new institutional ways to create an integrated urban environmental management that is more efficient, effective and democratic.

3.47 The protection and preservation of the environment, particularly in the urban areas, have generally been made through corrective measures. The emphasis is on the actions of emergency taken unsatisfactorily, especially in the areas inhabited by the poor population. As examples are the actions against floods and land sliding in situations of imminent risks or as a consequence of disasters that cause victims, with reactions of indignation from the public opinion. If there is a better regional - and local distribution of available financial, technical and human resources, it will be possible to revert this picture, so it can become part of the environmental protection in the political and administrative culture of all governmental agents.



THE CITY OF CURTÃO WAS THE SCENARIO OF FREQUENT NATURAL DISASTERS, DUE TO CONCENTRATED INDUSTRIAL POLLUTION IN VALLEY AREAS AND A STRANGE ATMOSPHERIC CURRENT WHICH AFFECTED THE VEGETATION ON THE SLOPES. A PREVENTIVE EMERGENCY PLAN WAS CONCEIVED AND PUT INTO OPERATION, TOGETHER WITH RE-VEGETATION PROGRAMMES DONE BY AIR. DRAINAGE BARRIERS WERE PLACED BETWEEN INDUSTRIAL COMPANIES AND HIGH SLOPES. THESE MEASURES REDUCED THE RISK OF ECOLOGICAL DISASTERS, BENEFITING THE CITY'S ENTIRE POPULATION.

3.48 With regard to the actions of sanitation, the operations of financing to expand and improve the services have been reinitiated, with resources of the FGTS, through the pro-sanitation programme, whose priorities are to attend the poor population and to conclude the ongoing projects in progress all over the country. Coherent with the proposals of decentralization of the carrying out of public policies, the Programme transfers to state bodies, formed by representatives of the government (states and municipalities) and of the society, the power of decision on the priorities for the allocation of resources. The loans can be conceded, through the National Savings Bank, to state and municipal bodies and entities.

3.49 Besides the recovery of investments in the sector, with loans from the FGTS, the trend we observe, on Federal, states and large municipalities levels, is to apply for external resources to complement the available sources of financing in the country, insufficient to meet the necessities of new investments. Big projects of environmental sanitation of hydrological basins are in process or in negotiation by the states of São Paulo, Paraná, Rio de Janeiro, Rio Grande do Sul and Minas Gerais. On the other hand, efforts are made to increase the agility of the utilization of the resources from international loans already contracted, by improving the technical, administrative procedures and those of financial management which are delaying the carrying out of the projects with incalculable social and economical losses.

3.50 The reformulation of the sanitation policy and modernization of the sector are object of the Project of Modernization of the Sector of Sanitation - PMSS, carried out by the Secretariate of Urban Policy from the Ministry of Planning and Budget and financed with resources from the World Bank. The

PMSS is the most comprehensive, complete and ambitious project about sanitation ever faced by the country, and attempts to explore new institutional ordering, new mechanisms of regulation and financing, including the principle of polluter-payer, and new alternatives of providing services. We can affirm, based on the PMSS, that the trends for the sector points toward the decentralization, flexibilization, integration, participation and bigger social control. Important also, to emphasize that the proposed concept of sanitation incorporates the environmental dimension which include: water, sewerage, drainage, solid residues and control of vectors.

3.51 The government actions directed towards the improvement of the urban and rural infrastructure still feel the effects of the absence of sanitation policies, linked with urban and environmental policies, in all levels of government. The conclusion and the approval of the proposals from the PMSS should, in the near future, eliminate many political indefinitions from the sector, especially with regards to: (A) allocation of funds; (B) redefinition of competencies between governmental spheres; (C) interinstitutional and intermunicipal co-operation; (D) partnership of public and private agents in providing services; (E) management of hydrological basins and with regard to the protection of collective interests of the users.

3.52 With regard to the actions in the area of public transport, we have to take into consideration that the present policy of containing the public deficit occurs at the same time when there has been an increase in the demand for transport. This situation, with the tendency to become worse in the perspective of a recovery of the economical growth, imposes the search for new forms of financing the sector. To the incapacity of the Federal Government and the states to invest in the mass transport, at the necessary size and pace, we add the difficulties of public and private companies to replace and expand the fleet of buses. The local initiatives of improvement of bus transport systems have collided against the inexistency of a permanent system of financing for the sector. However, it is important to remember that the private companies, concessionaires of public services, have the responsibility for the maintenance and modernization of the vehicles, while the concessive power stays responsible for the investments

in the infrastructure of the transport system, services and complementary equipments."

3.53 Some alternatives of mobilization of private capital for the sector have been tested, but are not to be generalized since they cannot be intended to completely substitute the public investment by privatization. Certain areas and services, of major importance for the functioning of the system, are, by definition, deficient all over the world and nevertheless should be attended. This way, if in certain experiences, such as special bus lanes in São Paulo, for example, there is the possibility of, in exchange for the concession, to receive from the private initiative investments not only for operating but also for the infrastructure. In other cases, particularly the underground systems and urban trains, the state will continue being responsible for bringing up the major part of the bulky investments in the infrastructure.

3.54 The recuperation, expansion and implementation of electrified mass transport systems, together with the strongly structurizing nature of the urban space, would considerably contribute to the reduction of the levels of pollution in large cities and to the improvement of the quality of the provided services. The National Bank of Economical and Social Development - BNDES worked out a proposal for a programme of transport of high capacity, whose feasibility is in discussion and is destined to support the projects of mass transport considered having priority, and aiming at the utilization of the full capacity of the existing systems.

3.55 By turning the metropolitan train systems over to the respective states, new projects are being developed, with the support of the World Bank, seeking to maximize the potential of use and occupation of bordering areas, whose density could make the implementation of the system feasible be it by generating real estate revenues, be it by the increase of the transport demand.

3.56 The concern with the environmental problems generated by transports led to the development of technologies which use sources of renewable energy and those of lesser impact to the natural environment. Experiences of

encouraging results with the use of automotive natural gas in the fleet of urban buses, taxis and vehicles of public service took place in several municipalities. The adoption of a specific policy for substituting energy can generalize and enlarge this practice, since the necessary technology is already fully developed and is even being exported.

3.57 The system of trolley buses, a solution of not polluting transport, has been an alternative adopted in several large cities and sustained by the BNDES which is financing the equipments. However, the system is facing problems with the costs of electricity which afflict the electrified systems, since the costs are higher during the hours of bigger demand coinciding with the peak hours of the collective transport. The sector is being mobilized towards the creation of a specific category of rates, a measure that in the end would stimulate the use of electricity with less environmental impact.

3.58 On local level, the municipalities have concentrated their efforts in the sense of improving the planning process, the management and the regulation of the collective transport services, with the objective to improve and increase the provision of public transport and by doing so attending to the social demand for more efficient and less polluting transports.

3.59 The reinstallation of the urban transport function, in the Federal Administration, since 1993, attended to the plea of the Municipal Governments and had the support of representatives of the states and of the organized society linked to the production of transport services. The Ministry of Transports has the support of the National Council of Urban Transport, and also exercises the function of articulator of the agents involved with urban transports.

### C.3 The setting up of the institutional framework

3.60 The institutional organization for the protection of the natural environment is structured since 1981, by the National System of Natural Environment - SISNAMA, integrated by a consultive and deliberative collegiate body - the National Council of Natural Environment - CONAMA and by executive

bodies from the federal and state spheres. The SISNAMA was created with the intention to implement the National Policy of Natural Environment, according to Bill n° 6.938/81.

3.61 Although the law had already stimulated its creation, it was only after the reestablishment of the direct elections for state governments, in 1982, that a new movement of institutionalization of state environmental bodies happened. Pressured by its new institutional and political responsibilities and by the growing social demand, the state bodies responsible for the environment created the State Councils of Natural Environment - CONSEMAS, and the National Forum of State Secretaries of Sanitation. Created also was the Brazilian Association of the Entities of Natural Environment - ABEMA, a national forum with the objective of promoting a stronger SISNAMA, into which it is incorporated.

2.62 The institutionalization of the sector made considerable progress as from the proclamation of the Constitution of 1988, which includes a chapter entirely dedicated to environmental questions, and strengthened later on by the realization of the Conference of Rio in 1992. The Constitution provides the division of legislative competencies between the three levels of government, and concedes unprecedented autonomy to the states and municipalities, an important step towards the decentralization of the environmental management.

3.63 In 1990 the Brazilian Institute of Natural Environment and of Renewable Natural Resources - IBAMA was created, which incorporated several existing bodies and federal agencies at the time, and contributed to the strengthening of SISNAMA and to consolidate the government actions on the environmental field.

3.64 With the installation of the Curator of the Natural Environment, in the more populated cities, the Civil Authority also takes an important step towards the discipline of public action, recognizing the rights and obligations of all citizens in environmental protection and preservation.

3.65 During the last decades the institutional picture of the environmental area presented a major evolution in the country allowing important advancements for sustainable development of human settlements. The creation of the Ministry of Natural Environment, the Hydric Resources and of the Legal Amazon Region today completes the institutional picture of natural environment on federal level, strengthened and enlarged by the performance of the states and municipalities in their respective spheres of government. The actions of the Ministry takes into consideration that for tackling the environmental problems more and more interministerial articulation, intergovernmental co-operation and collaboration with the civil society becomes necessary.

3.66 As a counter balance, it is important to recognize the growth, maturity and the strengthening of the environmentalist movement all over the country, including non governmental organizations, ecological movements and grassroots and community groups. The society has mobilized itself around questions of natural environment and social justice, on world, national and local level. The environmental movements and organizations have insistently pleaded for their active representation and participation in all the democratic fora and bodies that are formed, on all levels: the CONAMA, CONSEMAS, the municipal councils and grassroots committees, among others.

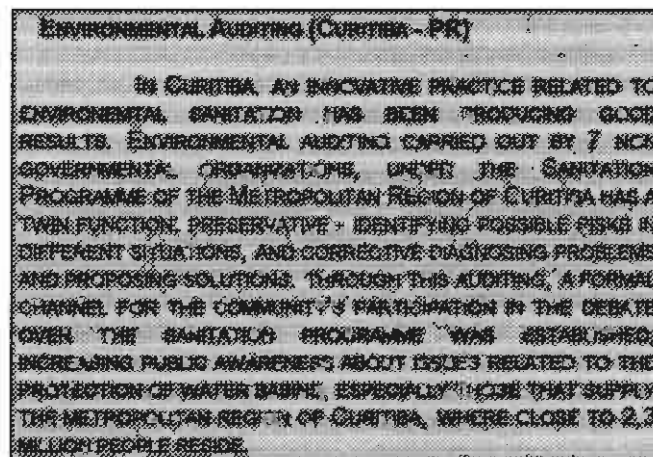
3.67 On the field of private initiative changes can also be observed which point towards a growing concern among the business community about the environmental impact and public hearings to discuss the new - industrial, commercial, real estate - projects and undertakings - induced the productive sector to organize itself with regard to the environmental field. It should be pointed out that the pressure from the production and service market, especially those directed towards the export to developed countries, also demanded changes in the productive sector, with positive reflections on the country as a whole.

3.68 As a consequence of the emergence of so many new actors dealing with the natural environment, the activities of environmental consultation and specialized services expanded, the NGOs assessing popular movements

increased in number and the national and international networks facilitated by the advancements of electronic communication.

3.69 The opportunities of forming human resources and training in the environmental area also rapidly multiplied as a response to the growing demand, of the public as well as the market sector.

3.70 The trends of decentralizing the environmental management and the increasing participation of the civil society in the formulation and the execution of policies and environmental projects will find response in an institutional framework in full development, thus collaborating so the country can give sequence to its commitments - internal and external - with the urban environmental agenda.



#### C.4 The environmental Legislation

3.71 The approval of legal instruments and norms also contributed to a greater institutionalization of the sector, which accelerated as from the 1988 Constitution, on all levels of government. The environmental legislation became more complex at the same time that the Brazilian environmental policy progressed. Initially limited to the preservation of the natural environment, during the last decade it widened its scope towards the legal disciplining of all potentially polluting activities, especially the industrial activities located in urban areas. The implementation of the system of licensing polluting activities, the disciplining of the creation of ecological zones, of conservation units and areas of environmental

protection, The Forest Code, among other legal norms, establish an expressive juridical milestone for the environmental control all over the country.

3.72 With regard to the carrying out of the legislation, it can be observed that the legislation stimulates, theoretically, an action articulated by the Union, states and the municipalities, it creates instruments and measures to formalize the punishment of polluting agents and regulates, on states level, an evaluation of environmental impact. But some questions of political institutional order made the correct enforcement in an urban context difficult: (A) conflicts of competency between the different spheres of government; (B) lack of a competent legislation concerning the regulation of the territory; (C) occasional conflicts with the urban and construction legislation, with a municipal character; (D) scarce and inadequate investments in sanitation and public transports, whose patterns are not in accordance with a broader environmental legislation.

3.73 It is important to note that, according to commitments taken by the Brazilian Government during the Conference of Rio, efforts are been made in order to create a national Agenda 21. Also, the Federal Government is aware of the necessity to enhance the contents of the Agenda Internally, by campaigns through the media. However, there are many and diversified initiatives in this sense, mainly from the NGOs and agencies of multilateral co-operation, all over the world. The Habitat II Conference presents itself as an opportunity in order to fill in the gap through joint initiatives from the public and business sectors. The dissemination of actualized, liable and accessible information about environmental urban questions is an important task for building the citizenship.

3.74 The arising of the environmental consciousness constitute part of the formation of citizenship. The possibility of greater access to information notably from the more excluded social categories, can give more potential to behavioural changes necessary to take actions directed towards general interest. Well informed citizens, when assuming the responsibility as relevant parts, have the conditions to exercise the social control on polluting agents, as well as engage themselves in actions of joint responsibility and community participation.



**SANITATION OF CONDOMINIUMS (BELEM DO PARA - PA e ANGRA DOS REIS - RJ)**

THROUGH THE TECHNICAL AND FINANCIAL ASSISTANCE OF PROSANEAR - LOW INCOME SANITATION PROGRAMME - VARIOUS MUNICIPALITIES ARE DEVELOPPING INNOVATIVE SEWERAGE PROJECTS IN POOR AREAS, ADOPTING LOW COST TECHNOLOGY: CONDOMINIAL SANITATION, A TECHNIQUE THAT REDUCES THE SEWERAGE NETWORKS EXTENSION, BY BUILDING COMMON SEWERAGE COLLECTORS. SINCE THE CASE IS THE CONSTRUCTION OF A PUBLIC SERVICE NETWORK IN A PRIVATE PROPERTY, THIS SOLUTION DEPENDS ON NEGOTIATIONS BETWEEN TECHNICAL EXPERTS RESPONSABLE FOR THE PROJECT AND THE COMMUNITY. IN BELEM DO PARA, WITH THE AIM OF FACILITATING THE COMMUNITY'S ACTIVE PARTICIPATION IN ALL STAGES OF THE PROJECT, MATERIAL ON SANITARY AND ENVIRONMENTAL EDUCATION, PICTORIAL CHRONOGRAMAS OF COMPLETED PROJECTS, PUBLICATION OF RECORDS OF MEETINGS, AMONG OTHER INFORMATION ARE PROVIDED TO THE PEOPLE INVOLVED. IN ANGRA DOS REIS, THE TOWN HALL ADOPTED A METHOD OF POLITICAL OR PEDAGOGICAL INTERVENTION THAT GOES BEYOND THE SIMPLE IMPLEMENTATION OF SERVICES, AND STRENGTHENS THE PARTNERSHIP BETWEEN GOVERNMENT AND COMMUNITY. A POPULATION OF 85,571 BENEFITS FROM THE PROGRAMME IN ANGRA DOS REIS (70% OF THE TOTAL POPULATION). THE PROGRAMME REACHES 105,000 IN BELEM.

