The decrease in migration to cities. According to the latest census data, of a total of 174,449,875 inhabitants, approximately 82 per cent live in cities.

The territorial area of Brazil is 8,514,215.3 square kilometres, divided into five large regions – North, Northeast, Central-East, South and Southeast, with a total of 27 states and 5,551 municipalities (IBGE, Census 2000).

Although the small municipalities with urban populations under 20,000 inhabitants represent 75 per cent of the total, they concentrate only 19.5 per cent of the country’s population. This means that around 80 per cent of the population lives in 25 per cent of the municipalities, revealing the existence of a strong spatial concentration in the country.

The last census (IBGE, 2000) shows another important aspect, namely that the core cities of the metropolitan regions had not only suffered a population growth rate decrease, but also no longer continue to attract migrants. This attraction is now to cities in the metropolitan periphery and medium sized cities.

1.2 Social Inequality

Social inequality is significant in Brazil, and it is particularly concentrated in the metropolitan regions, which...
also concentrate the highest rates of informal activity coupled with a lack of infrastructure and services.

This is particularly due to the fast urbanisation process that was never followed by public policies on housing, sanitation, education and health. But it also results from the high levels of social inequality that characterise the development of the country.

Access to housing has improved slightly recently, yet the amount of inadequate housing in slums, risk areas or environmentally fragile sites is still particularly high in the metropolitan regions. The housing deficit remains high in the country, especially in the lower income groups. In 1998 there were 1.3 million permanent dwellings in slums with 79.8 per cent located in the metropolitan region (Governo Federal, SEDU, 2000).

1.3 Industrialisation and Urbanisation

The strong relation between urbanisation and industrialisation characterises the territorial, demographic and economic dynamics of the country. Financial investment, particularly from the 1950s onwards, has been mainly aimed at the country’s modernisation, with urbanisation playing a strategic role.

From an agricultural economy the country has changed to an industrialised and urbanised society in thirty years. During the 1970s, the most important period of this process, the country grew at an average annual rate of 8.6 per cent. In the same period the annual industrial average production was 9 per cent and the urban population increased from 44 to over 55 per cent.

The new world economic dynamism, emerging from the mid-1990s, had an impact on the country’s industrial structure. This has been reflected in its spatial organisation and the market relations with innovations that came with globalisation. These changes to the productive structure were followed by the country’s free trade policy, and ended with the consolidation of monetary stabilisation and the adoption of a new free exchange currency policy.

Economic growth patterns during the 1990s were characterised by two sub-periods. Between 1990 and 1993 the economy was in recession with average annual growth reaching only 1.2 per cent. Between 1993 and 1997 average growth was higher reaching 1.7 per cent a year while for industry it was 3.8 per cent (IPEA, 2001).

The country’s industrial profile has also changed as part of this globalisation process. The third sector has reached surprising levels. Internally since 1994 there has been a reduction in the financial sector and an increase in other services, especially those linked to infrastructure and communication. Communication, which in the 1980s grew by two and a half times, grew by 120 per cent in the first six years of the 1990s. Other sectors, like tourism and leisure, have also grown notably, especially due to an increase of exchange and flows at national level.

Changes to the international productive structure have also caused a significant impact on the pattern of spatial location of industries and their complementary activities. At a national level there is a locational trend strongly dictated by the international economy with a concentration of services in the metropolitan regions, and some spread to medium sized cities or regions. Metropolitan regions have acquired a new role attracting transnational productive units or service companies. At a local level new uses have been emerging in cities to enable them to compete globally, requiring major investments in communication infrastructure (IBGE, Atlas Nacional, 2000).

2. The History of Rio de Janeiro

Founded by the Portuguese in 1566 at the entrance of Guanabara Bay, between the Sugarloaf and Cara de Cão Mountains, the city of São Sebastião do Rio de Janeiro was moved two years later to the square bordered by Castelo, Santo António, São Bento and Conceição hills. This was a better location for the defence of the city from the attacks of Indians and pirates from the sea and the flat lands.

At the end of the 18th century the hilly areas were already densely populated, and the swampy areas around the hills were drained and filled and began to be occupied. During the next two centuries sugarcane production was the most important economic activity on the periphery of the city, on land ceded by the Portuguese Crown. The spatial structure of the city and the areas of expansion in the following centuries was largely determined by the sugarcane industry.

During the 18th century port activity increased significantly due to the export of gold and gems from the neighbouring inland state of Minas Gerais. At the end of the 18th century all the lower lands around the hills were completely occupied by the city.

In 1763, with the transfer of the capital from Salvador to Rio de Janeiro, the city raised its political status, receiving infrastructure, drainage, water supply and aesthetic works to accommodate increasing urban growth.

The royal family moved to the city in 1808 and the town became the capital of the United Kingdom of Portugal, Brazil and Algarve. Along with the court over 15 thousand people moved to Rio, an increase of 25 per cent for the total population of the city of 50 thousand inhabitants, 50 per cent of whom were slaves. This sudden growth forced a rapid construction of houses to accommodate the Portuguese nobility, and the higher income population living in the city had to give up their houses to the newcomers. Between 1808 and 1816 around 600 terraced houses were built in the periphery of the city centre, an area previously dominated by rural properties and manor houses. The segregated pattern that nowadays remains in the city started to take shape at that time, with the rich living separately from the poor, yet all in the same central area of the city. In the periph-
ery were farms and manor houses and closer in were second homes without an economic role.

Given its new status of Capital of the Portuguese Kingdom the city received many economic and urban improvements. The opening of the port changed the city into an important node on international maritime routes. Libraries, theatres and schools sprang up, as well as private homes and business establishments.

Independence in 1822 and the wealth created by coffee brought new improvements to the empire’s capital, and with the construction of the railway connecting the inland agricultural production areas in the Southeast Region with the newly built port, population growth became rampant. The city expanded and improved with a number of public works and services – paving, lighting, sanitation, garbage collection and water supply.

A public transport system established in the mid-19th century allowed the city to expand to new areas like Tijuca and São Cristovão in the north and Botafogo and Laranjeiras in the south. The trams and the trains made it possible for people to move from the city centre, initiating a segregated pattern that was intensified in the following century and still remains today. The trams allowed the rich to move to the south close to the coast, whereas the train penetrating inland to the suburbs pushed the working and lower income groups from the city centre to the north.

The abolition of the slavery in 1888 emptied the coffee plantations, bringing migrants to the city. Social differences became more acute and the first favelas (slums) appeared. The term “favelas” has its origin in the first low-income settlement that was located in the city centre of Rio (Morro da Povidência) at the turn of the century, and named “Morro da Favela” housing ex-soldiers that had fought in a rebellion (Revolta dos Canudos) and ex-slaves unable to integrate into the new economy.

Rio became the capital of the country with the Proclamation of the Republic in 1889, and the political elite and bourgeoisie were ousted. In the city centre villas and mansions became schools or housing for poor people. It was a place of narrow streets and alleyways, low houses, deep plots, insanitary tenements with unhealthy conditions and prone to epidemics. The conditions called for a radical renewal of the city. Adopting a “Haussmanian” approach, Pereira Passos, mayor of the city (1902-1906) decided to demolish large areas to give space to wide green avenues - a design inspired by the Parisian boulevards - and modern new buildings. New areas were developed, the city was modernised and embellished to support the new industrial economy. Rio expanded in all directions and its face changed radically, especially the city centre that suffered a strong negative social impact with these interventions. Some of the existing hills in the city centre, where the town was founded, were cleared, and other hills were occupied by slums housing people left homeless by the demolitions (Providência, Santo António, São Carlos and Pinto), while some of the poor were pushed to the suburbs and the periphery, increasing the demand for social housing. The port was modernised and enlarged. Industries were transferred from the south and central zones to the suburbs and metropolitan municipalities.

The city in the late 1920s housed around 2 million people. The first urban plan, Plan Agache, was developed at this time. This plan proposed the organisation of the city following a segregated functionalist principle, reserving the boroughs of Ipanema, Leblon and Gavea (in the south) for the upper classes, while the suburbs were left for the working classes. This is the first official document to deal with the problems of favelas, suggesting their eradication.

The initial impulse given by industrialisation attracted new migrant populations to the city. The number of inhabitants duplicated in ten years reaching 2,380,000 in 1930. From the 1930s onwards the industries move away to the suburbs. Rio experienced significant industrial growth after the Second World War and up to the 1960s. Daily movements from home to work between the centre and the periphery steadily increased and transport problems became frequent. The electrification of the railway system from 1937 onwards, and the opening of Avenida Brazil (1964), connecting the centre directly with the suburbs, contributed to suburban sprawl. In the 1950s the suburbs were so crowded that the only areas still to be occupied were those which were environmentally fragile – swamps, steep hills, mangroves and riverbanks.

Growth of the favelas continued and in 1948 the census registered 139 thousand people living in 105 favelas spread across the city. Urban problems in the metropolitan area also became more acute – cars packed the streets, land prices increased haphazardly and the city grew vertically. Migration reached its highest rate in the 20th century with 38 per cent of inhabitants originating from outside the city.

Lack of housing and mass transport to attend to this growth forced the spread of favelas, and environmentally fragile areas in the city were occupied. Despite some effort by the state to build some social housing in the north and the suburbs, the number of units was very small compared to demand.

During the 1960s the city faced increasing difficulties with traffic and pollution. Population increased from 3,281,00 in 1960 to 4,261,918 in 1970, a growth of 30 per cent. In the same period the population living in favelas was over 500,000, or 13 per cent of the total population of the city, spread over 162 officially-recognised settlements. Industrial growth in the city decreased in this decade, and the maritime port lost importance. The capital was transferred to Brasilia and the city also lost political importance.