3.75 The realization of larger and more systematic environmental education programmes and campaigns of environmental awareness, are a collective responsibility of the government, society and business community. In this sense, educational campaigns would be recommended on all levels of education, and the inclusion in the formation of professionals of Architecture and Engineering, of a greater concern with the conception of projects, which should take into consideration the local and environmental conditions, the use of non-aggressive technologies to the natural environment and the conservation of energy.

3.76 It is important pointing out that adequate programmes of environmental education create jobs and income for the inhabitants of the slums, apart from stimulating changes of habits and behaviour, thus strengthening the environmental awareness. A number of experiments have been developed in this aspect by Municipal Administrations and are directed towards the projects of reforestation, urban agriculture, waste collection and recycling. The recycling of solid residues has propitiated the development of innovative projects, increased with entrepreneurial and community interest generating revenue, reducing the pollution and environmental risk and representing an important pedagogical contribution to the population.

3.77 The technical ability of the organized civilian society is a contemporary requirement aiming to reinforce the capacity of social movements to introduce proposals instead of maintaining themselves in a mere position of making demands. The understanding exists that only criticizing and making demands is not sufficient, it is necessary to propose real alternatives for the solutions of collective problems. The availability of information and environmental education constitute an indispensable instrument to widen the social responsibility with the development of sounder and safer cities in terms of environments.

#### C.6 The use of adequate technologies

3.78 The scarcity of resources for investments in face of the deficits of infrastructure was the reason for giving more attention to the so called "alternative" or "adequate" low budget technologies. This happened because the technology traditionally used for the carrying out of this kind of project has high costs for the implantation of services, which the great majority of the population cannot pay. The selection of the more "adequate" technologies among the "alternatives" should be made through an economical estimate, on micro as well as macro scale, and of social and economical efficiency. The alternative technology includes the use of simple procedures, which facilitate the realization of projects and reduce their costs, by taking advantage of the local conditions of labour, know - how and materials.

3.79 The sewerage problems, with the largest shortages in the country and extremely expensive solutions when conventional technology is used, is becoming a precious field for experiments with low - cost technologies. The best known examples to date are the sewerage systems used in building compounds. The main goal is to spread these systems to urban areas throughout the country, given regional technical conditions.

#### C.7 Urban Layout and Costs of Urbanization

3.80 The trend of contemporary urbanism is to seek the urban layout which is most flexible and adequate to the locality, to the correct use of the natural resources and to the preservation of the landscape. In accordance with the adopted layout, the costs of implanting the infrastructure can be reduced between 20% and 25%. The costs of infrastructure depend also on the size of the city and the density of its occupation. To optimize urban plans, from the point of view of economizing costs of implantation of the infrastructure as well as costs of transport, it is important to make a rational occupation of the city allowing it to expand.

3.81 The densification of the urban areas and the adoption of more realistic urbanistic and building methods can significantly reduce the volume of investments necessary for the expansion of services of sanitation and public transport, and so contribute to improve the environmental conditions of the cities.

## C.8 The Size of the City

3.82 The question of the size of the city needs to be examined from a perspective of worsening of the social, environmental and economical problems which affect the quality of life of its inhabitants, undermining local economy. The discovery of the negative effects of disorganized growth of the cities and their territorial expansion on the natural environment has become a motive of concern from the authorities and local urban leadership, particularly in the case of the Metropolitan Regions.

3.83 There is clear evidence, all over the national territory, that cities considered middle sized in their regions present better conditions of urban life than the larger ones, a situation which led to the phenomenon of dismetropolization. The tendency is to consider the big urban agglomerations as problems of underdevelopment. But the available experience in the world demonstrates that the instruments and the available means to restrain the size of the cities are limited. Going against trends of urban concentration becomes particularly difficult in Brazil, where we still live in a context of complete ignorance

concerning economical and social policies, as well as their impacts on the national space.

#### **D. Perspectives for the Sustainable development of the Cities**

##### **D.1 The Challenges of an Urban Environmental Policy**

3.84 The environmental crisis of the Brazilian cities is a challenge to the country, from the moment it seeks for new patterns of development. To improve the social indicators and the performance of the economy there will be a need to change the urban and environmental framework of the country. The critical conditions of the urban and rural areas affect the health and well-being of the population, create economical obstacles for the productive process and contribute to the exhaustion of natural resources, which compromise the sustainable development of the country. But it is in the cities that these phenomena appear more dramatically, since Brazil today has a predominantly urban population and that the most dynamic sectors of the economy have an urban base.

3.85 The international commitments assumed by Brazil, with regard to the natural environment (1992) and to social development (1995), already pointed towards the necessity of new strategies for urban policy and occupation of the territory in the sense of incorporating the environmental and social dimension to the urban development. To assume, in Istanbul (1996), new responsibilities with sustainable human settlements in an urbanizing world, main topic of the Habitat II Conference, demands an updated reflection about the dynamics of the urbanization and the sustainable development.

3.86 Sustainable human settlements should provide to all citizens conditions of access to the natural and economical resources which turn themselves into opportunities of sustainable development, when adequately put to use.

3.87 Sustainable cities need networks and services of environmental sanitation - including water, sewerage, drainage, waste collection and control of

vectors - whose coverage and quality guarantee adequate levels of public health and preservation of the natural environment. Their sustainability also depends on the adoption of patterns of use and occupation of the land which reduce the demand for transports and therefore minimize their polluting effects, prevent the urban expansion which represent loss of productivity of urban and rural land, preserve the ecosystems and reduce the impacts of environmental disasters.

3.88           The Brazilian urbanization - environmentally predatory and socially excluding - had as a consequence the worsening of the urban vulnerability, mainly in the big cities, because of the impacts of the growing environmental degradation and the urban poverty. The city is the main arena of the conflicts between urbanization and natural environment, with its population being, at the same time, subject to the negative effects of the environmental problems on global and local level.

3.89           To face the challenge of the environmental question means "thinking globally, acting locally", slogan adopted by environmentalist and municipalist movements all over the world, and reflects the interdependence of the phenomena of globalization and localization of the environmental agenda, as set in the Agenda 21. These are the challenges for an environmental urban policy that correspond to the responsibilities of the country with the sustainable development of its human settlements.

## D.2   Citizenship and Urban Environment

3.90           The constitution of 1988 established important changes in the concepts of environment and citizenship. From then on the Brazilian environmentalist movement directed itself towards the problems of the sustainable development, thus contributing significantly to the revision of the environmental policy of the country and its institutionalization on all levels of actions. This process accompanied the transformation which occurred in the national and international public opinion on problems of the natural environment, particularly since the decision of the Brazilian Government, at the end of 1988, to be the host country of the Conference of the United Nations on natural Environment and

Development. The opportunity of the realization of the Conference of Rio de Janeiro strengthened the articulation and the mobilization of the movement, on national and international level, and multiplied the number of non-governmental organizations, associations and public and private entities, business and community involved with the environmental question.

3.91 It should be pointed out the fundamental alterations in the concept of natural environment which took place in this decade. Humanity evolved towards a comprehensive conception of natural environment as a globally limited resource, whose use and exploration have to guarantee the sustainable development of present and future generations. In this sense, the natural environment turns out to be a political question that concerns the entire society, and therefore ceases to be just monopoly of specialists. On one hand, it embraces such ample topics as economy, health work, poverty, population and on the other, more specific topics that influence the day to day of the population, such as the lack or inadequacy of water, sewerage, waste disposal and transport services.

3.92 These changes led the government and the society to the recognition that the environmental questions involve technical, economical and political aspects to be subjected to a joint effort, giving more strength to the channels of dialogue and recognition of the rights and obligations of citizenship in defense of the common good. The rights of citizenship, considerably strengthened since included in the constitutional text, have met a fertile ground of expression in the struggles against environmental degradation. The progress of this movement of citizenship and natural environment inserted itself in the global experience and is taking off, specially through the international networks of NGO's and environmentalist movements.

3.93 It should be observed however that although Brazil is an urban country, there still persist attitudes directed towards the concern with the natural environment, which translate themselves in the greater emphasis to a political, institutional, juridical, and scientific and technological perfection in the protection and conservation of the natural resources, while the urban environmental

question has not earned the same attention of political, business and community leaderships; although the cities are their field of action and their dwelling place.

3.94 The perspectives, however, are of increasing awareness on all levels of government and social organization. The worsening of the urban environmental problems are new challenges for all the social agents, demanding new ways of focusing the urban question and the sustainable development. In this sense, we should point out the role of environmental education seen as a question inherent to the exercise of citizenship and, thus, as political education. Increasing the comprehension of the environmental question, by integrating technical know - how to concrete social practices is the challenge imposed by citizenship. This perspective requires the University to incorporate all accumulated experiences of social movements and organizations of the civil society. It is likely that the opportunities of environmental formation multiply themselves starting from the entities directed towards education, research and technological development, as the answer for qualified human resources to deal with the environmental question. The perspectives in the field of environmental education are promising and open new doors for the private initiative and NGO's.

### D.3 Urban Environmental Management, Decentralization and Management

3.95 The need to adopt decentralized policies of management of the natural environment and infrastructure, in the urban and rural areas, is a natural result of the territorial dimension and regional diversity of the country, the interaction of the parts involved and of the gravity of the problems that still exist. In Brazil the environmental problems are those that require most attention, notably the investments on urban infrastructure, which demand new projects and innovative forms of management and joint responsibility.

3.96 The joint responsibility is one of the main elements to reflect upon the question of the urban environmental degradation and to seek not only its solution, but also the aggregation of interests in a common logic of dealing with the problems. The intergovernmental collaboration, through decentralization, does

not leave out the responsible participation of the private initiative, the NGO's and from the communities to improve the urban and rural environmental conditions.

3.97 The decentralization and participation are commitments assumed with the implementation of the Agenda 21. The role of the government is to create effective conditions for a decentralized and participative management, which eliminates the socio - institutional obstacles that still limit an effective process of democratization of the environmental management based on the defense of collective interest.

3.98 Trends point out towards an occurrence of a slow change in the attitude of several intervenient agents - government, population and private business sector. It is becoming ever larger the amount of innovative experiences which acquire a paradigmatic character as from the emphasis put on environmental protection as a factor of generating income, through the combination of political will and financial and human resources.

3.99 The participation of the different social sectors - popular movements, environmentalists, NGO's and businessmen - have, nevertheless, been very differentiated. While the business community organizes itself in the defense of its interests, the popular movements have little institutional space to express their demands, and the NGO's function, mainly, as agents of environmental awareness.

3.100 The accusations formulated by environmentalist movements enable and pressurize the authorities to put a stop to projects, to force them to revise projects, to alert and increase the degree of awareness of the public opinion about negative environmental impacts. But they could transform themselves in incentives for the development of alternative programmes of environmental management based upon the active social participation and joint responsibility. The process of participative planning seems to be the most efficient and most appropriate to improve the management of the production of the habitat in the contemporary world.



3.101        There is still not sufficient experience and knowledge accumulated about possible strategies of creating partnerships between the private sector and community entities, which, based on responsibility and co-operation, present themselves with innovative solutions of environmental management. But the perspectives are promising a change of attitude in relation to the role of the Federal Government as sole provider of social well being.

#### D.4    The necessary investments to improve the habitat

3.102        There is unanimity concerning the preoccupying aspect of the shortage of public services and the precariousness of the infrastructural management and the natural environment nowadays in Brazilian cities. In present conditions, the investments necessary to complete the services would be so huge that we obviously would not have the necessary resources to accomplish this. Only in order to maintain the shortage at its present level, we should annually invest 1.5% more of the GNP, apart from present investments. To resolve the shortage in the next 20 years, we should invest 1.0% more per year, presuming a life span of 30 years in the investment already made, and 1% more for its maintenance, presuming that the operational costs would be assumed by the consumers. In short, the investments should reach 4.5% of the GNP annually to solve the lack of infrastructure, distributed as follows: 2.0% for the total annual investment; 1.5% to extend the services to new families; 1.0% to solve the accumulated deficit in 20 years.

3.103        Specifically in relation to urban transport, one can estimate that in order to operate public transport in the next five years, it would be necessary that the urban underground transport system increase from 8% to 11% of the total of metropolitan journeys, representing yearly increases of approximately 500 thousand journeys per day, which represent investments of approximately US\$ 3,8 million; the relation between the number of buses per thousand inhabitants exceeds the present 0.60 to 0.65, which represents the need of renovation and expansion of the fleet of 70,400 vehicles there including the change of technological patterns; approximately US\$ 6,6 billion should be invested in the implantation of 600 Km. of transport lanes.

3.104        - It is necessary to understand the question of urban transports in its appropriate dimension: a matter of national strategy where responsibilities should be assumed by all the agents intervening in the sector - the Union, the states, the municipalities, the private initiative and the organized civilian society, in order to create and maintain the adequate mechanisms and funds for the financing of the sector.

3.105        Government policies which provide, to all the parts providing public and private services, the improvement of the present relation cost - quality with adequate measures for each case, should contribute to change the picture. Initiatives which aim to optimize the application of resources in urban infrastructure, be it of federal, state or local origin or of private origin, should also be activated and stimulated.

3.106        We also should distinguish here that concentrated efforts on research give effective results in the reduction of costs of investments - approximately 50% of the costs - mainly when we discover the volume of wastefulness. This wastefulness in the industry of civil architecture is recognizingly high. A high percentage of treated water is wasted. The urban transport systems is irrational and out of date. In this situation one cannot talk about economical efficiency. It is necessary to change the forms of production of the habitat if we want to achieve results different from those up to now.

3.107        The waste of energy, human resources and capital is one of the main characteristics of large cities in the developing world. The retrieval of this waste constitutes a source of wealth bigger than the product of conventional economical growth, but requires the introduction of forms of social rationality in order to avoid losses, recover obsolete structures and installations, modernize and reutilize entire city parts and recycle major part of the subproducts from industrial and housing activities.

3.108        There are other forms of waste resulting from embezzlements and incompetent management. Many projects are overdimensioned or even unduly

exceeding the budget. With the improvement of the legislation referring to the contracting of public works and to concessions of public services, and demanding more transparency in the processes of contracting works and projects and more social control, the perspective is to overcome this situation.

3.109 Another form of wasting is can be formed in the ways of carrying out public works and of converting public services. Legislation in this sector is being improved to provide better management techniques, also providing more transparency on contracting third parties and social control.

3.110 Producing more with better quality and lower cost requires technical and administrative abilities which are still not sufficiently developed, neither on academic nor on business or governmental levels in the country. The perspective is to strengthen the capacity of the Federal Government in the regulation and fiscalization of the technical norms and service standards, and leaving to the private sector the social responsibility for the efficient and effective use of natural and economical resources.

## **CHAPTER IV: URBAN MANAGEMENT AND FINANCING OF THE URBAN DEVELOPMENT**

### **A. Introduction**

4.01           The situation of the human settlements in Brazil, particularly that of the urban centres, provides us with a clearer view of the problems one has to face in the areas of urban management and financing.

4.02           With economic growth in perspective, the urban challenge of the end of this century, also in Brazil, will require deep changes in public policies, in order to adjust these to the demands for social and urban services, within the indispensable requirements of efficiency and effectiveness of governmental action and of sustainability, solidarity and co-operation. These are the principles of the Habitat II and, as such, endorsed by the Brazilian Government and the Brazilian people.

4.03           The perspectives given by economic, social, environmental and urban scenarios as this decade comes to an end call for strategic decisions from Brazil, so that, in a five-year span, and given the available human, financial and technological resources, the country can take the responsibility to improve living and working conditions for the majority of the population. In this context, urban management and urban financing are key issues to a new strategy on sustainability.

4.04           Although the political and economical decisions which affect the occupation of the territory and life of the cities exceed the local political context, in a federative system, the municipality is the part responsible for the implementation of the urban policy and the provision of services of local interest. Its autonomy - guaranteed by the Constitution - is, nevertheless, limited by the remaining spheres of Government and their inter - relation. Over the years, the municipalities have generically been considered the weakest link of the federative structure, incapable of attending to their own interest. Such a generalization does

not take into account the reality of the municipalities, not considering size, economy or regional function of the cities, nor their distinctive capacity of management and urban financing.

4.05 The extension and diversity of the urban network, the continental dimension of the national territory and regional peculiarities, require national policies to develop national integration and reduce regional and urban disparities. In this sense, the Constitution of 1988 delegated to the Government the mandate for the elaboration and implementation of national and regional plans on zoning, on economic and social development and, also, for establishing general directives of urban development. The absence of these directives and national policies, which should link, in a national context, the urban policies to macroeconomic, social and environmental policies of the government, has created problems for the states, which are responsible for the metropolitan planning, and for the municipalities, when exercising their functions of management and urban financing.

4.06 Urban management has been exercised by municipalities with more or less effectiveness depending on the scale and complexity of the problems to be dealt with, on the availability of management tools and on human, economic and technological resources. The political and social conditions of governmentability also affect the ability of the municipality's management.

4.07 Intergovernmental co-operation is indispensable in order to effectively deal with urban challenges, despite the fact that the constitutional provisions which deal with the matter have not been regulated yet. The Federal Government and the states have an undeniable responsibility of co-operation with local governments towards improving the capacity of urban management, and restoring a policy of municipal capability and support which was very intense in the past.

4.08 The fiscal and financial crisis of the Brazilian State appears in a particularly perverse way in governmental policies more directly linked to the urban question. On the fiscal aspect, the capacity of the Federal Government to

finance urban development with resources from the Federal Budget has been progressively reduced. On the financial side, the main source of urban financing - the FGTS (a fund, to which both employees and employers contribute, and that can be drawn from in case of unemployment) has also been compromised by the length of the economic crisis, due to the decreasing levels of compulsory savings and growing rate of borrowers (individuals, companies, states and municipalities) in default.

4.09           The increase of states and municipalities' revenues - including those resulting from transference - a consequence of the fiscal decentralization initiated even before the promulgation of the Constitution in 1988 and strengthened by it has not been and will not be sufficient to finance the investments necessary to reduce the accumulated deficits of public housing and urban infrastructure and improve the conditions of urban and environmental management.

4.10           Taking measures to improve the efficiency, effectiveness and transparency of the use of the available resources could contribute to overcome the problems of dilution of resources, lack of coordination in using the funds, discontinuity of investment programmes and improper conditions of financing. These alone, however, will not be able to generate the necessary resources to the urban financing.

4.11           The economic stability, the fiscal and credit line decentralization and the pressure from the states and municipalities and from the social agents involved with the provision of shelter and urban services have promoted studies towards a new model of financing of urban development. The available diagnosis lead to the conclusion that it is not enough to increase the existing resources on all levels of government. It is indispensable to build a new model of financing public policies according to the challenges to be dealt with. One of the most difficult issues, according to the definition of the quoted model, refers to subsidies: how to finance housing and basic services for those without income, precisely the ones who need it the most.

4.12 Stimulated on one hand by the economic situation and by policies that lessen the role of the State and promote decentralization, and, on the other, by the claims of the community for broader participation in decisions that influence their lives and that of their cities, states and municipalities have carried out promising experiments of urban co-operation. These aim at broad mobilization of all who, operating in the urban space, try to solve community problems. The result is the creation of new partnerships with private companies, communities and NGO's.

4.13 The major challenge of urban management, in the face of financial management on all levels of government, is to find feasible alternatives in order to direct the available private resources - savings, financing capital and real estate - towards urban investments. The available information on the experiments in other countries of privatizing urban services still does not allow a secure evaluation of the feasibility of its application, particularly in the case of developing countries. The increase of the private sector's role in development is directly related to State reform, an item that has been part of the political agenda of the Brazilian government. A reform whose goals and outlining are still not clear for the whole of the society who remain concerned with possible socioeconomical impacts caused by the lessening of the State's role in the national scene.

4.14 Trends for a new situation on urban financing point towards an institutional rearrangement of the urban sector as a pre-condition to restore its capacity in orchestrating the urban financing, overcoming the limitations of gathering public funds by the additional mobilization of private resources and external funds. There is also the need to submit the priorities of application of funds to the necessities pointed out by the strategic planning of the country's development and social control.

## **B. The Financing of Urban Development**

### **B.1 Diagnosis of the situation in face of the financial crisis of public policies**

4.15       The crisis of the governmental policies financing, worsened during the 80's, hit of the various segments of the Brazilian economy, causing technological retard, delay on projects on the expansion of the economic's infrastructure, deterioration of the infrastructure and urban services and lack of means to deal with social demands. The worsening of the economic crisis also contributed to the degradation of financial mechanisms that had supported ambitious programmes of investments until the recent past.

4.16       The main elements of the financial crisis of public policies are, first, the scarcity of resources, due to the fact that the tax load has reached its limit, while at the same time a substantial part of the revenues are used to pay salaries, to cover the expenses of managerial operation, and other financial commitments of the federal budget. Although the thesis of the tax capacity having reached the limit does not meet with a unanimity among scholars, professionals and politicians, there are proposals for redistribution of taxes and for an increase on the basis of contribution. It is, in any event necessary to take into consideration the evasion, defraudation etc. which, if contained, could considerably increase the amount of resources available to the government for the financing of urban development. Another element is, the institutional fragmentation of these resources, as a result of the constitutional system of intergovernmental transferences established in 1988 (these increased the percentage of the obligatory transferences and still maintained the system of voluntary transference to states and municipalities) is, historically, the object of patronizing practices that contribute to further distortions in the allocation of budgetary funds.

4.17       In 1993, the transference to the Funds of Participation of states and municipalities of a percentage of the revenue from income tax and tax on industrialized products reached the mark of 44%, that corresponds to an increase of approximately 100% in relation to 1967. The prime application of these funds - to act as a compensation function for the federated units that have a small economic basis for taxation - was replaced by the transformation of these funds in the main sources of budget revenues for the majority of the states and



municipalities. The possibility to reckon with resources from the Fund of Participation has, moreover, served as an incentive to the creation of a significant amount of new municipalities. Since 1988, approximately one thousand new municipalities have been created in Brazil, increasing their number to more than five thousand. This process is a concern of the Federal Government, and it is being examined by the National Congress.

4.18            However, the increase on transferences to the municipalities did not result only in waste, as some critics state, since the absence of investments from the Federal Government forced the municipal administration to allocate more local resources to social programmes. Available data on the expenditures of direct municipal administrations confirm the priority of the expenses in the social area; during the 1988 - 1992 period, 22% were directed to education and culture, 16% to health and sanitation, 14% to housing and urbanism and 12% to transport\*.

4.19            On the other hand, some social indicators show that a relative improvement in the living conditions occurred during the 80's, in relation to the previous decade, a fact that is attributed by some analysts to the decentralization. That is why the system of intergovernmental transferences should not be dismissed as inefficient, although one might recognize the need of a major rationalization in the distribution, and more strictness in the application of fiscal resources.

4.20            The economic crisis also contributed to drain the Federal Government's capacity to act on credit. The main source of resources towards the urban area - the FGTS, mentioned in Chapter II - suffered an erosion due to the lack of supported growth of the level of employment, by the drop of salaries and the growing informalization of the labour market. The acceleration of withdrawals from the FGTS due to unemployment and the low rate of return of its investments worsened this situation. The number of those who failed to payback loans - individuals, states and municipalities - significantly increased during the period,

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\* APUD AFONSO, JOSÉ ROBERTO, "DESCENTRALIZAÇÃO FISCAL - SER OU NÃO SER NÃO É A QUESTÃO", R.J. 1994.

due to the persistency of high rates of inflation and the loss of income of employees. However, the major aspect to determine a low index for the FGTS was the system of indexation of its liquid assets, as the assets of the loans instalments and of the employees debt to the fund were continually inferior to the inflation rate, until recently. The FGTS had its financing capacity reduced to 15% of the amount it had during the 80's.

4.21 In a development opposite to that of the revenues, the Federal Constitution increased the responsibilities of the Federal Administration, by raising the benefits of social security. At the same time, it also granted to several branches of the Government legal capacity to increase social benefits. In spite of the principles of decentralization inscribed in the Constitutional letter, responsibilities assigned to the Municipalities, especially with regard to social services, imply continuous financial support from the Federal Government.

4.22 Other elements of the financial crisis of urban development were: the length of the economic crisis, associated to the lack of trust in the Government, caused by unsuccessful plans of stabilization, of the sudden drop of savings and investments from the Federal Government, the prohibition of linking revenues to investments, the restrictions suffered by pension funds due to the deterioration of wages. The bad management of these funds and failure of their contributors to fulfill their financial obligations, as well as the exhaustion of fiscal incentives for regional development, of the North, North - East and Central - West regions are still elements of this crisis.

4.23 Worse than the fall in reserves for public investments is the lack of governmental coordination concerning priority decisions on allocating these resources -. One can quote, for example, that the revenues reached a historical mark estimated in 30% of the Gross National Product (significantly above the 24% - 25% registered during the 80's), but the increase of expenditures is bigger and no changes are expected in this trend until the end of this century. This situation points towards a distressing scenario, where there is an approximately 3% margin in the budget, for the government to operate on priority actions.

4.24 The main corollary of the transformations that occurred in the fiscal scenario was the abandoning of a coordinated action to finance urban development. This was caused by a lack of leadership of the Federal Government, worsened by the successive changes on the institutional framework, including the extinction of the National Bank for Housing. The necessary institutional mechanisms capable of avoiding the dilution of resources, the superposition of interventions and the lack of coordination in governmental actions, were not created.

4.25 The present situation can, in short, be characterized by:

(a) a sudden drop in the rate of savings and investments of the public sector along with a deep change in its composition;

(b) a decrease of the support of pension funds, formed by compulsory savings - PIS, PASEP and FGTS, whose criteria of application were altered by the Constitution;

(c) a loss of self - financing capacity of state companies, as a result of the discontinuity of the tax policy, of the loss of fiscal resources originating from the former sole taxes and the heavy financial commitments of its indebtedness;

(d) an exhaustion of the fiscal incentives to regional development and absence of coordination of this financial instrument with the policy of allocation of resources of the Constitutional Funds for the development of the North, Northeast and Central-West.

B.2 Trends and perspectives for the urban financing in a scenario of economic stability and recovery of economic growth.

4.26 Despite evidences that the fiscal resources used in the financing of investments controlled by the Government lost substance in comparison to the results achieved in the seventies, the current reserves do not represent an insignificant amount. On the whole, the public sector commands investments superior to 4,2% of the GNP, not calculated in this amount the investments made with the state companies' own resources.

4.27 The multiplication in the number of authorities in charge of the administration of these resources, on federal, state and municipal levels, and the absence of a mechanism capable of coordinating the decisions for investment and of providing an efficient coordination of the allocations were undoubtedly of much more deleterious consequences, than the fall in the reserves directed to the financing of new investments.

4.28 The process of stabilization of the economy points towards a contradiction. While the control of the inflation and the increase of the economic activity provide higher levels of revenues, this cash increase brings pressures to increase expenditures, especially for public servants' wages of and the cost of governmental programmes, notably health.

4.29 Although the reduction of the financial capacity of the Federal Government might be a logical consequence of a national proposal of building a new federation, the reigning imbalance is incompatible with the role that is reserved to the Federal Government concerning regional and social disparities. Higher budgets for states and municipalities constitute an important factor for the choice of more adequate urban policies. However, it is necessary to seek a new balance starting from a consistent definition of responsibilities for each federated unit. Such a definition should allow new forms of association between government and the private sector in financing urban development.

4.30 This is, not however, the case of defending the re-centralization of resources. The idea is to promote the gathering of the available resources through an association of interests. The proposed association is an alternative not

only to the excess of centralization but also to an exaggerated dispersion of resources. It means the establishment of new institutional arrangements that could make the co-operation of the three federated bodies - Union, states, municipalities - possible whenever financing of development is concerned. Such arrangements should also preserve the autonomy of each Government sphere and establish conditions for the adoption of new forms of co-operation between government and the private sector.

4.31 The restructuring of government action in order to afford the financing of urban development depends on the results of the constitutional reforms in the State's redefining the role of the State. The most important is to examine the State's levels of association with the private sector and the sharing of public responsibilities in the federation. In this context, the new model of financing urban development should have the following three elements: balance in the allocation of resources, efficiency in the management and guarantee of the flow of investments. The coordination of decisions (replacing the model of centralization of resources) should guarantee the allocation of public resources on enterprises of great multiplying effect on the economy.

4.32 For the restructuring of a national system for financing urban development, it is up to the Federal Government to define adequate criteria to encourage participation of states and municipalities in projects beyond local interest. The Federal Government is also supposed to define criteria in relation to the allocation of federal resources in projects that would promote the internalization of foreign resources, as well as to the association resources from the private sector. Such criteria should also define the participation of all levels of Government through collegiate bodies, to guide the allocation of public resources.

4.33 The main issue of this discussion is the institutional rearrangement, as a pre-condition for the restructuring of the government's ability in orchestrating the financing of development, overcoming the limitations to gather public resources (by the mobilization of private resources and of foreign sources) and in choosing its priority according to the strategical planning of the country's

development. It is not enough to simply increase the existing resources, to create a new model of financing public policies, that should be coherent with the challenges to be dealt with at the end of this century.

4.34 The resources of the private sector should not be sought only through the simple privatization of public services. There are experiences that indicate an alternative, that of a partnership between the Government and the private sector. In them, the State takes the role of "coach" of the private sector action towards urban development, allowing a combination between providing for collective consumption with the logic of the market. A more significant participation of the private sector, however, requires a strengthening of the ability of regulating and planning by the public sector. This ability is not the same for the country, as a whole. Furthermore, a broader control, transparent and wide use of the constitutional instruments (plebiscite, referendum, popular initiatives, etc) would also be necessary.

4.35 The trends one observes in the national scenario of reducing state influence and of increasing participation of the private sector, in activities until recently understood as being exclusive to the government can also be found at the states and municipalities' level. Some options for privatization, lato sensu, such as the allocating of activities to third parties and joint-ventures, for example, have already been used in the country with promising results. Urban or interlinked operations, conduted by the Mayor's Office of São Paulo, already mentioned in Chapter II, provide good perspectives of investment of private capital for public housing projects. Some municipal administrations are appealing to private companies to manage their services of sanitation - particularly the collection and treatment of solid residues and water supply - while public transports are already being privatized in most municipalities.

4.36 Another important issue is the need to increase the efficiency of government action, especially at the municipal level, for the creation of resources for the financing of urban development. The democratization of the administration of the city, especially through the implementation of the participative budget, has

been an administrative commitment that has had good results for some municipalities, in proportion to the increase of the control of the community on the allocation of fiscal and financial resources.

#### URBAN MANAGEMENT AND FINANCING

AMONG THE EXPERIMENTS WHICH FAVOUR THE DEMOCRATIZATION OF PUBLIC ACTS, THE MOST IMPORTANT AND FAR-REACHING ARE REFERRED TO AS "PARTICIPATIVE BUDGET". THE POPULATION, BASED ON THE INFORMATION ON THE MUNICIPALITY'S FINANCIAL SITUATION, PRIORITIZES INVESTMENTS WHICH WILL LATER BE ACCREDITED BY A COUNCIL COMPOSED OF LOCALLY ELECTED DELEGATES AND PUBLIC AUTHORITIES REPRESENTATIVES. THIS PRACTICE IS BEEN IMPLEMENTED IN PORTO ALEGRE - RS AND BETEM - MG. IN PORTO ALEGRE, THE PARTICIPATIVE BUDGET IS BEING PRACTISED FOR THE PAST FIVE YEARS AND INVOLVES CLOSE TO 20,000 CITIZENS. IN BETEM, THIS PRACTICE IS BEING DEVELOPED FOR THE PAST 4 YEARS AND INVOLVES 10% OF THE POPULATION.