The development of a new urban plan by the Greek architect Constantin Dioxiadis redirected the focus to
the metropolitan region, proposing the displacement of work activities in the region and the construction of major access roads connecting it with the city. The implementation of these proposals would push away the poor once again, since they required the demolition of large built areas. Fortunately the proposals were not carried out immediately, avoiding a worsening of the housing conditions.

The development of the Pub-Rio (another plan for the city) in the 1970s, reinforced the need to relocate industries in the metropolitan region, proposing the development of an industrial district close to the neighbouring municipalities of Duque de Caxias and Nova Iguaçu. It was during this decade that the eastern areas of the city at Barra da Tijuca and Jacarepagua were occupied by middle and high income groups, whereas large ex-rural areas of Bangú, Santa Cruz and Campo Grande were subdivided into plots, mostly illegally, lacking infrastructure and services, to house the poor population unable to acquire housing in the formal market.

During the 1990s, urban growth in the city was controlled by the Municipal Decenal Master Plan (Plano Diretor Decenal do Município do Rio de Janeiro). This plan – far and away the most participatory plan to be developed - established the main rules, instruments and concepts to guide the city’s urban development, facing the problem of the slums that in the previous decades had increased significantly, as well as the socio-spatial segregation pattern.

Despite the development of a new municipal housing policy following the Plan in the 1990s, the magnitude and complexity of the problems to be faced increased. Economically the city of Rio, jointly with São Paulo, formed a development axis that positioned them in the rank of the global cities. The service sector has grown enormously, followed by the tourism and information technology industry.

3. The Physical City

The city occupies 1,255 km² (Anuario Estatistico, 1998) with a density of 4640.17 inhabitants/km² (IBGE, Censo 2000), nestled in rugged topography in Southeast Brazil. To the south is the Atlantic Ocean, to the east the Guanabara Bay. The result of this encounter is 86km of coastline that includes another bay, Sepetiba, to the west of the city. There are 72 beaches interrupted by mountains (PCRJ, 1998).

The city has a hot and humid climate, sunny all year round, with maximum and minimum temperatures of around 40ºC and 22ºC in summer and 24ºC and 12ºC in winter. Mountain formations of a great variety form beautiful scenery, and the powerful presence of rock is felt all around. Rio is at sea level (the average altitude is two metres) and is dominated by three larger ranges – Tijuca, Pedra Branca and Gericinó (PCRJ, 1998).

Rio has hundreds of rivers, canals, lagoons and marshes. It manages, within its urban area alone, water resources that include 217 rivers and canals totalling 639 kilometres and four lagoons, Jacarepagua, Camorim, Marapendi and Rodrigo de Freitas, that total 15.2 km². Rio has at its heart the Floresta da Tijuca, the largest urban forest in the world (PCRJ, 1998).

4. Demographics

The preliminary results of the Census 2000 record a total population in the city of 5,857,904 inhabitants, with 2,748,143 men and 3,109,761 women, and a population density of 4,640.17 inhabitants/km² (IBGE, Censo, 2000).

Although this data is still under critical evaluation, its confirmation will demonstrate, as with the Census of 1991, that the population growth rate in the last decade was on the decrease, compared with the previous decade.

**Figure 2** shows the variation in growth rate over the last sixty years. It shows that in the first three decades it reached a rate of 3 per cent, a consequence of migration movements and high fertility rates.

From the mid 1960s there was a gradual decrease in the growth rate. The transfer of the capital from Rio to Brasilia might explain this. Despite that, the city continued to attract migrants from other parts of the country and remained an important cultural and service centre.

In the mid-1990s the city began to regain economic importance. This had a big impact on its demographic patterns, and it experienced a high rate of average annual economic growth, reaching 0.26 per cent in the first half of the decade. This demonstrates that the city managed to maintain some stabilisation within its population dynamics (PCRJ/IPP, 2002).

According to the Census Bureau (Anuario Estatistico, PCRJ, 1998) the age population structure of Rio confirms the historical trend of being the state with highest number of elderly. This is strongly influenced by the population pyramid composition in the city where the younger sections are losing importance, corresponding to only 23.2 per cent of the population (0-14 years). This results from a decrease in the birth and death rates, that started in Rio before other parts of Brazil.

<table>
<thead>
<tr>
<th>Table 1. Rio de Janeiro Land Use (%) by Area In 1996</th>
</tr>
</thead>
<tbody>
<tr>
<td>URBANISED AREA</td>
</tr>
<tr>
<td>RESIDENTIAL</td>
</tr>
<tr>
<td>PREDOMINANTLY</td>
</tr>
<tr>
<td>INSTITUTIONAL</td>
</tr>
<tr>
<td>LEISURE</td>
</tr>
<tr>
<td>NATURAL AREAS</td>
</tr>
<tr>
<td>URBANISED</td>
</tr>
<tr>
<td>INSTITUTIONAL</td>
</tr>
<tr>
<td>GREEN AREAS</td>
</tr>
<tr>
<td>UNOCCUPIED</td>
</tr>
</tbody>
</table>

Source: Anuário Estatístico, PCRJ, 1998
The industrial sector of Rio is particularly diversified, presenting the following composition for the year 1999:

- The crisis of the traditional naval industry, which was strongly concentrated around the Guanabara Bay area and employed 90 per cent of the workers in the sector, is also related to the decline of the secondary sector in the city.

- During the 1990s Rio showed signs of a recovery in its economy. The process of globalisation which was under way will contribute to the installation of new economic activities in the city, especially in the chemical, service, transport and modern communication technology sectors. Its traditional industries of textiles, tourism, beverages, and clothes have also been strengthening (PCRJ, IPP, 2002).

- The existence of important educational and technological centres in the city – there are seven primary university centres concentrating the most significant scientific production of the country, and traditional institutions services for 7.5 per cent. The industrial sector of Rio is particularly diversified, presenting the following composition for the year 1999:

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5. The Urban Economy

The State of Rio de Janeiro is the second most important contributor to the country’s Gross Domestic Product (GDP) producing almost 11 per cent of the country total. The GDP of the city represents 67 per cent of the State’s GDP amounting around R$67.2 billion in 1998 (Standard & Poor’s, 2002).

The economic performance of the city by sectors in 1999 reveals that industry is responsible for 31.5 per cent of the total local production, transport and communications for 26.5 per cent, commerce for 19.9 per cent, the building industry for 14.5 per cent and public utility services for 7.5 per cent. The industrial sector of Rio is particularly diversified, presenting the following composition for the year 1999:

- The crisis of the traditional naval industry, that was strongly concentrated around the Guanabara Bay area and employed 90 per cent of the workers in the sector, is also related to the decline of the secondary sector in the city.

- During the 1990s Rio showed signs of a recovery in its economy. The process of globalisation which was under way will contribute to the installation of new economic activities in the city, especially in the chemical, service, transport and modern communication technology sectors. Its traditional industries of textiles, tourism, beverages, and clothes have also been strengthening (PCRJ, IPP, 2002).

The existence of important educational and technological centres in the city – there are seven primary university centres concentrating the most significant scientific production of the country, and traditional institutions
that deal with management and applied economy to the new demands of the international market – stress the integration of Rio into the global cities network.

In the city area are also located the headquarters of some of the most important companies in the country, especially metallurgical and foundry ones (Companhia Vale do Rio Doce and Companhia Siderúrgica Nacional), large state companies (such as PETRO-

<table>
<thead>
<tr>
<th>Table 2. Resident Population by Gender (1998)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
</tr>
<tr>
<td>1991 2,583,191</td>
</tr>
<tr>
<td>1996 2,608,818</td>
</tr>
<tr>
<td>Women</td>
</tr>
<tr>
<td>1991 2,877,573</td>
</tr>
<tr>
<td>1996 2,942,720</td>
</tr>
<tr>
<td>Source: Anuário Estatístico, PCRJ, 1998</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 3: Resident Population by Age (1998)</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>6-14</td>
</tr>
<tr>
<td>23.2</td>
</tr>
<tr>
<td>1,286,801</td>
</tr>
<tr>
<td>15-59</td>
</tr>
<tr>
<td>64.4</td>
</tr>
<tr>
<td>3,575,887</td>
</tr>
<tr>
<td>60 or more</td>
</tr>
<tr>
<td>12.4</td>
</tr>
<tr>
<td>688,850</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>100</td>
</tr>
<tr>
<td>Source: Anuário Estatístico, PCRJ, 1998</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 4. Socio-Economic Data for the City, Rio de Janeiro 2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>CITY ZONES</td>
</tr>
<tr>
<td>---------------------------------</td>
</tr>
<tr>
<td>South Zone</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>North Zone</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Suburb</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Suburb Distance</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Suburb Long Distance</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>East Zone</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Source: O Globo, 2001

In relation to the rest of the country the city has an average family income of around R$520/month (IPEA, PCRJ, PNUD, 2000). So, although living conditions in Rio are in general better than in most of the metropolitan regions of Brazil, they are extremely badly distributed, given the large differences between its regions and boroughs.

The city presents a very badly distributed pattern: the richest 1 per cent of the population earns 12 per cent of income and the poorest 50 per cent earns 13 per cent of the income (IPEA, PCRJ, PNUD, 2000). The “Gini” index, which varies between 0 and 1 and indicates the concentration of income to the highest sectors, was 0.491 in the period 1997-1998. This reveals a serious picture of income distribution.
concentration and of socio-spatial disparity (IPP, 2000).

Spatially, the southern zone of the city is clearly the richest, with an income per capita 2.5 times higher than the average income of the city as a whole, and 5 times higher than the income of the western zone (IPEA, PCRJ, PNUD, 2000).

The social inequality in the city is not confined to the administrative limits of the boroughs and administrative regions. In this sense, the idea of “periphery” denotes not necessarily only spatial distance but rather social exclusion and fragile life conditions, as it is the case of the favelas. They can be located in high-income areas, in middle and in low-income districts, but they clearly contrast with the “formal city”. These disparities are reflected in the hard reality of the everyday life of the favela dwellers, who represent 17 per cent of the total population of Rio (PCRJ/IPP, 2002). Their integration to the employment market is very unstable and fragile, and they have average incomes equivalent to 1/4 of those of people living in other areas of the city.