4.37 The financing of urban development is one of the strategic issues of Habitat II and theme of several preparatory events at international and regional levels, one of which was recently held in Rio de Janeiro. The exchange of information and experiences between the participating countries will supply important subsidies that could be useful for the Brazilian case. Considering the strategic importance of the subject for urban development, the Conference of Istanbul is a good opportunity to present, and confront with the experience of other countries, a new model of urban financing.

### **C. Urban management: Diagnosis, Trends and Perspectives of the Institutional Scenario.**

C.1 The heterogeneity of Brazilian Municipalities and their capacity of urban management.

4.38 The Federal Constitution guarantees political, fiscal and administrative autonomy to the Brazilian Municipalities. In practice however, those responsible for the local government and, particularly, for the city management have their autonomy limited by the political, economical, social and institutional restrictions of other governmental spheres and of the remaining social agents.

Historically, against the concentration of political power in the Federal and States' Government, the intergovernmental relations have not been favourable to the plain exercising of municipal autonomy, being the municipalities considered the weakest link on the federation and, in principle incapable of administrating their own affairs. In this context, the majority of Brazilian municipalities (which were 4,491 according to the Census of 1991) does not process human, technical and financial resources nor the necessary instruments fit for good management of their territory.

4.39 This distorted vision of the municipal reality, that still prevails in spite of the strengthening of the role of the municipality (promoted by the Constitution of 1988), is in great part the result of the symmetric and generic treatment given to the municipalities, independent of size, extension, economic basis or regional functions. In fact, the characteristics and diversification of the Brazilian urban network, described in Chapter I of this Report, place challenges for the local development and urban management, which should be taken into consideration when formulating public policies.

4.41 The most populated municipalities, where the most urgent problems of environmental degradation, urban poverty and deterioration of living conditions are worsening, face the challenge of providing social and urban services in a situation of scarcity of resources. There are no funds for investments in the expansion of job opportunities, that would be compatible with their needs for sustainable development. In larger urban centers, the costs of creating, operating and maintaining services are relatively higher due to the price of production factors, especially land. Urban management is also more complex as a result of the series of problems to be dealt with and the fragility of the instruments of planning to regulate the process of urban growth.

4.41 The metropolitan municipalities, inner city or pheriphery, are also facing the challenges posed by management placed by the multiplicity of organs and entities, public and private, that operate in the metropolitan space. The conflicts of mandate and interests, typical of a metropolitan region, demand a



mechanism of administration that could provide intergovernmental, inter-institutional and intersectoral exchange. In Brazil the experience of effectively shared management of problems is scarce, although promising initiatives of states and municipalities concerning the management of the environmental sanitation exist. The Constitution of 1988 did not contribute to the progress of the institutional situation in the metropolitan regions, which deteriorate sensibly from the end of the 70's on, in spite of the explosive growth of the metropolitan peripheries.

4.42 Middled sized cities present, in general, better conditions of urban management, although they are not immune to the problems generated by the process of urbanization and by the adopted model of development. It is important to remember that in the last three decades these achieved the highest rates of growth in the country. These cities are progressively integrating to the globalized economy, with visible transformations in the productive structure and working relations. The speed of economic, social and geographical changes, however, has not always been accompanied by the necessary adjustments of the institutional levels of the municipal administrations (and the instrument of urban management). This process brought urban problems resulting from the scarcity of housing, especially for the poor, and the deterioration of urban services, since the expansion of the supply did not follow the pace of the demand.

4.43 In smaller cities, excluded from the process of economic development, the situation is one of stagnation and lack of opportunities whose most frequent consequence is decrease in population. Without the means to face a competition from other more dynamic centers, they remain distant from the productive process and contribute to increase the disparities in the occupation and productive appropriation of the land. The challenges for municipal administration, are, then, usually superior to their abilities in taking actions, since the municipality depends solely on the revenues of transference from the Federal Government and support from the state governments. In this case can also be included the predominantly rural municipalities, whose economic base is not

broad enough to guarantee public investments in social services and infrastructure for the entire population - urban and rural.

4.44 Considering the peculiarities of the process of occupation and urbanization of the country's territory, it is clear that the heterogeneity of the municipal network and of the cities cannot be ignored in the formulation of public policies or governmental action plans. Thus, discussion about the ability of the municipalities as far as urban management is concerned, intensified by the progress of decentralization as a consequence of constitutional provisions, should initially consider several urban realities existing in a country of continental dimensions, with regional characteristics clearly differentiated, and whose process of urbanization and productive occupation of the territory is not yet completed.

## C.2 The institutional restrictions of urban management

4.45 The diagnosis of the situation of the municipalities concerning urban management - government, management or city's administration - seeks to identify the institutional and financial problems which, by restricting the performance of the Municipal Administrations, can affect the decentralization of the Administration currently going on in the country, and raise difficulties for the achievement of the goals of Habitat II. With regard to the political conditionalities for urban management, the current problems should be analysed in regard to: distribution of competencies, like municipal autonomy; decentralization; intergovernmental co-operation; public participation and social control. These are old and new challenges that constitute the condition of governability in a municipality's administration.

4.46 The distribution of competencies between the three levels of the Administration, albeit a constitutional matter, cause difficulties for management in general because of the lack of definition on common tasks like protection of the natural environment and preservation of natural resources; improvement on housing conditions and on basic sanitation; fight against poverty and social exclusion; protection of historic, artistic, cultural and environmental heritage. For

the states and municipalities the difficulties of management, which are not few, result from the lack of legislation on intergovernmental co-operation, to establish principles and restraints in order to regulate the performance of each sphere of the Administration and the mechanisms that should provide coordination and co-operation.

4.47 With regard to urban management, municipalities still remain subject to the initiative of the Federal Government, that has exclusive constitutional competence to legislate over expropriation, credit and savings system, bidding, contracting and concession. It also legislates on urban right; elaborates and implements national and regional plans on land regulation, sets conditions for urban development and for a national system of management of water resources, among other matters of interest for local authorities. In many cases the lack of initiatives in the federal sphere, or its unfamiliarity with innumerable and peculiar needs of the municipality, has impaired the manager's ability of solving problems and created obstacles for good management of the city.

4.48 Local administrations also depend on legislative and administrative initiatives, planning and implementation that are of competence of the states, often causing omission, superposition or competition of urban and environmental management actions. The most critical examples of lack of agreement between the two spheres of administration on urban management actually refer to metropolitan planning, to the providing of environmental services and to environmental management, as was already pointed out by this Report.

4.49 It is worth remembering, though, that the municipalities are also competent to legislate in their own sphere of action about matters of interest of urban and environmental management, particularly regarding the use and occupation of land and the provision of services. Important instruments of urban and municipal management can be created, adopted or improved through municipal laws, such as the institution of special areas of urbanization or environmental protection, the regulation of the urban services, environmental

sanitation and transport, and the creation of intermunicipal associations for the solution of common interests, among others.

4.50 With regard to the decentralization of urban and environmental public policies, the diagnosis points towards the difficulties resulting from the lack of agreement on the distribution of resources and taxes. It also points to the role of the Federal Government as a provider of social and urban services and, in a broader sense, as a promoter of development. The form and speed of intergovernmental decentralization might improve the conditions of the municipalities' urban management, depending on their economic and institutional ability and on their respective roles for the country's urban and regional development. The recent experience indicates that if seen only as an escape for the Federal Government's financial difficulties, and if unilaterally decided upon, the decentralization and municipalization of public policies do not contribute to improve the assistance to the population nor to better urban management. A possible diagnosis, at this stage of decentralization, points out, once again, that the spirit of intergovernmental co-operation should preside the discussions in all spheres of the government, in order to secure the aims of the Constitution's writers.

4.51 The evolution of the political system in Brazil shows that the state and municipalities' struggle for total autonomy from the Central Administration, in the sense of bringing a federative system into effect, have been a constant, fact throughout the history of the Brazilian republic. During the democratic periods, when federative constitutional laws prevailed, member states and municipalities benefitted from reasonable conditions for governing. Even in this context, the role of municipalities as suppliers of public services increased only as an answer to new demands from the society, due to the processes of urbanization and industrialization, without meaning a decentralization of powers. During the periods of dictatorship, characterized by clearly authoritarian constitutional lawmaking, power and responsibility were accumulated by the Central Administration, either by the increase of its role in the economy or as a supplier of public services.

4.52        The changes in the Brazilian political institutional framework that initiated with the re-establishment of democracy, were confirmed by the constitutional text of 1988 and reinforced by the decentralization of the Federal Government's apparatus and the strengthening of the municipalities. The fiscal and administrative reforms and the changes on policy lines, besides positive results of economic stabilization, indicate new possibilities of overcoming urban problems, according to a new optic of urban management. The new municipal organic laws, for the first time elaborated and approved on local level, were strongly influenced by the search of a new model of management for the city. This model should be democratic in what concerns the conditions for management and the participation of social agents; it should also be universal in relation to the citizens' rights of; distributive in relation to the social functions of the city.

4.53        In this context, the progressive decentralization of the government's activities and the strengthening of the municipal autonomy constitute the best way, not only to reduce public deficit but, through improvement of the urban management, to find possible solutions for improving living and working conditions of the urban population. Nevertheless, the expectations of transforming the urban scenario in a short term are necessarily modest. Even if it were possible to effectively and rapidly distribute and decentralize the available resources, against economic, political, and territorial interests, within the government and the country's society, the historically accumulated problems of poverty, environmental degradation and deterioration of the cities should persist for some time. The available solutions and the proclaimed urbanization patterns demand an effort of mobilization of human, financial and technological resources, which we certainly not within the reach of local governments and cities' inhabitants in a short term.

4.54        Although the Constitution might have reinforced the federative system by increasing the autonomy of the municipalities and by recognizing their need for co-operation towards development, in fact the real and necessary conditions for them to effectively play their role are not fully established. Theoretically, the city should have its destiny outlined by the level of government

to which it corresponds - the municipal level - which, in accordance with the local population, should plan its future, manage its resources, supply services of local interest, implement its urban policy and lead the processes of coordination and participation of economic and social agents responsible for local development.

4.55            However, it remains a challenge for local agents to affectively acquire the conditions for urban management. This is especially true for the heterogenous group of municipalities and Brazilian cities. The cities growth and development major determinants are beyond the reach of political and economic local agents. Therefore, the effort of supralocal spheres in regulating the conditions for planning, financing and managing of public services, housing and land property, when taken from municipal government boundaries, does not always meet local needs.

4.56            The decentralization of the supplying of public services of local interest, the definition of general guidelines for urban policy and for the zoning of the territory as well as the regulation of constitutional provisions and of urban management instruments, are fundamental for municipalities to effectively take responsibility on the implementation of urban policy and management of city areas, in a perspective of sustainable development.

### C.3   Instruments of administration

4.57            The demands that confront administrators today require instruments of urban management that prepare them for a better performance, in face of the processes of globalization of the society, of the modernization of public administration, and of the major presence of private and community agents in the urban scenario. The diagnosis of the situation, considering the efforts made by the municipalities towards a most efficient and effective use of instruments of management at the disposal of the Public Administration in general, points out the urgent need of a legislation on the use and occupation of urban land and on urban land property, to enable local administrations to guarantee the city's social role, in accordance with the Brazilian Constitution.

4.58 - In the first place one should distinguish the renewed importance of governmental planning in all spheres of the Central Administration. In a scenario of growing diversity, competitiveness, and uncertainty, the municipal administrations have sought to improve their planning instruments. Besides traditional instruments such as government plans, action plans and budget programmes, the municipalities have used the most modern techniques of strategic, participative and urban planning, reinforcing their teams and planning organizations.

**URBAN PLANNING (NATAL - RN)**

DURING THE LAST DECADE, THE PROCESS OF URBAN PLANNING AT MUNICIPAL LEVEL HAS BEEN CHARACTERIZED AS AN OPPORTUNITY TO RE-ESTABLISH INSTRUMENTS OF DEMOCRATIC PLANNING, INVOLVING ALL SOCIAL AGENTS IN THE DEFINITION OF LOCAL PROPERTIES. WITHIN THAT NEW PERSPECTIVE, RECENT EXPERIENCE, HAS MADE THE INTEGRATION OF UNDEVELOPPED SETTLEMENTS INTO THE URBAN STRUCTURE POSSIBLE, SEEKING TO IMPROVE THE ACCESS TO LAND AND TO URBAN SERVICES TO COMMUNITIES DEPRIVED OF THE BENEFITS OF URBANIZATION. THE MASTER PLAN OF NATAL IS AN EXAMPLE OF THIS NEW POSTURE, WHO AIM TO PROMOTE INTEGRATED DEVELOPMENT, THE CORRECT SOCIAL USE OF THE CITY AND URBAN PROPERTY AND THE MAINTENANCE OF AN ECOLOGICALLY BALANCED ENVIRONMENT. AMONG ITS PROPOSALS, THE MOST IMPORTANT ARE THE PARTICIPATION OF THE CITIZEN IN THE CONSTRUCTION PROCESS AND MANAGEMENT OF THE CITY, AND THE RECOVERY FOR THE COMMUNITY OF THE REAL ESTATE VALUE RESULTING FROM PUBLIC INVESTMENTS. IN NATAL THE POPULATION BENEFITTING FROM THIS PROGRAMME IS OF 606,887, A FIGURE WHICH CORRESPONDS TO THE ENTIRE URBAN POPULATION OF THE MUNICIPALITY.

4.59 In second place, it is important to point out the efforts of perfecting the financial administration. This was demanded in the recent past by inflation. It is also necessary now due to policies of economic stabilization, to the need of increasing revenues, improving the allocation and control of investments, and attracting national and foreign private resources. In this sense the municipalities have sought to improve their information system, by using modern techniques of informatization and communication, whenever possible.

4.60 In the third place, the challenge of improving the provision of services of local interest have claimed an effort from local administrations in the

sense of recovering their capacity of planning, regulating and supervising concessions of public services, with some significant results. There are several examples of municipal administrations that have recovered control of their services on urban transport and environmental sanitation, or that have adopted innovative solutions at low costs to increase the supply and improve the quality of the services. Considering the diagnosis, presented earlier in this Report, on federal public policies concerning the providing of public housing, basic sanitation and urban transport until the recent past, there is still a long way to go to recover the ability of managing municipal services according to local needs. However, the perspectives from urban management's point of view are promising, provided that the recovery of municipal finances are consolidated and sources of financing - compatible with the financial capacity of agents and users - be found.

**TRANSPORT AND TRAFFIC MANAGEMENT (SANTO ANDRÉ - SP)**

IN GENERAL, THE CONDITIONS OF PUBLIC TRANSPORT IN MEDIUM- AND LARGE - SIZED BRAZILIAN CITIES ARE SIMILAR IN RELATION TO TRANSPORT POLICIES. THEY ALWAYS GIVE PRIORITY TO PRIVATE VEHICLES AND INVESTMENT IN LARGE SCALE ROAD WORKS. NEVERTHELESS, IN SOME CITIES THE SITUATION HAS BEEN REVERSED, AS IT IS THE CASE OF SANTO ANDRÉ, IN THE METROPOLITAN REGION OF SÃO PAULO, WHERE INVESTMENTS IN HUMAN RESOURCES PLANNING AND MANAGEMENT, IN IMPROVEMENT OF SERVICES RENDERED AND TRANSPORT SECURITY WITH MEASURES DIRECTED SPECIALLY TOWARDS PEDESTRIANS WERE IMPLEMENTED. AS A RESULT THE POPULATION FELT THAT PUBLIC TRANSPORT HAD IMPROVED AND TRAFFIC ACCIDENTS HAD DROPPED SUBSTANTIALLY IN 3 YEARS. THIS PROJECT BENEFITTED THE ENTIRE POPULATION, ABOUT 562,000.