6. Governance

The municipalities are federated units that hold the same political-administrative status as other levels of government – the States, the Federal District and the Union. They have autonomy to manage local interest issues, particularly those of an urban nature, and are regulated by a law denominated “Lei Organica do Municipio”.

The city of Rio the housing problem has been gaining increasing importance in the political agenda of the Executive and Legislative Powers. With such a high housing deficit in the metropolitan region of Rio de Janeiro – over 505,000 units (FPJ, 2000), the municipal government was forced to implement a broad policy to attend the different types of slums. Urban interventions and the modernisation of policies on land use were conceived in order to increase accessibility to the “formal city” to a broader number of inhabitants. Social policies such as the promotion of income generation activities,

<table>
<thead>
<tr>
<th>Type of Industry</th>
<th>GDP (U.S. Million)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric electronic Material</td>
<td>80.8</td>
<td>2.3</td>
</tr>
<tr>
<td>Non-metalic Minerals</td>
<td>109.9</td>
<td>3.2</td>
</tr>
<tr>
<td>Dressing and Shoes</td>
<td>137.5</td>
<td>4.0</td>
</tr>
<tr>
<td>Equipment and Machinery</td>
<td>199.9</td>
<td>5.8</td>
</tr>
<tr>
<td>Paper and Publisher</td>
<td>346.6</td>
<td>10.1</td>
</tr>
<tr>
<td>Food Products</td>
<td>361.1</td>
<td>10.5</td>
</tr>
<tr>
<td>Other Types</td>
<td>395.1</td>
<td>11.5</td>
</tr>
<tr>
<td>Chemistry</td>
<td>409.2</td>
<td>11.9</td>
</tr>
<tr>
<td>Chemical</td>
<td>417.3</td>
<td>12.1</td>
</tr>
<tr>
<td>Metallurgy</td>
<td>441.1</td>
<td>12.8</td>
</tr>
<tr>
<td>Beverages</td>
<td>547.5</td>
<td>15.9</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>3446.0</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: CIDE, 2001 (1999 data)

<table>
<thead>
<tr>
<th>Age</th>
<th>10-14</th>
<th>15-17</th>
<th>18-24</th>
<th>25-29</th>
<th>30-39</th>
<th>40-49</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.67</td>
<td>1.56</td>
<td>3.04</td>
<td>4.73</td>
<td>6.64</td>
<td>8.98</td>
</tr>
</tbody>
</table>

Source: Anuário Estatístico, PCRJ, 1998

<table>
<thead>
<tr>
<th>Gender</th>
<th>Woman</th>
<th>Man</th>
</tr>
</thead>
<tbody>
<tr>
<td>Woman</td>
<td>6.85</td>
<td></td>
</tr>
<tr>
<td>Man</td>
<td>5.54</td>
<td></td>
</tr>
</tbody>
</table>

Source: Anuário Estatístico, PCRJ, 1998

<table>
<thead>
<tr>
<th>INDUSTRY</th>
<th>1997</th>
<th>1998</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>268,567</td>
<td>234,178</td>
</tr>
<tr>
<td>CIVIL CONST.</td>
<td>104,014</td>
<td>101,667</td>
</tr>
<tr>
<td>COMMERCE</td>
<td>5,314,311</td>
<td>318,067</td>
</tr>
<tr>
<td>SERVICES</td>
<td>1,409,338</td>
<td>1,379,850</td>
</tr>
<tr>
<td>OTHERS</td>
<td>223,668</td>
<td>210,610</td>
</tr>
</tbody>
</table>

Source: Anuário Estatístico, PCRJ, 1998

<table>
<thead>
<tr>
<th>Woman</th>
<th>Man</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.07</td>
<td>2.86</td>
</tr>
<tr>
<td>6.17</td>
<td>4.20</td>
</tr>
</tbody>
</table>

Source: Anuário Estatístico, PCRJ, 1998
construction of nurseries, health and education centres were included to fight exclusion.

The exceptional characteristics of beauty and vulnerability of the city’s location, demand the adoption of environmental policies, especially those that allow solutions to the aggressions resulting from the illegal occupation of fragile areas. Some actions are corrective, but a number are preventive, especially the housing policies.

In political and institutional terms the municipal government is formed by executive and the legislative powers. The executive power is held by the municipality. The highest position in the municipality is occupied by the mayor, who is elected directly by popular vote, and is the chief of the political, executive and administrative functions. The municipal secretaries are nominated by the mayor, and are responsible for formulating and implementing the several public policies that constitute the local authority administration. The municipal chamber of Rio de Janeiro holds the legislative power. This is formed by 42 members (according to the Federal Constitution of 88) elected also directly by popular vote for a mandate of four years coinciding with the mayor’s mandate. The municipalities of over 5 million inhabitants have a minimum of 42 and a maximum of 55 members.

The Municipal Planning Institute (IPP, PCRJ) recorded in 1996 a total number of 605 “favelas”. It is also estimated that from 1996 to 2002 around 100 new “favelas” have appeared in the city, while others have grown in size (O Globo, 19/05/2002).

The population of the “favelas” during the period from 1991 to 2000 has grown by 0.38 per cent a year while in the country it has increased by 2.4 per cent (IBGE). In 1991 the total number of inhabitants of “favelas” in the city was around 882 thousand and in 2000 the Census recorded 1,092 thousand (IBGE).

The “favelas” occupy an area of around 37 km2 in the city corresponding to 6.3 per cent of its total territory (IPP,PCRJ, 2001).

1.2. Illegal Subdivisions (loteamentos irregulares)

These are illegal subdivisions of land that lack infrastructure and do not comply with planning rules, but normally have some kind of urban physical order. They are considered irregular when have been submitted to the planning authorities but have not complied with the legal urban requirements, and clandestine when have not been submitted to the planning authority at all.

1.3. Invasions (invasões)

Irregular occupation of public or private land, still in the process of consolidation. This frequently takes place in environmentally fragile areas – riverbanks, swamps and hills or in residual areas of public infrastructure – under viaducts, in parks, beside roads and motorways.

1.4. Cortiços

Social housing formed by one or more buildings located in a single plot or shared rooms in a single building. The rooms are rented or sub-leased without any contract or legal basis. The dwellers share the use of bathrooms, kitchen and laundry, and sometimes, electrical appliances. Houses lack proper ventilation and lighting, are frequently overcrowded and one room may house many people and accommodate different uses. Services are deficient and do not have adequate maintenance required for good working and security (SEDU, 2000).

2. Location of Slums

2.1. Location of Squatter Settlements (Favelas):

Favelas are spread throughout the city, frequently occupying hilly sites. Recently some have been located on flat land, like the “Rio das Pedras” settlement that occupies a swamp flooded area in the well-to-do expansion zone of “Barra da Tijuca”. It was founded only two years ago and already houses a population of 18 thousand inhabitants (PMRJ, 2002). Some favelas are also located along motorways and in swampy areas like the “favela da Maré”.

II. SLUMS AND POVERTY

B. TYPE OF SLUM

1. Types

In general four types of slums can be identified – favelas (squatter settlements), loteamentos irregulares ou clandestinos (illegal subdivisions), invasões (invasions) and cortiços. These are illegal subdivisions of land that lack infrastructure and do not comply with planning rules, but normally have some kind of urban physical order. They are considered irregular when have been submitted to the planning authorities but have not complied with the legal urban requirements, and clandestine when have not been submitted to the planning authority at all.

Quantitative data and statistical information are more frequently available and are best organised and systematised for the first two categories. Cortiços and invasões have been the subject of a number of policies and interventions but there is little compiled information available.

The four types of slum could be briefly described as follows:

1.1. Squatter Settlements (Favelas)

Favelas can be defined as highly consolidated invasions of public or private land with self-build developed by the poor on lands lacking infrastructure and without following any kind of plans. They exist in large numbers and are spread across the city.
2.2 Location of Illegal Subdivisions (Loteamentos Irregulares)

The large numbers of illegal and clandestine settlements registered in Table 14 shows that the area with the highest concentration is the eastern zone of Rio. The borough of Campo Grande within this zone has the largest number of this type of slum.

2.3. Location of Invasions

At present most of invasions occupy risky areas: viaducts, under electricity lines, on the edge of railways, etc or in public squares, streets and avenues.

2.4. Location of “Cortiços”

“Cortiços” are concentrated in the central area of the city and the port region.

This type of slum does not exist in the richer areas of the city, but recently a similar sort of housing has emerged on the periphery with the construction of rows of rooms located at the rear of a plot, and sharing toilet facilities.

Table 15 above shows the list of officially known “cortiços” that have been improved (or are programmed to be improved) by the municipality. All are located in the city centre.

3. Age

3.1. Age of Squatter Settlements (“favelas”):

The main causes for the development of favelas in the city at the turn of the 20th century can be summarised as follows:

- The abolition of slavery, resulting in a large number of unemployed and homeless people;
- The crisis of the rural areas;
- Increasing migration from country to the city due to a reduction in agricultural work and an increase in industrialisation;
- Migration from other regions of the country;
- The urban changes introduced by the mayor Pereira Passos that removed many low-income populations and demolished their houses;
At the end of the 19th century, with the abolition of the slavery and the proclamation of the Republic, free poor women and men were pushed onto the streets, leaving them homeless and unemployed. Many cortiços developed and favelas occupied the hills in the city centre. As early as in 1822 there was already public concern with cortiços, and the government exempted industries from taxes that built social housing. The amount of social housing built was however very small compared with the increasing demands and the cortiços and favelas continue to sprawl. According to historical information, between 1888 and 1890, the population living in cortiços doubled (Abreu, 1994).