4.61 The redemocratization of the country and the claims of the society have also demanded important changes in municipalities' administrative practices. They have to work with new mechanisms of participation and social control, that demand more up to date and liable information, major transparency and technical rationality of the decision making processes, access to the municipal budget and accounting, etc. The new political - institutional context also favoured the opening of the municipality towards its region and therefore increased significantly the experiences of inter municipal collaboration reinforcing the microregional associations of the municipalities, including the metropolitan regions.



**TRAFFIC SAFETY - INTER - SECTORIAL INVOLVEMENT OF  
THE COMMUNITY (CAMPINAS - SP)**

CONSCIOUS OF WHAT TRAFFIC ACCIDENTS REPRESENTS FOR THE COMMUNITY, THE CITY OF CAMPINAS, IN THE STATE OF SÃO PAULO, IMPLEMENTED A PROGRAMME ON TRAFFIC SAFETY AND TRAFFIC EDUCATION WITH A MULTIDISCIPLINARY FOCUS, WITH THE PARTICIPATION OF PUBLIC INSTITUTIONS, SERVICE DEALER COMPANIES AND ORGANIZED SECTORS OF THE COMMUNITY. BROUGHT TOGETHER AT THE TRAFFIC SAFETY COMMISSION, THEY PROPOSE AND TAKE PART IN PROGRAMMES ON TRAFFIC SAFETY AND EDUCATION. THE "TRAFFIC TEACHING IN SCHOOLS PROJECT" THAT INITIALLY INVOLVED STUDENTS FROM 7 TO 14 YEARS, HAS BEEN EXTENDED TO 3<sup>RD</sup> GRADE STUDENTS OF MUNICIPAL SCHOOLS, BOTH PUBLIC AND PRIVATE. IN 1995 THE PROGRAMME HAS BEEN EXTENDED TO 14 SCHOOLS, AND IN 1996 IT IS EXPECTED TO REACH ANOTHER 100 SCHOOLS, INVOLVING CLOSE TO 1,500 STUDENTS IN THE CITY.

#### C.4 Financial restrictions on urban management

4.62 The diagnosis of the crisis of financing of public policies in general, and in particular urban development policies showed the exhaustion of the model of financing based on the indebtedness of states and municipalities through loans obtained from or with the help of the Federal Government. These resources, so transferred without financial obligations and directed to urban development - which historically were insignificant against the needs of investments in housing and urban infrastructure of states and municipalities - do not occur anymore.

4.63 Local administration, especially that of large cities, had to face several challenges during the past decade. There was the instability of macroeconomical adjustment policies, the growing control of public deficit and the corrosion of the contributive basis due to the reduction of economical activities and the progressive informatization of the labour market. The economic recession, the loss of income from tax payers and the increase of poverty also worsened the collection of local taxes thereby reducing revenues and impaired the functioning of the administrative apparatus.

4.64 The relief brought about by the increase of intergovernmental transferances improved the situation of municipalities in comparison with the states. Nevertheless, the difficulties faced by federal and state bodies to keep

investments to supply social and urban services - public housing, sanitation and urban mass-transport - ended up by creating more financial obligations for municipal administrations, that were subjected to direct pressures from the local population, in an even more intense way.

4.65        The scarcity of resources finally led local governments to look for alternatives of survival through greater control and rationalization of public expenses, administrative modernization, improvement on tax collection and reduction of costs in the implementation, operation and maintenance of the services. Facing problems like poverty required considerable creativity and entrepreneurial spirit of municipal leaders. Many local administrations found innovative and low costs techniques to respond to social demand, taking action in areas that before were unknown, or considered as of competence of other levels of the Administration. As a noteworthy example, it can be mentioned the creation of jobs and income, the care of poor children, the protection of the environment, the improvement of housing conditions for the poor.

4.66        During the period of economic and financial crisis, without the support of the Federal Government's or of the States, a new institutional capacity of intermunicipal coordination and of local management was forged. Today, it is in the municipal sphere that the best answers for urban problems are to be found. The associative movements were reinforced, be it on microregion or national level, and at present allow a horizontal transference of rather significant management experiences. After the worst of the crisis was over, the stabilization of the economy finds the municipalities better prepared to take advantage of the new conditions of governing the country, and with more capacity to fulfill their tasks.

4.67        However it is indispensable to keep in mind the heterogeneity of the municipal universe in order to have a realistic picture of the situation. Financial restrictions of urban management affect the cities in a different way, depending on their size, their economic basis, their location and regional function. As a consequence, the role of the Federal Government in the reduction of social

differences and of regional disparities cannot be minimized. The improvement of living and housing conditions of the population depends on the quality of management by all municipalities, so they can explore their potentials and possibilities of adjustments to the directives of development of the country, as established by competent national and regional policies.

## **Conclusion**

4.68           The upcoming of a cooperative federation will demand a major fiscal effort from municipalities. On the other hand it is necessary to offer them a perspective of sustainable development - that will depend on the strategy that will be forged for the future at all levels of the Administration.

4.69           The present challenges towards a democratic management of the city are aggravated by the fragmentation of the urban space, particularly in the case of the metropolises, and by the strong dispute of interest in the implementation and operation of services and urban equipment in a context of scarcity of investments. New demands for occupation of the land, resulting from new worldwide forms of business and urban life, postulated as a search for modernity, put pressure on local authorities and increase the difficulties of a democratic management. This uncritical "modernization" does not match with the present stage of urbanization and development of the country, since it reinforces the disparities between centre and periphery, increases the contrasts between super equipped urban islands with modern technologies and areas of precarious urbanization where the majority of the population lives.

4.70           Sustainable human settlements demand the formulation of a new project of urban development that could be shared by the entire Brazilian society. In the making of a new urban thinking, the preservation of old certainties concerning the links between urban and economical growth and social development do not fit any more. New links between the production and social

reproduction processes have to be created due to the society's need to have access to new technologies of information and communication.

4.71 The elaboration of new urban policies of management and the occupation of the territory should necessarily search for: (A) the improvement of social relations in the urban daily life, marked by violence and social transgression; (B) the expansion of urban co-operation; (C) the engagement towards the sustainable development of human settlements, which is not limited to the providing of infrastructure and services but include the creation of employment and the generation of income; (D) the access to housing for all.

4.72 A possible solution would be a better and wider use, by society of contemporary technical and technological resources: towards institutional reorganization and towards the assessment of financial and cultural assets to be used in a collective effort in the improvement of living conditions.

4.73 In view of the crisis of manageability, it is necessary to promote the rehabilitation of the public sphere, in order to conduct this process of sustainable development. The lack of far-reaching proposals for urban problems, that impair the capacity of urban management, is deeply linked to the society's disbelief in the political process, expressed in the loss of legitimacy by the Government and by the representativeness of political parties.

4.74 The reform of the State, presently under discussion by the Brazilian society, should allow the elaboration of a new urban approach and the recovery of the Federal Government's social functions, thus preserving public interest (social, economic and environmental justice) through the regulation of the market and the promotion of public policies. A solid, competent and democratic public sphere will be able to establish a new pace of intergovernmental, inter-institutional and intersectorial coordination.

4.75 In this context it is necessary to recognize that urban co-operation, and particularly intergovernmental co-operation, is fundamental for a new strategy

on urban development that would produce the results expected by government and society. A cooperative federalism is the most up to date and adequate way to deal with the urban and environmental problems that impair national development, the present and future of the Brazilian cities.

4.76           The transference of financial obligations and responsibilities to the local administration should be accompanied by the progressive preparation of the municipalities to exercise their constitutional competencies. In this sense, attention has to be paid to the proposals of the Global Plan of Action of the Habitat II, which engage the countries into extending the municipal autonomy, and consequently strengthen the institutional capacity of local governments.

4.77           The future of the cities depends on the understanding that the local authority cannot and should not act isolatedly for it remains, in Brazil, the weakest link of the federation, acting and reacting according to political and economic decisions taken outside of their constitutional sphere of competence. Vital issues like zoning, urban financing, sanitation and urban mass transport still depend on initiatives from the Federal Government and the states. The political will and management capacity of the local authority, even counting on the active and interested participation of society, are not enough to overcome obstacles of juridical, institutional and financial order that impair the implementation of a policy of urban development. It should guarantee the development of the social functions of the city and the well being of its inhabitants.

4.78           Furthermore, the city does not exist outside its regional, national and in some cases global context. The results of its insertion in these different spheres will establish its potential for sustainable development, benefiting all citizens. The administrative managerial conditions are the ones that will define its future. This far-reaching and global vision of the urban challenge has made municipal leaders to change their political practice and improve their ability of management, by adjusting them to the transition at the end of this century.

4.79 It is the Federal Government's task to seek for adequate options to multiply the successful experiences of municipal authorities, taking into consideration the country's limitations of human, financial and technological resources. On the other hand, it is the role of the states and municipalities to contribute to the strengthening of the federation, by joining in the Federal Government's efforts towards development.

4.80 An effective citizenship requires a change of attitude from the entire society - companies, families, communities, profesional and academic associations, non-governmental organizations, etc. It demands from the people that the knowledge of their rights and responsibilities, and that their cooperation for the improvment of urban conditions, for a more solidary, just, safe, sound and sustainable Brazilian city.

## **PART B NATIONAL PLAN OF ACTION**

**OBS: THE NATIONAL PLAN OF ACTION IS CURRENTLY BEING DISCUSSED WITH THE SOCIETY AS A WHOLE AND THEREFORE CANNOT BE ACCOMPLISHED ON SCHEDULE. THE FINAL TEXT OF THE NATIONAL PLAN OF ACTION WILL PRESENTLY BE DELIVERED.**

**PART C**  
**INTERNATIONAL CO-OPERATION**



1. Over the last years international co-operation has become an important instrument of accomplishment of social programmes at governmental and non-governmental level. This process not only involves the Federal Government but also the state and municipal authorities. Technical and financial co-operation are the most common forms of co-operation.

2. Governmental technical co-operation is coordinated by the Brazilian Government via the Brazilian Agency for Co-operation. Some programmes stand out for their competence and methodology, besides showing significant results on the solution of social problems.

3. Presently, Brazil is the recipient of technical co-operation agreements with Japan, the Federal Republic of Germany, France, Canada, United Kingdom, Italy, The European Community, Spain, in addition to international organizations like UNDP, UNICEF, FAO, and OAS. In the field of co-operation with developing countries, there are projects with African, Latin American and Caribbean countries.

4. The projects implemented with the support of the above mentioned sources are spread over the entire country and present characteristics as diversified as the regions where they are located.

5. The mechanism of technical co-operation is becoming efficient in relation to government policies, particularly in what housing and sanitation are concerned. In the recent past, this co-operation has also contributed to studies and research on data collection and the implementation of policies.

6. Technical co-operation is considered as a propelling mechanism of structural changes as the benefits resulting from the absorption of technical know-how, information and experiences are incorporated into sectors such as industry, agriculture, health, environment, transport, institutional strengthening, among others.

7. The demand for technical co-operation from developed countries is increasingly pressing for new technologies that bring qualitative changes that could effectively contribute to the modernization of the national productive system.

8. In relation to the issues dealt by the Habitat II Conference where bilateral co-operation is concerned, programmes implemented with the support of the German, French and Italian Governments stand out.

9. With the support of the German government, the Feasibility Programme for Economic Areas of Low Income Populations (PRORENDIA) seeks to contribute to the organization of economically discriminated groups, turning them from targets of governmental charity to managers of their own needs as citizens. The implementation of the Programme claims for the mobilization and reinforcement of these communities' managerial abilities. The actions of the Programme are divided in three stages: support to economic and social development of poor rural families; support to the improvement of life and income urban peripheries populations; support to economic and managerial development of formal productive enterprises of the poor.

10. The "Feasibility Study for Economic Area of Low Income Population of the Urban Periphery of Porto Alegre", Rio Grande do Sul and the "Urbanization and Strengthening of Economic Areas in Slums of Fortaleza", Ceará are some examples of the "PRORENDIA".

11. The aim of the first above mentioned project mentioned above, carried out by the Foundation of Metropolitan and Regional Planning of Rio Grande do Sul - METROPLAN, is to urbanize the slums of Porto Alegre. It seeks the creation of economic areas for the low income population of the urban periphery, by generating jobs income, as well as improving urban infra-structure.

12. In Fortaleza, the Office of Planning of the State of Ceara SEPLAN/CE carries out the project "Urbanization and Strengthening of Economic

Areas in Slums of Fortaleza”, which, in its first phase, will promote land regularization, physical and social infra-structure, the creation of jobs and the strengthening of community organizations. The second phase entails the implantation of urban, economic and social improvements, integrating needy communities and institutions.

13. The French Government sponsors the “Urban Policies and Dynamics Programme”, whose aim is to intensify the technical and methodological coordination of local public housing initiatives, stimulating the discussion of issues related to urban systems and to technological and industrial development on construction materials and components. The Programme assembles projects in the areas of ratification of materials, production system, leasing, housing and the creation of community labour groups for public housing building.

14. Some of the projects financed by the French Government are carried out by the Company of Housing and Urban Development of São Paulo - CDHU/SP. The first, entitled “Social Leasing System”, aims to develop and implement models of management in social leasing, through pilot - projects in the municipalities of São Paulo, Santos and Cubatão. The projects entail the construction or refurbishment of vacant buildings and existing slum tenements.

15. The second project “Implantation of Housing Projects in the State of São Paulo”, seeks to develop and implement a methodology for planning and management of integrated urban enterprises - housing projects - through two pilot-projects, in the municipalities of Franco da Rocha, in the metropolitan region of São Paulo, and Sumaré, in the region of Campinas.

16. The Institute of Technological Research of the State of São Paulo - IPT - conducts the project “National System of Certification and Ratification of Materials and Housing Systems”, which envisions the establishment of a national system of certification and ratification of materials, components and innovative

building systems for housing, implementing methodologies to evaluate performance, simultaneously the necessary technical support.

17. In the State of Ceara the project "Innovations for Community Free Labour Groups", which is in its second phase, proposes solutions for dwelling, infra-structure and community equipment problems for families earning up to two minimum salaries, through the introduction of technological, economic and financial innovations within micro-urbanization projects promoted by State Government.

18. The cited programme was awarded by The United Nations for its contribution to the development of human settlements. The award "Habitat Scroll of Honour-95" was presented to the Government of Ceara on the Habitat International Day, 02/10/95, in Curitiba.

19. With the support of the Italian Government, the Labour and Social Action Office of the State of Minas Gerais - SETAS/MG - runs "Project Dawn". It aims to promote the rehabilitation and socio-urbanistic integration of slums in the metropolitan region of Belo Horizonte, the socio-economic and cultural development of its residents, the rural development of labour-scarce areas and the strengthening of local agencies.

20. Multilateral technical co-operation has its own characteristics both in relation to the modus operandi as well as regarding the large number of projects in negotiation. The fact that the majority of the multilateral organisms is linked to the United Nations, allows for more than one international organization to act at once, thus guaranteeing optimum performance from the institutions involved.

21. Among the institutions from the United Nations System, the United Nations Development Programme constitutes the most important source of multilateral co-operation, supporting housing and urban planning projects. The V planning cycle of the UNDP, covering a period of 5 years (1992-1996) benefits

from resources of the Programme and from national participation, on a "cost sharing" basis (financial contributions from institutions responsible for the project).

22. As for the programme with the UNDP a few projects being developed with the State Office for Urban Development of Parana - SEDUR stand out: The Strategic Actions for Support to Urban Development has two immediate aims: the first, to contribute towards the definition of state policies and guidelines for urban development according to the "State Programme of Urban Development 1995/2000", and the systematisation of instruments that ensure their correct follow up and evaluation; the second, to support the increase in urban administration effectiveness through the implementation of human resource training programmes.

23. The Environment Office of the State of São Paulo conducts the project "Management and Technology of Waste Treatment in São Paulo", which seeks to contribute to the creation of waste management models and to the implementation of strategies to deal with the problem at each level of government.

24. The Federal Government, through the Institute of Applied Economic Research - IPEA - and the Office for Urban Policy - SEPURB - conducts the project "Supporting the Modernization of the Sewerage" which contributes, to the the increasing and improving of the quality of sewerage services to rural and urban populations. It also seeks to optimize the process of production, distribution and comercialization of sanitation services, together with the incorporation of environmental actions and the initiation of economically and financially sustainable plans.

25. The Office for Urban Policy (SERPURB) carries out the 'Technical Assistance for Housing and Sewarages Project', which seeks to contribute to the improvement of the standard of living of low income populations, by the institutional strengthening of services of housing, sewerage and urban problems.

26. -Still in the Federal area, SEPURB carries out the "Water Quality and Pollution Control" programme. The project envisions the conception, detailing, and implementation of investment programmes intended for urban environmental sewerage that emphasizes the recuperation and protection of water supply in metropolitan regions and urban agglomerations, through integrated actions of treatment of domestic and industrial effluents and solid waste, as well as micro and macro-drainage; re-settling of populations from endangered areas; re-composition of green covering, creation of parks and areas of environmental protection; and institutional actions concerned with the creation of management models capable of maintaining regional environmental quality of hydrographic basins that are selected by the project.

27. The support received by the Brazilian Government for the preparation of the International Conference on Human Settlements Habitat II through a project financed by the UNDP allowed the organization of preparatory activities at internal level and served as a stimulus for the incorporation of other national partners in the governmental area, non-governmental organizations and private companies.

28. Other multilateral agencies have had a significant role in the financing of technical co-operation, like the Inter-American Development Bank through the Small Projects Fund, and the European Union, where Social Programme II is in the planning phase. This programme will deal with the question of slums phenomenon in Rio de Janeiro and São Paulo.

29. From the international relations point of view, the co-operation Brazil renders to developing countries represents an important mean of sharing valid experiences and technical and technological novelties, providing significant opportunities in the most diverse areas.

30. The Brazilian Government has identified partners in Latin America, the Caribbean and Africa, especially those of portuguese language. In spite of

difficulties to implement co-operation proposals due to financial restrictions, one can list a series of contacts already made with authorities of those countries. The areas of greatest interest have been health, public administration, agriculture, urban transport, urban planning, sewerage, and municipal management for solid waste treatment.

31. In 1994, the Regulation of the Brazilian Co-operation Fund - FBC, was signed. The Fund was geared to finance actions of technical co-operation between Brazil and the member - States of the Organization of American States - OAS. These actions will respond simultaneously to priorities established by the soliciting countries and to policies and directives of the "Technical Co-operation to Developing Countries Programme" - CTPD established by the Brazilian Government. The Fund's resources are designed to support the formation and training of human resources and consultancy through the exchange of experts between member - states. Among the priority areas to benefit from the FBC, the most important are: health, communications, environment, industry, mining, urban development, sewerage, and transport.

32. The Brazilian Government, via the ABC, when requested, seeks to identify national institutions that could allocate technical capacity and contribute to the implementation of co-operation. Successful experiences in the areas of housing, transport and sewerage can be extended to other countries.

33. Presently, there is an interest on the part of the Brazilian Government to develop horizontal co-operation projects on technical exchange, notably on models of services, production management, sewerage treatment, technology in urban centers, methodology of tariffs in sanitation.

34. In the scope of Mercosul, there is no specific group that deals with questions linked to urbanization and sanitation. Nevertheless, the issue is examined by diverse sub-groups, specialized meetings and other technical organs.

35. With regards to human resource training, Brazil participates intensively by receiving experts of Latin American and African countries to follow post-graduate courses *stricto* and *lato-sensu*, in town planning and architecture. The University of São Paulo and the Federal University of Rio de Janeiro are prominent in this aspect.

36. The actions of financial co-operation aim notably at promoting public and private investment for the financing of development. Resources received from international financial institutions are transferred to government bodies in a concessional basis, under special interests schemes. At the government's level, the Ministry of Planning is the focal point on the formulation of directives, evaluation and coordination of the negotiations with multilateral institutions and foreign government agencies, related to the financing of public projects through the International Affairs Secretariat.

37. In the scope of the IDB, in 1995, the amount of funds allocated for sewerage works, transport and urban improvements were 66% of the total financing. The following projects are the most prominent: urban transport in the city of Curitiba, environmental sewerage of the All Saints bay and urban improvements programme of the city of Rio de Janeiro.

38. The World Bank finances far-reaching projects of financial co-operation in the country, in the most diverse areas, such as rural development, improvement of public administration capacity, small industries, communications, energy, education, urban development and sewerage. Sometimes, these loans are accompanied by some technical co-operation, generally in coordination with the United Nations Development Programme, or other specialized agencies of the United Nations System.



## **ANNEXES**

## **ANNEX I**

### **A. TECHNICAL TEAM**

A1 GENERAL RELATOR - MARLENE FERNANDES - IBAM

A2 NATIONAL SEMINARS OF PREPARATION FOR HABITAT II:

- THE BRAZILIAN PROCESS OF URBANIZATION: A GLOBAL DIAGNOSIS, BELO HORIZONTE, MARCH 1995

RELATOR: THEREZA CARVALHO

PRESENTERS: GEORGE MARTINE "The Trajectory of the Brazilian" Urbanization: Specifics and Implications"

ANA CLARA TORRES RIBEIRO: "Urbanization Without Courtesy: A Panorama of Uncertainties"

MODERATOR: JAFETE ABRAHAO

- SEMINAR ON HABITATION AND THE URBAN AGRARIAN QUESTION, RIO DE JANEIRO, MAY 1995.

RELATOR: NABIL GEORGES BONDUKI

PRESENTERS: ERMINIA MARICATO: "Habitation and Agrarian Urban and Environmental Policies"

DOMINGOS THEODORO DE AZEVEDO NETO: "The Agrarian Question"

MODERATOR: ANTONIO DUARTE NOGUEIRA, JR.

- SEMINAR ON INFRA-STRUCTURE AND URBAN AND RURAL ENVIRONMENT, SALVADOR, JUNE 1995.

RELATOR: MARCIO MILLER SANTOS

PRESENTERS: JUAN LUIZ MARCARO: "Systems of Urban Infra-structure in Brazil"

MODERATOR: SUELY GONZALES

- SEMINAR ON MANAGEMENT AND FINANCING OF URBAN DEVELOPMENT, SÃO PAULO, JULY 1995.

RELATORS: DIANA MEIRELLES MOTTA  
EMMANUEL CAVALCANTE PORTO

**PRESENTERS: FERNANDO REZENDE: "Financing of Urban Development"**

**ALEXANDRÉ CARLOS DE ALBUQUERQUE SANTOS: "Urban Management: The aim to consolidate Decentralization and Democracy in a setting of diversities."**

**MODERATOR: Rogério de Paula Tavares**

## **B. CONTRIBUTIONS AND COMMUNICATIONS**

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8. Campos, Cândido Malta - "Urban Policy and Development", São Paulo, 1995;
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11. Centre for Urban Affairs of the Labour Party - Housing of Social Interest: A Discussion, NAU-PT, Rio de Janeiro, 1995;
12. "Contribution of the State Council to the Feminine Condition/SP, by Vania Moura Ribeiro, representing that Council;
13. "Contribution to the Outline for the Enrichment of the Letter of Credit as an Instrument of Residential Financing", by Demetri Anastassakis, President - Institute of Architects of Brazil, Rio de Janeiro branch;
14. Corveto, Rubens - Directives for a Habitational Programme in the State of Rio de Janeiro, Centre for Urban Affairs of the Labour Party, Rio de Janeiro, 1995;

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**TABLE I. 1**  
**INFANT MORTALITY RATE, BY SEX. BRAZIL AND LARGE REGIONS - 1980, 1991 AND 1995**

BIG REGIONS	INFANT MORTALITY RATE (o/oo)								
	1980			1991			1995		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
BRAZIL (1)	69,1	76,3	61,7	48,6	55,5	41,5	44,4	50,5	38,1
NORTH	62,8	69,9	55,5	47,1	52,8	41,2	42,2	47,7	36,5
NORTHEAST	106,8	114,6	98,8	78,2	83,7	72,5	70,0	75,7	64,2
SOUTHEAST	47,4	54,4	40,0	26,5	32,4	20,4	23,7	29,1	18,1
SOUTH	43,7	50,8	36,3	23,6	29,4	17,5	21,1	26,5	15,6
C. WEST	47,9	54,9	40,5	29,1	35,0	22,9	26,0	31,5	20,3

Source: IBGE. Preliminary Projection of the Population of Brazil for the Period 1980 - 2020. Márcia Martins Salgado Mendes et al. Rio de Janeiro, IBGE, Staff of Research, Department of Population and Social Indicators, 1994. Texts for discussion, n° 73.

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Note: Preliminary Projections, conciliating infant mortality indicators that utilize information from the Demographic Census and from the National Surveys by Domicile samples - 1980 e 1991

(1) Infant mortality rates implicit in the Preliminary Projections of the Brazilian Population by the method of the components for the period 1980 / 2020.



TABLE I. 2

LIFE EXPECTANCY DURING BIRTH, BY SEX. BRAZIL AND LARGE REGIONS - 1980, 1991 e 1995

LARGE REGIONS	LIFE EXPECTANCY DURING BIRTH								
	1980			1991			1995		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
Brazil (1)	61,76	58,95	64,68	65,90	62,58	69,34	67,30	63,81	70,38
NORTH	61,31	57,92	64,83	66,88	63,77	70,10	68,32	65,13	71,62
NORTHEAST	58,71	56,03	61,50	64,01	61,05	67,09	65,66	62,61	68,84
SOUTHEAST	64,54	61,20	68,01	66,78	63,26	70,43	68,29	64,74	71,97
SOUTH	65,34	62,09	68,72	67,97	64,75	71,32	69,35	66,04	72,76
C. WEST	63,47	60,50	66,56	67,06	64,01	70,24	68,56	65,44	71,80

Source: IBGE. Preliminar Projection of the Population of Brazil for the Period 1980 - 2020. Márcia Martins Salgado Mendes et al. Rio de Janeiro, IBGE, Staff of research, Departament of Population and Social Indicators, 1994. Texts for discussion, n° 73.

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Note: Life Expectancy during birth implicit in tables of preliminary mortality starting from the conciliation of the infant mortality with the mortality of the other age groups, derived from information of the Demographic Census and Civil Register.

(1) Life Expectancy during birth implicit in the Preliminary Projects of the Brazilian Population by the method of the components for the period 1980 / 2020.

TABLE I. 3

**RATE OF ILLITERACY OF PEOPLE OLDER THAN 15 YEARS,  
AMONG THE POPULATION WITH 15 YEARS OR OLDER. BRAZIL AND LARGE REGIONS  
1980 / 1991**

LARGE REGIONS	TAXA DE ANALFABETISMO PESSOAS COM 15 ANOS OU MAIS					
	1980			1991		
	Total	Urban	Rural	Total	Urban	Rural
Brazil	25,3	16,7	53,5	20,1	14,2	40,5
NORTH (1)	30,5	16,6	71,5	24,6	15,8	38,5
NORTHEAST	45,8	30,3	64,8	37,6	26,5	56,9
SOUTHEAST	16,5	12,9	33,6	12,3	10,5	29,3
SOUTH	15,7	11,8	51,7	11,8	9,7	18,2
C. WEST (2)	23,5	17,4	46,2	16,7	13,8	30,2

Source: IBGE, Staff of Research, Department of Population and Social Indicators

Note: Demographic Census of 1980 and 1991.

(1) Including Tocantins (2) Excluding Tocantins.

**TABLE I. 4**  
**RATE OF TOTAL FERTILITY BRAZIL AND LARGE REGIONS**  
**1980 / 1990**

LARGE REGIONS	RATE OF FERTILITY		
	1980	1991	1995
BRAZIL (1)	4,0	2,6	2,3
NORTH	5,5	3,2	2,9
NORTHEAST	5,8	3,4	3,0
SOUTHEAST	3,2	2,1	2,0
SOUTH	3,4	2,3	2,1
C. WEST	4,2	2,5	2,3

Source: IBGE, Anuário Estatístico, 1994.

IBGE. Preliminary Projection of the Population of Brazil for the Period 1980 - 2020. Márcia Martins Salgado Mendes et al. Rio de Janeiro, IBGE, Staff of Research, Departament of Population and Social Indicators, 1994. Texts for discussion, n° 73.

IBGE. Preliminary Projections of the Populations from the Large Regions during the Period 1980 - 2010. Márcia Martins Salgado Mendes et al. Rio de Janeiro, IBGE, Staff of Rsearch, Departament of Population and Social Indicators, 1995. Texts for discussion, n° 76.

Note: Preliminary estimates, conciliating indicators of fertility obtained through several methods and utilizing as sources data from the Demographic Census, National Surveys by domicile sample and from the Civil Register.

(1) Total Rate of fertility implicit in the preliminary projection of the Brazilian population by the method of the components for the period 1980 / 2020.

TABLE I. 5

## NUMBER OF MUNICIPALITIES IN THE GENERAL CENSUS OF 1940/1991, PER CLASS OF SIZE OF THE POPULATION

	1940		1950		1960		1970		1980		1991	
TOTAL	1574	100,00	1889	100,00	2766	100,00	3952	100,00	3991	100,00	4491	100,00
Up to 2 000	-		3	0,16	15	0,54	56	1,42	56	1,40	58	1,29
from 2 001 to 5 000	31	1,97	65	3,44	263	9,51	602	15,23	610	15,28	682	15,19
from 5 001 to 10 000	249	15,82	349	18,48	651	23,54	1058	26,77	957	23,98	1055	23,49
from 10 001 to 20 000	577	36,66	615	32,56	847	30,62	1159	29,33	1114	27,91	1299	28,92
from 20 001 to 50 000	597	37,93	691	36,58	783	28,31	826	20,90	872	21,85	926	20,62
from 50 001 to 100 000	97	6,16	128	6,78	143	5,17	157	3,97	240	6,01	284	6,32
from 100 001 to 500 000	21	1,33	35	1,85	57	2,06	83	2,10	124	3,11	162	3,61
more than 500 000	2	0,13	3	0,16	7	0,25	11	0,28	18	0,45	25	0,56
with more than 50 000	120	7,62	166	8,79	207	7,48	251	6,35	382	9,57	471	10,49

Source: IBGE, Staff Research, Preliminary Synopsis from the Demographic Census - 1991

## POPULATION IN THE GENERAL CENSUS OF 1940/1991, ACCORDING TO THE CLASSES OF SIZE OF THE POPULATION

	1940		1950		1960		1970		1980		1991	
TOTAL	41169321	100,00	51784325	100,00	70608046	100,00	94508583	100,00	121150573	100,00	146917459	100,00
Up to 2 000	-		1909	0,00	22150	0,03	92110	0,10	88183	0,07	91431	0,06
from 2 001 to 5 000	126483	0,31	263069	0,51	997501	1,41	2213159	2,34	2228112	1,84	2451222	1,67
from 5 001 to 10 000	1924487	4,67	2651228	5,12	4853342	6,87	7764485	8,22	7069211	5,84	7687121	5,23
from 10 001 to 20 000	8523575	20,70	8947268	17,28	12111526	17,15	16403397	17,36	15937703	13,16	18453189	12,56
from 20 001 to 50 000	17680584	42,95	20794193	40,16	23608342	33,44	24988753	26,45	26728931	22,06	28005202	19,06
from 50 001 to 100 000	6369635	15,47	8356444	16,14	9467253	13,41	10443490	11,05	15937465	13,16	19379111	13,19
from 100 001 to 500 000	3454155	8,39	5669985	10,95	9113130	12,91	14610868	15,46	23531329	19,51	32073626	21,83
more than 500 000	3090402	7,51	5100229	9,85	10434802	14,78	17982321	19,03	29529639	24,37	38776557	26,39
with more than 50 000	12914192	31,37	19126858	36,94	29015185	41,09	43036879	45,54	69098433	57,04	90229294	61,41

Source: IBGE, Staff Search, Preliminary Synopsis of the Demographic Census - 1991

**TABLE I. 6**

**PERMANENT OCCUPATED URBAN AND RURAL PRIVATE DOMICILES  
1940/1991**

	permanent private domiciles		
	Urban	Rural	Urban Domiciles
1940	2509639	5388130	31,8%
1950	3730368	6315831	37,1%
1960	6350126	7147697	47,0%
1970	10276340	7352359	58,3%
1980	17770981	7439658	70,5%
1991	27157268	7577447	78,2%

Source: IBGE, Staff of Research, Department of Population and Social Indicators, Demographic Census from 1940 to 1991.