The first cortiço to be demolished by the urban renewal project of Pereira Passos in 1893 was known as “Cabeça de Porco” and it was located near the main train station in the city centre. This demolition left 2,000 people homeless.

Table 12. Number of Favelas by Decades

<table>
<thead>
<tr>
<th>Decades</th>
<th>1880 - 1920</th>
<th>1921 - 1930</th>
<th>1931 - 1940</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>24</td>
<td>32</td>
<td>56</td>
</tr>
<tr>
<td>1914 - 1950</td>
<td>85</td>
<td>97</td>
<td>84</td>
</tr>
<tr>
<td>1971 - 1980</td>
<td>74</td>
<td>105</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 13. Distribution of Favelas by Total Area Rio de Janeiro, 1991

<table>
<thead>
<tr>
<th>AREA (m²)</th>
<th>NUMBER OF SUBDIVISIONS</th>
<th>NUMBER OF PLOTS</th>
<th>OCCUPIED PLOTS</th>
<th>NUMBER OF INHABITANTS</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 10,000</td>
<td>30</td>
<td>1,200</td>
<td>1,002</td>
<td>5,050</td>
<td>5.43</td>
</tr>
<tr>
<td>From 10,001 to 100,000</td>
<td>77</td>
<td>9,085</td>
<td>7,740</td>
<td>38,340</td>
<td>41.27</td>
</tr>
<tr>
<td>From 100,001 to 500,000</td>
<td>16</td>
<td>6,389</td>
<td>5,409</td>
<td>27,040</td>
<td>29.10</td>
</tr>
<tr>
<td>From 500,001 to 1,000,000</td>
<td>2</td>
<td>5,897</td>
<td>2,776</td>
<td>13,880</td>
<td>14.94</td>
</tr>
<tr>
<td>Over 1,000,000</td>
<td>1</td>
<td>11,754</td>
<td>1,720</td>
<td>8,600</td>
<td>9.26</td>
</tr>
<tr>
<td>Total</td>
<td>126</td>
<td>34,325</td>
<td>18,647</td>
<td>92,910</td>
<td>100.0</td>
</tr>
</tbody>
</table>
The public health director in 1913 gave the following description of the city: “in the Morro da Favela (Providência) there were 219 houses and in Santo Antônio 450 houses, totalling around 5,000 people living in the two areas. In the seven urban districts there were 2,564 shacks with 13,601 people”. The city centre was the first area of Rio to concentrate a labour force and, in consequence, housing. The slums have always developed near those concentrations given that the poor are attracted by the offer of employment, establishing their houses near their work in order to minimise expenses and time lost through travelling (PCRJ, IPP, 2000).
At the end of 1910 new areas were occupied outside the city centre: the suburbs with new working-class population attracted by the establishment of the industries in those areas, and the southern zone of Rio, with the establishment of high income houses. The only area controlled through building codes and planning permission was the southern part. The rest of the city grew outside the law with no planning or building control.

The first plan of the city was developed in the 1920s. It was the first official document to deal with the problems of favelas, suggesting their eradication. The favelas were seen as an “epidemic” that was growing in the best and most expensive areas of the city.

**The Expansion of the Favelas: 1930-1964**

Around 1930 the city was highly segregated, with different areas for the well-to-do, the middle classes and the poor. The first lived in the south, the second in the north and the low-income classes in the suburbs. By that time these suburbs were already dense, and the only alternative left to the poor was to live far away in the periphery or in favelas in risky sites like the riverbanks and on steep hills. The areas occupied by the squatters were frequently bad and not very attractive to the developers. Migratory movements grew and labour offered by favela dwellers was in high demand by industry, commerce and services. Furthermore, it was politically disadvantageous to remove slums, so the favelas remained, with no major interventions.

In the period from 1930 to 1950 the city, both legal and illegal, expanded significantly. The electrification of the railway system, from 1937 onwards, and the opening of Avenida Brasil (1964), connecting the centre directly with the suburbs, allowed the expansion of industries, and contributed to suburban sprawl. The opening of this avenue brought a number of favelas to the region.

From 1950 to 1964 the economic crisis grew worse. Urban land suffered from speculative development, and plots remained empty to increase their value. The city lacked a policy of urban development. In parallel, mass transport allowed low-income people to move to plots far away from their work. Distances in the city increased, while the offer for new developments in the city was drastically reduced and prices of land rose. Land in the periphery, lacking infrastructure was the only available choice for migrants. Housing crises were ever more critical. In this decade the growth of the favelas was huge. According to Parisse (in Abreu, 1997) they housed a total of 169,305 inhabitants in 1950. Ten years later they housed over 335,063 dwellers, corresponding to a growth of 98 per cent. By the mid 1960s a clientelist housing policy was launched by the state, but the old slum removal policy continued to prevail, especially in areas required for new industry in the north, or by developers in the south. In parallel a small number of re-urbanisation projects for favelas were carried out, in contrast with the mainline policy of slum removal (PCRJ, IPP, 2000).

3.2. Age of Illegal Subdivisions (loteamentos clandestinos e irregulares)

Illegal subdivisions started to appear in Rio in the 1930s, as a result of the subdivision of old orange farms. These farms were subdivided as a consequence of the World War II crisis, and the spread of orange plantation parasites (Fase, 1986).

This new urban use of farmland represented an alternative to the already non-productive agricultural sector. It also represented access to cheap urban land ownership, since plots were offered without infrastructure and services, for low prices.
The main factors that stimulated the growth of illegal subdivisions were: i) an increasing demand as a result of large migration flows attracted by industrialisation during the 1980s; ii) a strong squatter settlement removal policy, especially in the areas most attractive to speculative building, especially during mid 1960s; and iii) the restrictions imposed on the building sector by the subsequent legislation coupled with lack of finance of social housing (Fase, 1986).

The transition from rural to urban has given the periphery of Rio a diversity of land uses, with a predominance of low income populations. Nowadays there are a total of 348 illegal subdivisions in the city (in the process of regularisation). It is estimated that there are 40,000 plots housing 160,000 inhabitants (PCRJ, SMH, Sabren 2002).

3.3. Age of Invasions (Invasões)
This is an old phenomenon that led to the formation of “favelas”. At present it has assumed new characteristics, occupying very specific locations. The cases are very particular and localised, and are difficult to map and quantify, requiring special policies.

3.4. Age of “Cortiços”
This type of housing appeared at the beginning of the 20th century with the urban renewal of the city centre.

4. Population Size and Characteristics of Slums
Disaggregated information is not available, but the Rio de Janeiro census offer some general data for “favelas” shown in the table 19 below. Data for illegal subdivisions refer only to areas where the municipality is implementing urbanisation programmes, the other type of sub-standard housing (slums) do not have recorded or available data.

<table>
<thead>
<tr>
<th>PERIOD</th>
<th>NUMBER OF SQUATTER SETTLEMENTS</th>
<th>NUMBER OF DWELLINGS</th>
<th>NUMBER OF INHABITANTS</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 1900</td>
<td>6</td>
<td>3.999</td>
<td>15.202</td>
<td>1.64</td>
</tr>
<tr>
<td>From 1901 to 1910</td>
<td>5</td>
<td>2.728</td>
<td>11.521</td>
<td>1.24</td>
</tr>
<tr>
<td>From 1911 to 1920</td>
<td>12</td>
<td>14.104</td>
<td>55.347</td>
<td>5.98</td>
</tr>
<tr>
<td>From 1921 to 1930</td>
<td>32</td>
<td>20.768</td>
<td>84.218</td>
<td>9.09</td>
</tr>
<tr>
<td>From 1931 to 1940</td>
<td>54</td>
<td>34.853</td>
<td>133.686</td>
<td>14.43</td>
</tr>
<tr>
<td>From 1941 to 1950</td>
<td>83</td>
<td>46.774</td>
<td>190.684</td>
<td>20.59</td>
</tr>
<tr>
<td>From 1951 to 1960</td>
<td>96</td>
<td>50.865</td>
<td>201.181</td>
<td>21.72</td>
</tr>
<tr>
<td>From 1961 to 1970</td>
<td>83</td>
<td>27.798</td>
<td>109.963</td>
<td>11.87</td>
</tr>
<tr>
<td>From 1971 to 1980</td>
<td>70</td>
<td>16.647</td>
<td>71.564</td>
<td>7.73</td>
</tr>
<tr>
<td>From 1981 to 1991</td>
<td>64</td>
<td>12.762</td>
<td>52.898</td>
<td>5.71</td>
</tr>
<tr>
<td>TOTAL</td>
<td>525</td>
<td>231.298</td>
<td>926.264</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: PCRJ, IPLANRIO, apud Larangeira, A., 1995
Under this definition we could identify three types of “sub-standard” housing, particularly in Rio: favelas, illegal subdivisions (loteamentos clandestinos e irregulares) and Cortiços (SMH, PCRJ, 1994). From 1990 onwards the municipal housing programme has gained importance under the Municipal Master Plan (Plano Diretor Decenal da Cidade do Rio de Janeiro). The Plan has recognised the need to face the housing problem for the low-income population through a strategy of urban policies for the entire city. The specified aims include: rational use of urban land, improvement and legalisation of favelas and illegal occupations, supply of local housing and units of popular services, improvements to infrastructure and decrease in the housing deficit (PCRJ, SMU, 1993). The Municipal Secretariat of Housing, founded in 1993, has structured its housing policy towards these aims embodied in the following key programmes: “Favela-Bairro”, “Regularização fundiária e titulação”, “Morar sem risco”, “Mutirão renumerado” and “Novas Alternativas” (Fiori, Riley and Ramirez, 2000).

In the last ten years, the government and NGOs have adopted the term “comunidade” (community) to refer to squatter settlements (“favelas”). This term has also been absorbed by residents.