**TABLE I. 7**  
**RESIDENT POPULATION - LARGE REGIONS**  
**1991**

LARGE REGIONS	RESIDENT POPULATION			
	1991			
	TOTAL	URBAN	RURAL	URBAN POP. (%)
BRAZIL	146.825.475	110.990.990	35.834.485	75,59
NORTH	10.030.556	5.922.574	4.107.982	59,05
NORTHEAST	42.497.540	25.776.279	16.721.261	60,65
SOUTHEAST	62.740.401	55.225.983	7.514.418	88,02
SOUTH	22.129.377	16.403.032	5.726.345	74,12
CENTRAL-WEST	9.427.601	7.663.122	1.764.479	81,28

Source: IBGE, Staff of Research, Department of Population and Social Indicators, Demographic Census of 1991.

**TABLE I.8**

**ANNUAL GEOMETRIC RATE OF GROWTH FROM THE RESIDENT POPULATION BY LOCATION OF DOMICILE.**

**BRAZIL AND LARGE REGIONS - 1991**

LARGE REGIONS	RESIDENT POPULATION								
	1980	1991	T. Annual Growth (%)	1980	1991	T. Annual Growth (%)	1980	1991	T. Annual Growth (%)
	TOTAL	TOTAL		URBAN	URBAN		RURAL	RURAL	
BRAZIL	119.011.052	146.825.475	1,93	80.437.327	110.990.990	2,97	38.573.725	35.834.485	-0,67
NORTH	6.619.755	10.030.556	4,06	3.329.439	5.922.574	5,38	3.290.316	4.107.982	2,04
NORTHEAST	34.815.439	42.497.540	1,82	17.568.001	25.776.279	3,55	17.247.438	16.721.261	-0,28
SOUTHEAST	51.737.148	62.740.401	1,76	42.841.793	55.225.983	2,34	8.895.355	7.514.418	-1,52
SOUTH	19.031.990	22.129.377	1,38	11.876.780	16.403.032	2,98	7.155.210	5.726.345	-2,00
CENTRAL-WEST	6.806.720	9.427.601	2,99	4.821.314	7.663.122	4,30	1.985.406	1.764.479	-1,07

Source: IBGE, Staff of Research, Department of Population and Social Indicators, Demographic Census of 1980 e 1991

TABLE I. 9a

**RESIDENT POPULATION, BY LOCATION OF DOMICILE, ACCORDING TO LARGE  
REGIONS AND CLASS OF SIZE OF THE MUNICIPALITIES - BRAZIL - 1980/1991**

Large regions and classes of size of the municipalities (Number of inhabitants)	Resident Population					
	1980			1991		
	Total	Urban	Rural	Total	Urban	Rural
<b>Brazil</b>	119011052	80437327	38573725	146825475	110990990	35834485
Up to 20 000	25361396	9747971	15613425	28673965	13758230	14915735
More than 20 000 to 50 000	26244838	12289421	13955417	28191796	16165064	12026732
More than 50 000 to 250 000	30170504	22471745	7698759	37586180	30777298	6808882
More than 250 000 to 1 000 000	13433872	12364043	1069829	22350855	21014526	1336329
More than 1 000 000	23800442	23564147	236295	30022679	29275872	746807
<b>North</b>	6619755	3329439	3290316	10030556	5922574	4107982
Up to 20 000	1358202	376337	981865	1889471	718576	1170895
More than 20 000 to 50 000	1688575	559707	1128868	2430807	1069015	1361792
More than 50 000 to 250 000	2006315	957147	1049168	2901492	1869405	1032087
More than 250 000 to 1 000 000	1566663	1436248	130415	552596	409806	142790
More than 1 000 000				2256190	1855772	400418
<b>Northeast</b>	34815439	17568001	17247438	42497540	25776279	16721261
Up to 20 000	9325059	2776383	6548676	10342239	3935034	6407205
More than 20 000 to 50 000	10706695	3746208	6960487	11845005	5276318	6568687
More than 50 000 to 250 000	7599588	4253940	3345648	9898876	6903276	2995600
More than 250 000 to 1 000 000	3170589	2800886	369703	5269281	4521275	748006
More than 1 000 000	4013508	3990584	22924	5142139	5140376	1763
<b>Southeast</b>	51737148	42841793	8895355	62740401	55225983	7514148
Up to 20 000	8208054	4088451	4119603	8253513	4936648	3316865
More than 20 000 to 50 000	7119220	4590985	2528235	7706416	5612803	2093343
More than 50 000 to 250 000	12824672	11199754	1624918	15511630	13961635	1549995
More than 250 000 to 1 000 000	7125634	6667865	457769	12824024	12513626	310398
More than 1 000 000	16459568	16294738	164830	18444818	18201271	243547
<b>South</b>	19031990	11876800	7155210	22139377	16403032	5726345
Up to 20 000	4685303	1683813	3001490	5806046	2747708	3058338
More than 20 000 to 50 000	5107739	2523164	2584575	4446980	2931010	1505970
More than 50 000 to 250 000	6526800	5058244	1468576	7454120	6419765	1034355
More than 250 000 to 1 000 000	561690	471748	89942	1853793	1741985	111808
More than 1 000 000	2150458	2139831	10627	2578438	2562564	15874
<b>Central-West</b>	6806720	4821314	1985406	9427601	7663122	1764479
Up to 20 000	1784778	822987	961791	2382696	1420264	962432
More than 20 000 to 50 000	1622609	869357	753252	1772588	1275918	496670
More than 50 000 to 250 000	1213129	1002680	210449	1820062	1623217	196845
More than 250 000 to 1 000 000	1009296	987296	22000	1851161	1827834	23327
More than 1 000 000	1176908	1138994	37914	1601094	1515889	85205

Source: IBGE, Children and Adolescents Social Indicators, IBGE, Department of Population and Social Indicators, V. 5, 1995.



TABLE 1. 9b

**RESIDENT POPULATION, BY LOCATION OF DOMICILE, ACCORDING TO LARGE  
REGIONS AND CLASSES OF SIZE OF MUNICIPALITIES - BRAZIL - 1980/1991**

Large regions and classes of size of the municipalities (Numbers of inhabitants)	Resident Population					
	1980			1991		
	Total	Urban	Rural	Total	Urban	Rural
<b>Brazil</b>						
Up to 20 000	21,31	12,12	40,48	19,53	12,40	41,62
More than 20 000 to 50 000	22,05	15,28	36,18	19,20	14,56	33,56
More than 50 000 to 250 000	25,35	27,94	19,96	25,60	27,73	19,00
More than 250 000 to 1 000 000	11,29	15,37	2,77	15,22	18,93	3,73
More than 1 000 000	20,00	29,30	0,61	20,45	26,38	2,08
<b>North</b>						
Up to 20 000	20,52	11,30	29,84	18,84	12,13	28,50
More than 20 000 to 50 000	25,51	16,81	34,31	24,23	18,05	33,15
More than 50 000 to 250 000	30,31	28,75	31,89	28,93	31,56	25,12
More than 250 000 to 1 000 000	23,67	43,14	3,96	5,51	6,92	3,48
More than 1 000 000				22,49	31,33	9,75
<b>Northeast</b>						
Up to 20 000	26,78	15,80	37,97	24,34	15,27	38,32
More than 20 000 to 50 000	30,75	21,32	40,36	27,87	20,47	39,28
More than 50 000 to 250 000	21,83	24,21	19,40	23,29	26,78	17,91
More than 250 000 to 1 000 000	9,11	15,94	2,14	12,40	17,54	4,47
More than 1 000 000	11,53	22,72	0,13	12,10	19,94	0,01
<b>Southeast</b>						
Up to 20 000	15,86	9,54	46,31	13,16	8,94	44,14
More than 20 000 to 50 000	13,76	10,72	28,42	12,28	10,16	27,86
More than 50 000 to 250 000	24,79	26,14	18,27	24,72	25,28	20,63
More than 250 000 to 1 000 000	13,77	15,56	5,15	20,44	22,66	4,13
More than 1 000 000	31,81	38,03	1,85	29,40	32,96	3,24
<b>South</b>						
Up to 20 000	24,62	14,18	41,95	26,22	16,75	53,32
More than 20 000 to 50 000	26,84	21,24	36,12	20,09	17,87	26,43
More than 50 000 to 250 000	34,29	42,59	20,52	33,67	39,14	18,03
More than 250 000 to 1 000 000	2,95	3,97	1,26	8,37	10,62	1,95
More than 1 000 000	11,30	18,02	0,15	11,65	15,62	0,28
<b>Central-West</b>						
Up to 20 000	26,22	17,07	48,44	25,27	18,53	54,54
More than 20 000 to 50 000	23,84	18,03	37,94	18,80	16,65	28,15
More than 50 000 to 250 000	17,82	20,80	10,60	19,31	21,18	11,16
More than 250 000 to 1 000 000	14,83	20,48	1,11	19,64	23,85	1,32
More than 1 000 000	17,29	23,62	1,91	16,98	19,78	4,83

Source: IBGE, Children and Adolescents: Social Indicators, IBGE, Department of Population and Social Indicators, V. 5, 1995.

TABLE 1. 10

**DISTRIBUTION OF THE URBAN POPULATION, ACCORDING TO THE GROUPS OF  
INHABITANTS DURING THE YEARS OF CENSES BRAZIL - 1950 TO 1980**

<b>CITIES</b> (Number of inhabitants)	<b>CENSUSED POPULATION</b>			
	<b>1950</b>	<b>1960</b>	<b>1970</b>	<b>1980</b>
<b>Brazil</b>	18782891	32004817	52904744	82013375
Up to 20 000	5142655	8479207	12614279	19470227
More than 20 000 to 50 000	1803988	3140591	5175926	8419386
More than 50 000 to 100 000	1370919	2511478	4425233	8136606
More than 100 000 to 200 000	1472654	2766167	4673999	7589516
More than 200 000 to 500 000	1772643	3265456	6012075	9956797
More than 500 000 to 1 000 000	760726	1441797	2854329	4494213
More than 1 000 000 to 2 000 000	2084561	3913105	6908979	10340105
More than 2 000 000	4374745	6487016	10239924	13606525

Source: BREMAEKER, François E. J. de. *Urbanização em marcha (1950-1980)*. Rio de Janeiro, IBAM/CPU/IBAMCO, 1991. 46p. (Estudos demográficos, 2).

TABLE I. 10b

GROWTH OF THE URBAN POPULATION, ACCORDING TO THE GROUPS OF INHABITANTS,  
DURING THE YEARS OF CENSES - BRAZIL - 1950 TO 1980

CITIES (Number of inhabitants)	GROWTH IN THE PERIOD			
	1950/1960	1960/1970	1970/1980	1950/1980
Brazil	1,70	1,65	1,55	4,37
Up to 20 000	1,65	1,49	1,54	3,79
More than 20 000 to 50 000	1,74	1,65	1,63	4,67
More than 50 000 to 100 000	1,83	1,76	1,84	5,94
More than 100 000 to 200 000	1,88	1,69	1,62	5,15
More than 200 000 to 500 000	1,84	1,84	1,66	5,62
More than 500 000 to 1 000 000	1,9	1,98	1,57	5,91
More than 1 000 000 to 2 000 000	1,88	1,77	1,5	4,96
More than 2 000 000	1,48	1,58	1,33	3,11

Source: BREMAEKER, François E. J. de. *Urbanização em marcha (1950-1980)*. Rio de Janeiro, IBAM/CPU/IBAMCO, 1991. 46p. (Estudos demográficos, 2).

TABLE I. 11

**RESIDENT POPULATION, AVERAGE GEOMETRIC RATE OF ANNUAL INCREASE,  
RELATIVE PARTICIPATION OF THE POPULATION, AND ABSOLUTE AND  
RELATIVE VARIATION - METROPOLITAN REGIONS - 1980 / 1991**

METROPOLITAN REGIONS	Resident Population		Annual Rate of Geom. Growth (%)	Relative Participation		VARIATION	
	1980	1991		1980	1991	Absoluta	Relativa
<b>Total</b>	34.389.262	42.734.132	1,99	100,00	100,00	8.344.870	24,27
Nucleus	22.450.194	26.112.380	1,38	65,28	61,10	3.662.186	16,31
Other Municipalities	11.939.068	16.621.752	3,05	34,72	38,90	4.682.684	39,22
<b>Belém</b>	999.165	1.332.840	2,65	100,00	100,00	333.675	33,40
Nucleus	933.287	1.244.689	2,65	93,41	93,39	311.402	33,37
Other Municipalities	65.878	88.151	2,68	6,59	6,61	22.273	33,81
<b>Fortaleza</b>	1.580.066	2.307.017	3,50	100,00	100,00	726.951	46,01
Nucleus	1.307.611	1.768.637	2,78	82,76	76,66	461.026	35,26
Other Municipalities	272.455	538.380	6,39	17,24	23,34	265.925	97,60
<b>Recife</b>	2.347.146	2.874.555	1,86	100,00	100,00	527.409	22,47
Nucleus	1.200.378	1.298.229	0,71	51,14	45,16	97.851	8,15
Other Municipalities	1.146.768	1.576.326	2,93	48,86	54,84	429.558	37,46
<b>Salvador</b>	1.766.582	2.496.521	3,19	100,00	100,00	729.939	41,32
Nucleus	1.493.685	2.075.273	3,03	84,55	83,13	581.588	38,94
Other Municipalities	272.897	421.248	4,03	15,45	16,87	148.351	54,36
<b>Belo Horizonte</b>	2.609.520	3.436.060	2,53	100,00	100,00	826.540	31,67
Nucleus	1.780.855	2.020.161	1,15	68,24	58,79	239.306	13,44
Other Municipalities	828.665	1.415.899	4,99	31,76	41,21	587.234	70,87
<b>Rio de Janeiro</b>	8.772.265	9.814.574	1,03	100,00	100,00	1.042.309	11,88
Nucleus	5.090.700	5.480.768	0,67	58,03	55,84	390.068	7,66
Other Municipalities	3.681.565	4.333.806	1,49	41,97	44,16	652.241	17,72
<b>São Paulo</b>	12.588.725	15.444.941	1,88	100,00	100,00	2.856.216	22,69
Nucleus	8.493.226	9.646.185	1,16	67,47	62,46	1.152.959	13,58
Other Municipalities	4.095.499	5.798.756	3,21	32,53	37,54	1.703.257	41,59
<b>Curitiba</b>	1.440.626	2.000.805	3,03	100,00	100,00	560.179	38,88
Nucleus	1.024.975	1.315.035	2,29	71,15	65,73	290.060	28,30
Other Municipalities	415.651	685.770	4,66	28,85	34,27	270.119	64,99
<b>Porto Alegre</b>	2.285.167	3.026.819	2,59	100,00	100,00	741.652	32,46
Nucleus	1.125.477	1.263.403	1,06	49,25	41,74	137.926	12,25
Other Municipalities	1.159.690	1.763.416	3,88	50,75	58,26	603.726	52,06

Source: IBGE. Demographic Trends: An Analysis based on the results of the Demographic Census from 1991. Rio de Janeiro, IBGE, Department of Population and Social Indicators, 1994.