### D. UNOFFICIAL DEFINITIONS OF SLUMS

#### 1. Popular Understandings

Poor people living in slums clearly identify two main categories - the illegal subdivisions (loteamentos irregulares) and the favelas (squatter settlements). In the illegal subdivisions people build illegally in a plot they have acquired lacking infrastructure and resulting from an illegal process of subdivision of land that does not comply with mandatory urban regulations. In a favela people acquire a shack or a slab, where they will make extensions or increase the number of floors.

There is nevertheless, a common understanding that all that has an irregular appearance is poorly built or lacks infrastructure is a favela. Even some housing estates that have suffered uncontrolled changes have acquired the aspect of a “favela”, meaning run down accommodation.

#### 2. Local Language Terms for Slums

“Cortiço”
“Favela” and “Morro”
“Comunidade” – general term frequently used to refer to slums
“Loteamento” – to distinguish someone that lives in a settlement more regular than a favela; a broad term generally used to name illegal subdivisions.
“Vilas periféricas” – recent typology frequent in the periphery of the city that is constituted by a row of bedrooms sharing kitchen and laundry facilities;
“Vila, Parque and Jardim” – terms used recently to name old illegal subdivisions that have received public infrastructure and services;
3. Slum Dwellers’ Perception of their Status

“I am 31 years old and have lived here for 31 years. My whole life is rooted here. I live in the “morro” because I need to, since I am unable to live where I wish in the southern zone of the city, in a nice house, or a nice flat, with the ideal conditions that all human beings like. So, I am left with only two choices: to stay in the “morro” and try to improve the place where I was born, or to move to the “suburbs” far away from the city” (Itamar Silva, Morro Santa Marta, Iplanrio 1988, p. 56).

“In this community I was able to have my own house, avoiding having to pay rent; I also see that this place is improving with the work carried out by the government. I also have easy transport for working in the south” (Esmeralda da Silva, married 55 years old, homeowner of two houses, house keeper, Favela Complexo do Alemão, Zona Norte).

“I was able to buy a plot in a subdivision near my relatives and with their help I have built a small house. I feel good having my own house that will be inherited by my daughter and my granddaughter” (Alda Maciel, housekeeper, divorced, 1 daughter and 1 granddaughter).

E. OFFICIAL DEFINITIONS OF POVERTY

1. Definitions

Official documents and organisations normally refer to poverty in connection with concepts such as the number of poor people, income distribution (per capita and per family) and poverty lines. The Census Bureau (IBGE) also uses the concept of poverty in relation to a given minimum wage. The idea of a minimum wage is related to “survival” and in Brazil it emerged during the 1930s, based on research which measured the value of a basket of the food most commonly consumed by workers’ families. The 1988 Brazilian Constitution returns to this concept establishing that a minimum wage is a monetary reference that enables workers to fulfil their families’ basic needs – including food, housing, education, health, leisure, clothing, hygiene, transport and social security. The basic basket is measured in the main capitals of Brazil, so the minimum wage varies according to the geographical location. The minimum wage is defined according to the value of the basket for a family with two children and it is corrected annually.

Above all the Constitution establishes that the State (Federation, States and Municipalities) is responsible “for fighting the causes of poverty and marginalisation, and promoting the social integration of deprived people” (Federal Constitution, Article 23, 1988).

The distinction between the poor and the non-poor is based on the establishment of an artificial line that defines the boundaries between the two groups and allows the measurement of the number of people in each category. In the Atlas of Human Development in Brazil, published in 1998, the proportion of poor is defined as the number of people with family incomes per capita (sum of the incomes of all members of a family divided by the number of family members) below 50 per cent of the minimum salary on 1st of September 1991 (in IPEA, 1998).

According to the Rio Human Development Report (Relatório de Desenvolvimento Humano no Rio) developed by PNUD and IPEA, currently poor are people below the poverty line when they have incomes below R$82.00 (US$221.40) per month, which corresponds to the minimum income considered necessary to fulfil the basic needs of a citizen, including housing, food, health, education and clothes). This corresponds to 34 per cent of the total population of Brazil and 12.3 per cent of Rio’s population. The Human Development Report also defines a number of multiple indices that give a much better picture of poverty of a qualitative nature (i.e. access to services, healthcare, education, level of education, child mortality rate, nutrition, food, etc). These are measured globally by the Human Poverty Index that allows for a world-wide comparison. Figure 30 below shows the index for several capitals in Brazil where Rio de Janeiro appears with very similar values to the others.

As with many international agencies, the definition of poverty currently used in Brazil is frequently connected to income and capacity to buy or acquire a minimum level of services and goods. So poverty is frequently connected to the absence of certain material conditions, lacking partially or globally, goods and access to services required to live, this is to say, when people are “segregated” be from society. Poverty, like unemployment, is normally understood to be a structural problem. The link between poverty and unemployment has been always present, and much of the statistical data is still on employment. The methodology adopted in Brazil by the IBGE (Census Bureau) to measure unemployment is the one developed by the International Labour Organisation and used in most parts of the world. This defines the unemployed as those people who are part of the economically active population (people aged from 10 to 65 years) but who are temporarily jobless (not more than two months).

An analysis of the evolution of poverty in Rio in the last few decades shows that: i) the city has increased its share of national poverty, to reach levels similar to those for the rest of the country in 1995: 20 per cent of the population is poor, due largely to the decline in its economic activity; ii) the results of the evolution of poverty during the 1980s are the worst in Brazilian history, probably resulting from important changes in the productive structure and levels of labour income; and iii) a marginal reduction of poverty from 1995 resulting from the price stabilisation policy adopted in the country, that benefited those with lower incomes (IPEA, 1997).

2. Changes to Definitions over Time

In Latin America during the 1950s and 1960s the theme of poverty was strongly connected with the idea of mar-
From a Marxist point of view the poverty phenomenon was linked to the idea of a labour-force reserve. Poverty was seen as a product of urbanisation and industrialisation within a capitalist framework that required a surplus of labour to enable it to maintain its economic efficiency. Another view of poverty saw it as a product of the exploitation of the poor by the rich. The last view, from the United States, interpreted poverty as a cultural phenomenon, linked mainly to underdevelopment.

These different conceptual ideas of poverty still permeate the discussion on the theme, but the question has regained importance mainly in view of the large social disparities and problems of violence in the country. Statistical data on poverty developed in recent years can be classified basically in two types – those that try to measure “absolute poverty” considering people that are below a minimum acceptable standard of living, and those that consider “relative poverty” in relation to the rest of society. In both cases income is used as an indicator. In Brazil absolute poverty is defined in relation to the poverty line, and relative poverty is defined by the idea of the minimum wage, which as explained previously is linked to the notion of a basic food basket. The main source of data on the subject is supplied by IBGE through the Census, and although studies use the data to estimate the poverty line there is no official value adapted for this purpose.

**F. UNOFFICIAL DEFINITIONS OF POVERTY**

1. **Popular Understandings of Poverty**

   “In the illegal subdivisions people came from everywhere. Sometimes they wanted to leave the favela, some came from the north, expelled by speculative building, but some came from the south and from the periphery” (Dulce Vasconcelos, Jardim Nova Guaratiba, Morar an Métropole, Iplanrio, 1988, p. 65).

   “In the squatter settlement your space is your house. The other spaces you share with everyone” (Dulce Vasconcelos, Jardim Nova Guaratiba, Morar an Métropole, Iplanrio, 1988, p. 61).

   “The favela has its own culture, its own rhythm. You pass by and the doors are open, or windows open onto somebody else’s house. There is a lack of privacy, but on the other hand people have more relations with each other” (Morar an Métropole, Iplanrio, 1988, p.59).

   “The possibility of having my own house is the first condition to be able to overcome poverty. If I stop paying rent I will be able to improve my family income and improve my living conditions” (Rose da Silva, Favela da Maré).

2. **The Poor’s Perception of their own Poverty**

   “Here where I live there are only poor people, houses of non-durable materials, when it rains everything gets flooded. To get anywhere is difficult, and transport takes an important part of my working income” (João Inácio, Invasions in the West Zone).

**G. ORIGINS AND TYPES OF SLUMS**

1. **Social, Economic and Political Forces that have Formed and Removed Slums**

   In the last forty years there have been major changes in the design and implementation of public policies on social housing for low-income people. The idea of offering housing through mass construction of huge estates predominated from the 1930s to the 1950s. These estates were often built far away from the city in the periphery, and lacked infrastructure. This has evolved into a more holistic approach of the idea of “habitat” - supplying the city to its inhabitants.

   Slum clearance policies adopted in the 1960s show an understanding of “favelas” as a problem to be eradicated from the city, especially in those areas of higher land value suitable for speculative building.

   During the 1980s, with democratisation, this policy came to an end, and changed to one of support for all kinds of self-build, mainly through self-building and urbanisation of sub-standard settlements, especially “favelas” (Santos, CN, 1980).

   Guarantees against eviction have given security to people to become more engaged (directly or indirectly) in the improvement of their dwellings and communal spaces. Nevertheless, land and property rights are still waiting to be recognised and legalised, this being one of the most important factors for the social security of families (SEDU, 2001).

   Slum inhabitants, both in “favelas” and illegal subdivisions, are still seen as “second class citizens” in the
sense that they do not have the right to basic urban facilities and services that legal parts of the city do. This situation makes people to feel fragile and dependent on political manoeuvring and old practices of vote bargaining. This explains why the main demand of people living in slums continues to be land ownership regularisation, followed by urban upgrading, infrastructure and security (SEDU, 2001).

2. Social, Political and Economic Advantages of the Slums to the City

The slums represent an enormous initiative by the poor, that is able to alleviate the huge demand for low-income housing.

When the slums are located in a dynamic economy:

- They represent a cheap flexible labour force
- They force the socialisation of infrastructure, services and equipment installed in the “formal city”, including for leisure
- They guide the state in the administration of different social conflicts
- They force the exchange and inter-penetration of cultures, mainly manifested through cultural-musical manifestations (samba, rap, funk, pagoda and so on), dance and other expressions
- They mobilise participation and citizenship through the emergence and action by local associations, whose main role brings attention to the segregated reality of the city

Illegal and clandestine settlements, located at the periphery of the city contribute to the city in a different way than “favelas”. The following aspects can be stressed: i) they bring urbanisation and new transport facilities to the areas in which they are located; ii) they often receive urban facilities such as schools.

One of the main negative aspects are the discontinuities they create in the infrastructure and service networks since they are located in peripheral areas and force infrastructure to be extended to areas which are weakly occupied. The high prices of urban land in Rio, together with the excess of urban laws that exclude large sectors of the city pushes people to build outside the law in distant spots. Many of these are located in fragile areas: mangroves, swamps and riverbanks, causing a very negative impact on the natural systems of the city and threatening sustainability.

H. CITY SLUM DATA

1. Map

The population growth in sub-standard housing (slum) areas in the last decade in the city was over 10 per cent. According to the Census Bureau (IBGE), there was the following increase in population:

- 1999 – 882,483 people living in subnor housing
- 2000 – 1,092,783 people living in subnormal housing

Detailed maps of the urban agglomeration showing developed areas, streets, water bodies and landmarks are not available.

2. Census Data for Slum Types

Statistical data as observed previously, are only available for favelas and illegal subdivisions. These data are frequently estimated and can not be taken at face value. As such, this section presents first hand information taken from the authors' experience in the subject.

2.1 Piped Water

In the “favelas” the residents’ associations link the settlements to the Water Company network, organising the residents to implement a distribution network inside the settlement. It is also frequent that illegal unofficial connections are made to the main system. Available data in 1993 show the following situation for piped water network and supply:

- Official – 37.17 per cent
- Unofficial- 41.37 per cent

Source: PCRJ/IPlanrio Favelas Cariocas, 1996

Recent information published in the newspapers indicates that 98.1 per cent of households have access to piped water (Retratos do Rio, O Globo, 2001).

2.2 Sanitation

As with the case of water, residents’ associations arrange for the Sewage Company to collect most of the sewage and direct it to the drainage network, from where it ends up in rivers, the bay and the sea, some without any treatment. A large number of houses have septic tanks, and there are also some connections that are illegally linked to the official network. The situation in 1993 was as follows:

- Official network – 11.65 per cent
- Unofficial network – 17.11 per cent
- Others – 67.2 per cent

Source: PCRJ/Iplanrio Favelas Cariocas, 1996
Recent information published in the newspaper indicates that 94.9 per cent of households have access to sewage (O Globo, 2001).

2.3 Electricity
The Electricity Company attempted for the first time, in the 1980s, to record the number of people living in "favelas" in order to determine the number of consumers and prevent illegal consumption of energy. As a result of this practice a large number of people are connected officially to the city network as the 1993 data shows:

- Official network – 92.50 per cent
- Unofficial network – 4.89 per cent

Source: PCRJ/Iplanrio Favelas Cariocas, 1996

2.4 Transport and Delivery (per cent of streets passable by a small truck)
Private companies provide services to “favelas” in small vehicles. An increase in this activity, unofficially counted, has occurred in the 1990s. People living in illegal subdivisions normally take at least two hours to go from home to work, while the same journey takes around 25 minutes for people living in “favelas”.

2.5 Access to Health Care
Slums normally use regular public health care in the neighbourhood were they are located. In areas with better availability of services, such as the south and the north of the city, access to health care is acceptable.

2.6 Access to Education
As with health, populations living in slums normally use the public schools available in their neighbourhood, so in the better served areas of the city, access is acceptable. In the last decade, the municipality has also built a number of schools and nurseries inside the slums. Small crèches are operated through the individual initiative of residents, supported mainly by working women. NGOs also offer training courses for the young. Unfortunately official data are not yet available.

2.7 Crime Rates
This data is not easily available specifically for slums.

2.8 Secure Tenure
Most slums are illegal with inhabitants not having secure tenure. At present, risk of eviction is almost non-existent, and there is a busy real estate activity within slums.

I. POVERTY IN THE CITY
Poverty in Rio increased by 1.5 per cent between 1999 and 2000 and the poverty level is higher than in 95 per cent of all Brazilian Municipalities (O Globo, 2001) with 12.3 per cent of inhabitants living below the poverty line (IBGE, 2001). The figures below show the evolution of poverty in the city in the last two decades of the 20th century, measured according to the official definition of poverty.

Per cent Poor Population in the city:
- 1981/85 - 13.9 per cent
- 1995/99 - 12.3 per cent

The data below show that the income per capita in Rio is well above the established minimum wage. This situation does not apply to all cities in Brazil. The average does not show the important levels of inequality. Comparing the average income of the poor with that of the population highlights this inequality.

Average income per capita:
- 1981/85 – R$440 (US$162.96)*
- 1995/99 – R$522 (US$193.33)*

Average income of the poor:
- R$45.50 (US$16.74)*

* 1US$ = R$2.70
Source: O Globo, 2001

1. Census Data
Table 20 expresses the important social inequality present in the metropolitan region of Rio.

<table>
<thead>
<tr>
<th>METROPOLITAN REGION</th>
<th>TOTAL</th>
<th>AVER. INCOME</th>
<th>AVER. INCOME</th>
<th>TOTAL</th>
<th>AVER. INCOME</th>
<th>AVER. INCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,079,072</td>
<td>145.78</td>
<td>1.07</td>
<td>395,044</td>
<td>2,261.24</td>
<td>16.63</td>
</tr>
</tbody>
</table>

Source: IBGE, 2001
III. SLUMS: THE PEOPLE

The information presented in this section is based on second and first hand information from a sample of slums.

J. THE INHABITANTS OF THE SLUMS

“The only people who live in favelas are those do not have any other choice. It is like a bus. Only people that are unable to pay for a taxi or do not have a car use it” (Interview in Magalhães, 1992).

1. Short Histories from Timbau

a. Leadership: “People from the favela are not very active, but I understand them because you cannot ask people who are more concerned about whether their family is going to eat tomorrow, to go to an RA meeting. The system does not work. People expect us to do something, they expect the politicians, the government to change things. It is a very paternalistic system, but we would like to see instead people meeting and bargaining for a fair salary, people getting organised in unions, participating” (Francisco, President of a residents’ association).

b. Houses: “Gradually people change their houses, some to give independence to sons and daughters when they grow up, or to build another floor to avoid boys mixing with girls, or when some of them get married”. “We made the wall taller because of the shootings, so with a taller wall it becomes more difficult for bullets to reach us”.

c. Politicians: “politicians look for favelados just at election times, but they don’t do anything, they just promise thing to win votes, but when they get to power they don’t do anything” (interview in Magalhães, CFR, 1992)

K. HOUSEHOLDS INDICATORS

In this section, information available for specific slums was used.

1. Income by Quintile and Household Type

For this information samples of some slums where secondary information was available were used.

2. Size of Houses

2.1 Data for squatter settlements (“favelas”):

- In the 10 best favelas = 5 rooms
- In the 10 worst favelas = 3 rooms
- Average number of rooms per house = 4

Source: PCRJ/Iplanrio Favelas Cariocas, 1996

2.2 Data for illegal subdivisions:

- Average number of rooms per house = 4

Source: estimates supplied by the PCRJ / SMH - Municipal Secretary of Housing (2002).

3. Literacy Rates

- People with less than 4 years of study:
  - Average of all favelas = 20.64 per cent
  - In the 10 best favelas = 14.74 per cent
  - In the 10 worst favelas = 26.8 per cent

Source: PCRJ/Iplanrio Favelas Cariocas, 1996

- People with more than 15 years of study
  - In average of all favelas = 1.07 per cent
  - In the 10 best favelas = 6.57
  - In the 10 worst favelas = 0.47
  - In the city = 17.20

Source: PCRJ/Iplanrio Favelas Cariocas, 1996

4. Occupancy Ratios

- Average number of people per house in all favelas = 3.99
  - In the 10 best favelas = 3.83
  - In the 10 worst favelas = 4.11
  - In the city = 16.70

Source: PCRJ/Iplanrio Favelas Cariocas, 1996

L. COSTS OF LIVING IN SLUMS

1. Commuting to Work

The estimates below are based on interviews undertaken with selected squatters.

- Cost of transport from home to city centre in “favelas”: by bus R$1.20 (US$0.44)* and by metro R$1.50 (US$0.55)*
- Average time expended from home to the city centre in “favelas” (outside the settlement): by bus 25 minutes and by metro 15 minutes.
- Costs of transport from home to city centre in illegal subdivisions: by bus R$1.55 (US$0.57)*, by train R$1.47 (US$0.54)* and other alternative forms of transport: R$2.00 (US$0.74)*

- Average time expended in illegal subdivisions from home to city centre: by bus 1h 30 minutes, by train 50 minutes and other alternative forms 1h 20 minutes.

* 1US$= R$2.70

2. Availability of Housing Finance

Private banks do not offer loans to people living in slums. Public urban development banks offer some finance under municipal or governmental programmes.

3. Health Problems

This data is aggregated from information collected through health centres that attend the neighbourhoods and regions, so there is no detailed information on slums.
4. Victimisation and Insecurity

Social inequality and enclaves of poverty have been linked to increases in criminality in many studies undertaken by research institutes, universities and public bodies recently.

An updated analysis undertaken by the municipality based on data provided by the State Secretary of Public Security and the Police demonstrate the increase in violence in the city. These data are known, however, to be under-estimated since they were collected for different purposes and they are not precise.

Table 22 shows that there is a difference in levels of violence according to geographical and racial origins of the victims (PCRJ, IPP, 2001).