Note: Compatibility of the territorial structures of the MR's in relation to the extension from 1991 to Belo Horizonte, Rio de Janeiro and Porto Alegre.

TABLE II. 1

**DISTRIBUTION OF MONTHLY INCOME OF ALL THE JOBS FROM OCCUPIED PEOPLE  
WITH JOB INCOMES, ACCORDING TO CATEGORIES OF PERCENTAGE OF  
THE OCCUPIED PEOPLE - BRAZIL - 1981 / 1990**

PERCENTAGE  CATEGORY	DISTRIBUTION OF INCOMES (%)							
	In the category				Acumulated			
	1981	1983	1986	1990	1981	1983	1986	1991
10 -	0,90	1,00	1,00	0,80	0,90	1,00	1,00	0,80
10	2,00	1,80	2,10	1,80	2,90	2,80	3,10	2,60
10	3,00	2,80	2,70	2,30	5,90	5,60	5,80	4,90
10	3,80	3,50	3,30	3,00	9,70	9,10	9,10	7,90
10	4,80	4,30	4,40	4,10	14,50	13,40	13,50	12,00
10	6,00	5,60	5,70	5,50	20,50	19,00	19,20	17,50
10	7,80	7,40	7,40	7,50	28,30	26,40	26,60	25,00
10	10,70	10,40	10,30	10,50	39,00	36,80	36,90	35,50
10	16,10	16,50	15,80	16,40	55,10	53,30	52,70	51,90
10 +	44,90	46,70	47,30	48,10	100,00	100,00	100,00	100,00
5 +	31,90	33,10	33,90	34,40	.	.	.	.
1 +	12,10	13,20	14,00	13,90	.	.	.	.
Indices of Gini	0,564	0,584	0,584	0,602	.	.	.	.

Source: IBGE. national Research by sample of domicils. Syntesis of Indicators form the basic research, Rio de Janeiro, IBGE/DPE/ Diretoria de Pesquisas, Departamento de Emprego e Rendimento, 1990.

Note: Exclusive those without income and those without tax declaration.

TABLE II . 2

**CONSOLIDATION OF THE ESTIMATES OF THE COMPONENTS FROM HOUSING  
DEFICITS - BRAZIL AND LARGE REGIONS  
1991**

LARGE REGIONS	IMPROVISED		RURAL		FAMILY COHABITATION		TOTAL	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural (3)
BRAZIL	92035	54500	664515	1063440	2601035	527943	3357583	1645775
NORTH (1)	8709	14987	17823	.	196281	.	222813	14987
NORTHEAST	21468	10999	378873	889561	680492	248541	1080832	1148991
SOUTHEAST	37820	8682	189710	81928	1215696	126435	1443226	217045
SOUTH	12977	10256	59723	26412	287403	121153	353465	157823
C. WEST (2)	11061	9576	25024	65539	221163	31814	257247	106929

Source: Fundação João Pinheiro, 1995. (Dados utilizados: IBGE, Sinopse Preliminar do Censo demográfico - 1991, Censo Demográfico de 1991 e Pesquisa Nacional por Amostra de Domicílios, 1990.

(1) Excluding Tocantins (2) Including Tocantins (3) Excluding estimatives and improvised domiciles censused and rural areas of the North Region.

TABLE II. 3

PERMANENT PRIVATE DOMICILES AND DWELLERS, BY LOCATION OF DOMICILE  
ACCORDING TO THE FORM OF WATER SUPPLY - 1980

Water supply	TOTAL		URBAN		RURAL							
	Domiciles	People	Domiciles	People	Domiciles	People						
TOTAL	25210639	100,00	117348286	100,00	17770981	100,00	7439658	100,00	38030534	100,00		
With internal pipe network	14119061	56,00	62872568	53,58	12774996	71,89	56122552	70,76	1344065	18,07	6750016	17,75
General network	11977045	47,51	52560176	44,79	11739827	66,06	21342781	26,91	237218	3,19	1217395	3,20
Well or spring	1909270	7,57	9216102	7,85	884933	4,98	4111953	5,18	1024337	13,77	5104149	13,42
Other Form	232746	0,92	1096290	0,93	150236	0,85	667818	0,84	82510	1,11	428472	1,13
Without internal pipe network	11053748	43,85	54306607	46,28	4972346	27,98	23099210	29,12	6081402	81,74	31207397	82,06
General network	1865700	7,40	8553875	7,29	1783511	10,04	8123711	10,24	82189	1,10	430164	1,13
Well or spring	5604756	22,23	27967742	23,83	1864622	10,49	8979446	11,32	3740134	50,27	18988296	49,93
Other form	3583292	14,21	17784990	15,16	1324213	7,45	5996053	7,56	2259079	30,37	11788937	31,00

Source: IBGE, Staff of Research, Department of Population and Social Indicators, Demographic Census of 1980.

PERMANENT PRIVATE DOMICILES AND DWELLERS, BY LOCATION OF DOMICILE  
ACCORDING TO THE FORM OF WATER SUPPLY - 1991

Water supply	TOTAL		URBAN		RURAL							
	Domiciles	People	Domiciles	People	Domiciles	People						
TOTAL	34734715	100,00	145657806	100,00	27157268	100,00	110148364	100,00	7577447	100,00	35511442	100,00
With internal												
pipe network	25782039	74,23	103760090	71,24	23318883	85,87	93158605	84,58	2463156	32,51	10601485	29,85
General network	22575504	64,99	90267345	61,97	22060444	81,23	87936638	79,83	515060	6,80	2330707	6,56
Well or spring	2887929	8,31	12142441	8,34	1073448	3,95	4462689	4,05	1814481	23,95	7679752	21,63
Other Form	318606	0,92	1350304	0,93	184991	0,68	759278	0,69	133615	1,76	591026	1,66
Without internal												
pipe network	8952676	25,77	41897716	28,76	3838385	14,13	16987759	15,42	5114291	67,49	24909957	70,15
General network	1986509	5,72	8842975	6,07	1786470	6,58	7867072	7,14	200039	2,64	975903	2,75
Well or spring	3661434	10,54	17338873	11,90	971120	3,58	4471195	4,06	2690314	35,50	12867678	36,24
Other form	3304733	9,51	15715868	10,79	1080795	3,98	4649492	4,22	2223938	29,35	11066376	31,16

Source: IBGE, Staff of Research, Department of Population and Social Indicators, Demographic Census of 1991.

**TABLE II. 4**  
**PERMANENT PRIVATE DOMICILES AND RESIDENTS, BY SITUATION OF DOMICILE,**  
**ACCORDING TO SEWAGE NETWORK - 1980**

Sewerage network	TOTAL			Urban		RURAL	
	Domiciles	People		Domiciles	People	Domiciles	People
<b>TOTAL</b>	25210639	100,00	117348286	100,00	79317752	100,00	38030534
Only from domicile	17191169	68,19	79904580	80,18	64724479	81,60	15180101
General network	6499635	25,78	27299108	36,01	26797402	33,78	501706
Cesspit	3484068	13,82	16458203	17,18	14298903	18,03	2159300
Rudimentary Cesspit	7207466	28,59	36147269	26,98	23628174	29,79	12519095
Common to more than one	2058233	8,16	7971539	10,55	7143191	9,01	828348
General network	490281	1,94	1704958	2,73	1680644	2,12	24314
Cesspit	412271	1,64	1571704	2,22	1492910	1,88	78794
Rudimentary Cesspit	1155681	4,58	4694877	5,60	3969637	5,00	725240
Without	5509899	21,86	27346221	7,23	5778658	7,29	21567563
							56,71

Source: IBGE, Department of Population and Social Indicators, Demographic Census - 1980.

**PERMANENT PRIVATE DOMICILES AND RESIDENTS, BY SITUATION OF DOMICILE,**  
**ACCORDING TO SEWAGE NETWORK - 1991**

Sewerage network	TOTAL			Urban		RURAL	
	Domiciles	People		Domiciles	People	Domiciles	People
<b>TOTAL</b>	34734715	100,00	145657806	100,00	110148364	100,00	35511442
Only from domicile	27907074	80,34	115470837	88,54	97893959	88,87	17576878
General network	11662737	33,58	44678901	42,42	44036802	39,98	642099
Cesspit	5576624	16,05	23070853	18,49	20668197	18,76	2402656
Rudimentary Cesspit	10667713	30,71	47721083	27,64	33188960	30,13	14532123
Common to more than one	1729247	4,98	6486997	5,89	5943194	5,40	543803
General network	594226	1,71	2095408	2,18	2082536	1,89	12872
Cesspit	365175	1,05	1360853	1,27	1280267	1,16	80586
Rudimentary Cesspit	769846	2,22	3030736	2,44	2580391	2,34	450345
Without	5098394	14,68	23699972	5,57	6309211	5,73	17390761
							48,97

Source: IBGE, Department of Population and Social Indicators, Demographic Census - 1991.



TABLE II. 6b

**PROPORTION OF PERMANENT PRIVATE DOMICILE, ACCORDING TO SOME  
CHARACTERISTICS - LOCATION, CONDITION OF OCCUPATION AND TOTAL BASIC  
INFRASTRUCTURE - BRAZIL AND LARGE REGIONS - 1991**

CHARACTERISTICS	BRAZIL	LARGE REGIONS				
		NORTH	NORTHEAST	SOUTHEAST	SOUTH	C.WEST
<b>Total</b>	100,00	100,00	100,00	100,00	100,00	100,00
<b>Sort</b>						
House and Apartment	94,91	90,54	94,69	94,32	97,44	97,30
Agglomerated *	4,54	8,49	4,94	5,05	2,37	1,34
Small apartment	7,00	0,97	0,37	0,63	0,19	1,36
<b>Cond. of occupation</b>						
Proper	69,85	78,37	75,60	65,80	71,47	63,80
Construction and land	61,76	68,35	63,90	59,18	63,66	60,85
Only construction	8,09	10,01	11,70	6,62	7,80	2,95
Rented	16,38	9,77	11,21	20,82	14,18	17,17
Granted	13,09	11,23	12,53	12,77	13,42	18,37
Other	0,68	0,63	0,67	0,61	0,94	0,67
<b>Water supply</b>						
General network	70,71	44,71	52,74	84,80	70,81	66,05
Well or spring	18,86	40,78	17,45	12,49	26,54	30,76
other	10,43	14,51	29,82	2,72	2,64	3,18
<b>Sanitary Instalation</b>						
General network	35,29	1,33	8,88	63,46	13,65	27,24
Cesspit	17,11	24,45	15,08	10,57	39,73	7,56
Other forms	32,93	52,98	38,34	21,52	40,55	54,71
Without	14,68	21,24	37,69	4,45	6,08	10,48
<b>Destination of urban waste</b>						
Collected	80,05	54,43	63,48	86,75	87,03	75,80
Others	19,95	44,74	36,14	12,98	12,67	23,67

Source: IBGE, Staff of Research, Department of Population and Social Indicators, Demographic Census of - 1991

\* Houses and apartments located in slums with more than 50 domicile unit

**TABLE II . 7a**  
**CONSOLIDATION OF THE ESTIMATIONS OF INADEQUATENESS FOR THE TOTAL OF DURABLE URBAN DOMICILES**  
**BRAZIL IN LARGE REGIONS**  
**1990**

LARGE REGIONS	INFRASTRUCTURE		EXCESSIVE DENSIFICATION		URBAN RENTS WITH ONJUS > THAN 30%		DURABLE URBAN DOMICILES		
	Poor	(%) Inadequate (%)	Total	(%)	Total	(%)			
BRAZIL	4652611	17,54	4214596	15,89	2134357	8,05	946621	3,57	26528083
NORTH (1)	262983	23,98	337822	30,8	136551	12,45	20322	1,85	1096710
NORTHEAST	1921363	36,39	1040175	19,7	407547	7,72	129425	2,45	5279822
SOUTHEAST	842392	13,22	1155686	8,29	1236079	8,87	606308	4,35	13941294
SOUTH	374033	8,73	871589	20,35	219181	5,12	111799	2,61	4283429
C. WEST(2)	251840	13,07	809324	42,00	135000	7,01	78767	4,09	1926828

Source: Fundação João Pinheiro, 1995. (Data: IBGE, Pesquisa Nacional por Amostra de Domicílio, 1990)

Note: Also without income tax declaration

(1) Excluding Tocantins (2) Including Tocantins

TABLE II . 7b

**CONSOLIDATION OF THE ESTIMATIONS OF IN ADEQUATENESS FOR THE TOTAL OF DURABLE URBAN  
DOMICILES FOR DOMICILES WITH FAMILY INCOME OF 5 MINIMUM WAGES  
BRAZIL AND LARGE REGIONS - 1990**

LARGE REGIONS	INFRASTRUCTURE		EXCESSIVE DENSIFICATION		URBAN RENTS WITH ONUS > THAN 30%		DURABLE URBAN DOMICILES		
	Poor	(%) Inadequate (%)	Total	(%)	Total	(%)			
BRAZIL	3527677	13,29	2264604	8,54	1340455	5,05	627281	2,36	26528083
NORTH (1)	161660	14,74	164321	14,98	34846	3,18	9328	0,85	1096710
NORTHEAST	1629073	30,85	613597	11,62	314744	5,97	108654	2,05	5279822
SOUTHEAST	1287367	9,23	631297	4,52	691870	4,96	394687	2,83	13941294
SOUTH	272872	6,37	467104	10,90	163160	3,8	64874	1051	4283429
C.WEST(2)	176705	9,17	388286	20,15	91944	4,77	49738	2,58	1926828

Source: Fundação João Pinheiro, 1995. (Data: IBGE, Pesquisa Nacional por Amostra de Domicílio, 1990)

Note: Also without income tax declaration

(1) Excluding Tocantins (2) Including Tocantins

TABLE III . 1

**MUNICIPALITIES WITH COLLECTION OF SANITARY SEWERAGE, WITH TREATMENT  
OF THE COLLECTED SEWERAGE AND MUNICIPALITIES USING DRAINAGE  
CHANNELS - BRAZIL AND LARGE REGIONS - 1989**

LARGE REGIONS	TOTAL	MUNICIPALITIES WITH SERVICES OF COLLECT, TREATMENT AND DRAINAGE					
		With collect of sanitary sewerage	(%)	With treatment of collected sewerage	(%)	With drainage to expel	(%)
BRAZIL	4425	2091	47,25	345	7,79	540	12,2
NORTH	298	25	8,38	7	2,34	25	8,39
NORTHEAST	1461	381	26,08	53	3,62	43	2,94
SOUTHEAST	1430	1301	90,98	214	14,96	379	26,50
SOUTH	857	335	39,09	57	6,65	95	11,08
C. WEST	379	46	12,92	14	3,69	13	3,43

Source: IBGE, Staff of Research, Department of Population and Social Indicators. National Research of Basic Sanitation, 1989.

TABLE III.2

**PERMANENT PRIVATE DOMICILES AND RESIDENTS, BY LOCATION OF DOMICILE, ACCORDING TO  
THE SERVICES OF COLLECTION AND DESTINATION OF WASTE - 1991**

Destination of waste	TOTAL			URBAN		RURAL	
	Domiciles	People		Domiciles	People	Domiciles	People
<b>TOTAL</b>	34734715	100,00	145657806	100,00	110146364	100,00	35511442
<b>Collected</b>	22162081	63,80	87774239	27157268	80,05	7577447	1879555
<b>Burned</b>	4130560	11,89	18477655	2085459	7,68	422884	5,29
<b>Buried</b>	570088	1,64	2396137	224296	0,83	2045101	25,92
<b>land, river, etc</b>	5873541	16,91	27562042	2912115	10,72	345792	4,10
<b>Other</b>	1998448	5,75	9447733	196201	0,72	2961426	40,47
			6,49		848671	1802244	24,21

Source: IBGE, Staff of Research, Department of Population and Social Indicators, Demographic Census of 1991