5. Financial Expenditure of a Typical Slum Household

The estimates below are based on interviews undertaken with selected squatters and are given as average monthly expenditures for a family of four people:

- Housing – R$250.00 (US$92.59)*
- Food – R$100.00 (US$37.03)*
- Transport – R$220.00 (US$81.48)*

considering two people going to work

(*) Value of Dollar used is 1US$= R$2.70

M. ASSETS AVAILABLE TO SLUM DWELLERS

1. Social Capital

Individuals have to make the effort to build their own houses as well as acquiring the plot. In some cases family and friends might help in building, but frequently people hire labour from their community to undertake the construction of the house.

The residents’ associations negotiate with official programmes to get infrastructure and shared services of water and energy.

The strong social inequalities that characterise development in Brazil have prevented people from finding adequate solutions to their housing problems. Slums of different types show the seriousness of the problem, but on the other hand demonstrate the amount of energy people by themselves put into solving their housing difficulties. People organise themselves in a spontaneous manner to survive. This energy takes shape through various actors. There is the work of the community leadership, which performs the roles of developer, mayor, politician, social assistant, etc. The local shopkeeper finances small quantities of construction material and food. The local developer builds houses to rent or sell. The self-builder, alone or with help of family and friends is able to build or enlarge his dwelling. And there are the workers who are responsible for infrastructure (Governo Federal, SEDU in Hernandes de Soto, 2001).

2. Financial Capital

Outside the small number of official programmes the owners may finance the construction materials by buying them gradually. The dwellings are built with their own financial resources. Houses can also be bought from local developers in the communities.

<table>
<thead>
<tr>
<th>Income Levels</th>
<th>Serrinha</th>
<th>PSS/LF</th>
<th>M. Machado</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 1</td>
<td>14.8</td>
<td>10.1</td>
<td>11.4</td>
<td>12.0</td>
</tr>
<tr>
<td>1 - 3</td>
<td>53.9</td>
<td>64.7</td>
<td>47.9</td>
<td>55.5</td>
</tr>
<tr>
<td>3 - 5</td>
<td>18.0</td>
<td>16.8</td>
<td>20.7</td>
<td>18.2</td>
</tr>
<tr>
<td>5 - 10</td>
<td>10.2</td>
<td>8.6</td>
<td>9.3</td>
<td>12.8</td>
</tr>
<tr>
<td>More than 10</td>
<td>3.1</td>
<td>0.7</td>
<td>0.7</td>
<td>1.5</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>(n=128)</td>
<td>(n=139)</td>
<td>(n=140)</td>
<td>(n=407)</td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>330.8</td>
<td>296.3</td>
<td>372.1</td>
<td>333.1</td>
</tr>
</tbody>
</table>

Source: Secretaria Municipal de Trabalho, 1988
IV. SLUMS AND POVERTY: THE POLICIES

N. POLICIES AND ACTION

1. Locational Socio-Economic Targeting

Estate housing has been supplied mainly through the production of new building, re-urbanisation of slum settlements (sub-standard settlements), resettlement of people living in risky areas and loans for the acquisition of build materials and buildings.

These actions are aimed at low-income people and supported by resources coming from:

- The municipal budget;
- The state budget (passed to states and municipalities);
- State funds, mainly from social security (FGTS - Fundo de Garantia por Tempo de Serviço);
- External funds (multi-lateral banks, co-operation and aid agencies and international organisations)

Very few municipal administrations are able to implement a housing policy capable of attending to demand with their own resources. Even cities with good budgets and available financial resources are unable to deal with their housing problems given the magnitude of the deficit, and end up not making use of available state and aid funds. Furthermore, the fact that municipalities are required to prove their capacity to pay debts and also to provide part of the finance is an additional problem.

Funds from central government come from the state budget (Orçamento Geral da Uniao - OGU) and can only be used for sanitation and housing. The National Congress supports the sharing of these resources between municipalities and states. Among other things they have to comply with the following prerequisites:

- large social scope with small individual building costs
- respect for the environment
- priority is given to areas already occupied by low-income groups with high under five mortality rates.

The Programme "Morar Melhor-Habitação" implemented by the Federal Government, aims at raising living standards in risky, invaded, decaying areas and slums occupied by families with monthly incomes up to three minimum wages. Access to this type of finance depends, to some extent, on political composition, despite the methodology and structuring conceived to be strictly technical. The programme also has a number of administrative procedures to enable the transfer of funds to municipalities that require time and competence.

The use of social security resources (Fundo de Garantia por Tempo de Serviço - FGTS) is directed at financing housing and sanitation in municipalities and states under several types of programmes, targeting different social groups.

The recently launched programme named "Programa de Arrendamento Residencial" (PAR) reserved 3 billion reais (about US$1.1 billion) to stimulate the production of new dwellings in the metropolitan regions of the country for families with less than 6 minimum wages monthly income. This programme supports public partnerships (between municipalities and states) and public-private partnerships (between real estates agents and developers). Its key feature is the establishment of a 180 month rental contract, with an acquisition option, without interest.


<table>
<thead>
<tr>
<th>NO. OF INHABITANTS/DWELLING</th>
<th>NO. OF DWELLINGS 1974</th>
<th>%</th>
<th>NO. OF DWELLINGS 1994</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1.9</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>8.9</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>3</td>
<td>12</td>
<td>21.4</td>
<td>7</td>
<td>28.0</td>
</tr>
<tr>
<td>4</td>
<td>11</td>
<td>19.6</td>
<td>6</td>
<td>24.0</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>10.7</td>
<td>4</td>
<td>16.0</td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td>12.5</td>
<td>4</td>
<td>16.0</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
<td>12.5</td>
<td>1</td>
<td>4.0</td>
</tr>
<tr>
<td>8</td>
<td>3</td>
<td>5.4</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>9</td>
<td>4</td>
<td>7.1</td>
<td>2</td>
<td>8.0</td>
</tr>
<tr>
<td>10</td>
<td>3</td>
<td>5.4</td>
<td>1</td>
<td>4.0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>56</td>
<td>100.0</td>
<td>25</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: PCRJ, IPLANRIO apud Larangeira, A, 1995

Table 22 Number of Homicides by Colour and Location of Victim

<table>
<thead>
<tr>
<th>Area of victim residence</th>
<th>White</th>
<th>Black</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of population</td>
<td>% of victims</td>
<td>% of population</td>
</tr>
<tr>
<td>South zone and Barra da Tijuca</td>
<td>81.2</td>
<td>33.3</td>
</tr>
<tr>
<td>North zone</td>
<td>61.1</td>
<td>37.6</td>
</tr>
<tr>
<td>East zone and suburbs</td>
<td>55.6</td>
<td>41.5</td>
</tr>
</tbody>
</table>

Source: SESP and Policia Civil apud IPP, 2000
Also supported by the FGTS, the Programme “Pro-Moradia”, aims at improving the living conditions of urban slum families with incomes up to three minimum wages per month. It funds integrated actions in housing, sanitation and infrastructure. Despite being innovative, these programmes funded by the FGTS, have been difficult to implement given:

- excessive administrative requirements that are time consuming and demand the collection of too much information
- the exclusion of too many potential candidates (municipalities and states) by the methodology adopted by the financing agent (Caixa Economica Federal) to evaluate their debt capacity
- the non-existence of banks in the municipality to speed up the process of resource demands
- they make it difficult for developers to use alternative technology for sanitation, paving and housing

Finance obtained by the government from banks and multi-lateral international agencies only supports projects in strategic areas involving fights against poverty, and sustainable development.

Urbanisation programmes for sub-standard settlements, such as “Habitar BID/Brasil” (Federal Government), “Baixada Viva” (ERJ Government) “Favela-Bairro” (PMCRJ/BID), cover housing and the general improvement in housing conditions.

These programmes require bilateral negotiations and approval of the capacity of the borrower to pay the loan, which demand time. Despite the inflexibility of their rules, these programmes, despite being long-term, often suffer discontinuities.

The National Social-Economic Development Bank (BNDES) promotes policies at a national level, financing municipalities and state social programmes. These should integrate urban actions, including work and income generating activities and training of young people. NGOs have co-financed some of these programmes in partnership with municipalities and communities.

State governments also have available some programmes for housing finance and urbanisation.

At the local government level, two types of private-public partnerships can be pinpointed:

- Mobilisation of municipal and community resources. This represents a local authority effort to mobilise resources for low-income housing. It represents the use of small individual savings that are channelled through co-operatives and associations that are managed jointly, stimulating community organisation.
- Special funds: created by local authorities with resources coming from: (i) the municipal budget; (ii) urban instruments; (iii) national and state funds transfers; (iv) payments and refunds of housing loans and (v) mortgages given to housing projects.

A general assessment is that the number of municipalities benefiting from these resources is still small and restricted to those that were able to provide local funds and better managerial capacity.

These funds are directed at a variety of actions and attend projects that provide:

- production of housing estates: despite recent trends that attempt to search for more friendly and humanised solutions than the mass production of the 1960s, their high costs has made them inaccessible to people with incomes below five minimum wages per month
- housing production through self-management: dwellers’ associations in partnership with local authorities supervise the construction. Despite representing a very positive experience for strengthening communities, it faces difficulties of implementation, especially in the lower income groups
- urbanised plots programme: aimed at giving access to urban land. This approach is designed to count on user participation in the construction of the housing unit, representing one of the lowest cost housing policies available
- building material supply programme: is a complementary action to the urbanised plots programme, for self-help housing and refurbishment of units. Managed by municipalities, it offers funds for the acquisition of construction materials in: (i) authorised shops; (ii) public construction material centres; (iii) through local poles that manufacture specific components. It is aimed at families with incomes up to three minimum wages, but it has spread among the “favelas”;
- programme for risky areas: aimed at resettling low-income populations that have invaded environmentally vulnerable or unhealthy areas (garbage deposits, contaminated land, eroded or flooded areas). It basically deals with the public sector and requires complementary action to be successful
- social programmes: complement urban or housing initiatives in actions such as professional training for the young, women and the unemployed; childcare and care for the elderly; and support for community organisations. The evaluation of these initiatives shows very positive results and its implementation has been enlarged and has involved the participation of NGOs.

2. Non-Governmental Interventions

Community organisations in Rio share some general common features:

- A tendency to independence of the market and the state, even when acting in complementary actions developed by those
- A varied type of organisation and institutional framework that represents either economic interests, religious
views or values of special sectors of society (women, black population, children, elderly, disabled, etc)

- Their actors have diverse origins through which they can participate simultaneously in more than one organisation.

These organisations exist in parallel with others like residents’ associations or religious groups. In the last few years new forms of social organisation have emerged, such as for example the “Community Chambers” that have been created in the boroughs to deal with solutions to local problems.

Around 59 per cent of the existing organisations in Rio are linked to the Church. This shows the importance of religion in the society and a still incipient social participation that in fact was initiated with the democratisation process of the country two decades ago.

Approximately 15 per cent of the registered organisations are residents’ associations, a total of 499. These associations have an important role in raising social awareness, especially in the low-income sector. Non governmental organisations (NGOs) correspond to 11 per cent of the total number registered. They have been gradually increasing in number and responsibility in the last few decades, and have been one of the principal actors involved in the city’s environmental questions.

The associations concentrate their activities in the following fields:

- Education and religion – around 40 per cent
- Health – 25 per cent
- Citizenship – 20 per cent

Although associations have historically been involved with improving living conditions in the city’s slums, the involvement of community-based groups and NGOs in housing policies and programmes are very recent. An innovative example is the case of the Favela-Bairro programme, in which NGOs are active in implementing social, cultural and educational projects. The municipality hires local associations, for example, to manage their community centres or to implement training and sports programmes. The following NGOs are involved in the programme: Viva Rio, Roda Viva, SOS-Caju and Fábrica dos Sonhos. Despite the increasing participation of these associations in the defence of the community and mediation in their relations with the state, it seems clear that an active role in the decision-making process is still required. Participation takes place mainly at an executive level aimed at the fulfilment of very specific objectives and tasks. It has adopted a top-down approach where long-term social aims in the participatory process are part of the programme but not their key priority (Fiori, Riley and Ramirez 2000). The municipal housing pro-

gramme “Novas Alternativas” is an NGO in partnership with the municipality which deals with the management of some of the historic buildings that have been rehabilitated.

O. IMPACTS

Of the Rio municipality’s housing programmes two should be highlighted:

1. **Programa Favela-Bairro:**

   In the period 1994-2000 this has substituted the “Programa Mutirão”. It follows the basic approach of the local authority to increasing access to the legal city offered by urbanising “favelas” and at the same time promoting social health and education programmes. It does not cover the construction of housing units – except in cases of re-settling due to works – and it is focused on the improvement of the place with the final aim of including it socially in the local neighbourhood. It has completed the urbanisation of 119 “favelas” of average size from 1994 to 2000, investing the first part of BID resources of US$60 million. The second part of the project, agreed with BID, includes interventions in 656 “favelas”, benefiting 250 thousand people, over a period of four years. It is also expected that it will receive R$55 million (around US$150 million) from Caixa Economica Federal to urbanise four large “favelas” and R$28 million (around US$75 million) to urbanise 35 small “favelas”.

2. **Programa de Regularização de Loteamentos Irregulares: (Illegal Municipal Settlement Regularisation Programme / PCRJ).**

   Since it was created in 1994 it has always shared management between the local residents’ associations and the legal, infrastructure and urbanism bodies of the public administration. Combined action requires close relations with the legal powers to enable property rights to be legalised to enable dwellers to have property deeds. At present it is estimated that there are 855 illegal settlements in the city with a certain degree of regularity with a total of 88,712 plots. Among them there are 348 recorded as social, with 100 holding deeds. At the initial stage of this programme it is estimated that around 23 thousand plots will be ready to obtain their deeds with the notary (IPP, PCRJ/Sabren - Sistema de Assentamentos de Baixa Renda, 2002).

   The municipality has invested around US$26,500 million in urbanisation works during the period 1996/99, specifically in the popular sectors of these illegal subdivisions (PCRJ/IPP Anuário Estatístico da Cidade do Rio de Janeiro, 1998, pg 819 and 820). The “Programa de Regularizacao de Loteamentos” - Illegal Settlement Municipal Regularisation Programme / PCRJ - has been considered a successful experience given:
Its continuity in time
- improvements in sanitary conditions and, as a consequence, in public health
- the strengthening of community initiatives of mobilisation and participation in public management

Their main negative aspects can be summarised as follows:
- appropriation for politicians of community mobilisation, creating the opportunity of gaining votes during elections;
- investment of large amounts of money to supply the obligations of developers
- immobility of public actions to modernise the legislation required to face problems of irregularity

Some other questions refer to the difficulties encountered in obtaining property rights with notaries, yet some improvements can be noted due to the role of the courts. This has contributed to enlarging the number of low-income owners with deeds (Source: interview with Antonio Augusto Veríssimo, PCRJ / SMH manager of Illegal Settlement - Municipal Regularisation Programme)

1. Reasons for Successes and Failures

The Favela-Bairro programme constitutes a best practice example in housing policy. Although it has been based on a concept defended by urbanists for three decades, it has the great merit of having made it real. It also innovated by introducing social projects within the urbanisation programme.

By promoting the articulation between several sectors of the municipal administration it has also managed to go forward in the required procedures for the land ownership, which is one of the main demands of the population living in sub-standard settlements.

The continuity of the programme will allow the improvement of some managerial aspects and structures, consolidating the key idea of integration between areas of social exclusion and the formal boroughs of the city, a segregation which is characteristic of the city at the present.

The population have responded very positively to the intervention in the public and collective spaces introduced by Favela-Bairro and have themselves improved their houses.

2. Lessons Learned

For the purposes of this document we have concentrated on the most important and recent programme developed in the city by the municipality – Favela-Bairro. According to the aims of the programme it was anticipated that the main benefits of the programme would be the following:

- improvements in the population’s health
- strengthening of community organisation and structure
- improvements in pre-school education;
- reduction of flooding in the city;
- reduction in the number of accidents caused by landslides
- improvements in environmental conditions in the settlements and in the city
- strengthening of citizenship ties and social inclusion;
- integration of favelas into the city
- improvements of access to infrastructure
- garbage collection systems
- community relations improved by the existence of new public spaces and services enabling more social interaction

(Source: SMH, 1995 in Fiori, Riley and Ramirez 2000).

An overall evaluation shows that the programme attains many of the objectives it has set, especially those of social-physical integration and the strengthening of citizenship ties and social inclusion.

Although it has been successful in improving the image of the favelas, the problems of illegality and irregularity still remain without solution, and they continue to constitute enclaves in the city, dominated by marginal activities. From the point of view of the individual houses, although it has innovated in the acknowledgement of the potential of auto-construction and community initiatives, the programme has failed to provide support for the improvement of the dwelling conditions.

On the other hand an evaluation of national programmes for social housing in Brazil highlights the following aspects:

- there has been an official recognition of an increase in the country of around 1,200 thousand housing units, with approximately 360 thousand located in slums (sub-standard settlements), which require urgent action
- it is necessary to remove the obstacles that block the action of traditional estate agents and developers in the housing sector
- it is necessary to provide new resources and strengthen the existing ones directed at low cost housing
- it is necessary to diversify the types of housing programmes to increase participation of local developers in order to reduce costs and enlarge housing offer.
A good example is the “Programa de lotes urbanizados”.

- it is necessary to create attractive conditions for private investors by either simplifying their urban legislation or the administrative planning and building procedures
- local municipalities must be trained to be more efficient in perceiving community needs and housing problems and in the choice of implementation measures that are easy and fast to implement
- the local government should assume a more active role in relation to municipal housing problems, acting in a planned and continuous form, adopting flexible and innovative mechanisms in the planning and building rules, be more efficient in channeling funds and stimulating private capital and partnerships. Participation has to be present throughout the whole process
- an effective integration between housing policy and urban policy needs to be pursued in order to reach the following dimensions in any implemented action: i) land has to be provided in the necessary quantity, location and quality; ii) economy – special finance approaches are required to enable easy long term credit; iii) urban – more flexible procedures, norms and legislation has to be adopted to increase access to the legal city for all people; iv) citizenship – provide means and mechanisms that allow for the democratic operation of planning and management processes. This should contribute to improving democracy as a whole, the efficiency of governmental action giving it greater transparency
- the concept must be incorporated of the social function of housing, increasing its integration into the city environment and in the access to the set of public services and goods available, in order to allow for its fair economic value to be provided
- access to legalised housing should be considered as the final aim, in the face of all the obstacles still present in the country’s legal structure that do not allow deeds to be obtained in urban regularised settlements
- the urban question has to be reintroduced into the federal government agenda, particularly supporting actions and policies in housing and public transport

Some questions still remain open and require further debate among the different agents in order to be able to find the best solution. The first is how to guarantee that improvements undertaken in a given area benefit its inhabitants without stimulating them to leave the area, creating a vicious circle of demands and attracting a new sort of speculative mechanism. The second refers to finding democratic and respectful ways for the state to have a presence in the communities, offering support to people and preventing drug-dealers from assuming control. Finally some means must be found for increasing the amount of available resources for improvements to slums and their legal integration with work opportunities and income generation activities in the city.

P. MONITORING, FEEDBACK AND ADJUSTMENT

Monitoring and feedback are not common practice in Brazil, particularly in social policies. The Favela-Bairro programme has also innovated in this field and for this reason offers an interesting case of analysis. To evaluate and monitor the impact of the programme the municipality is using a methodology approved by the main financial body (the Inter-American Development Bank) which develops in three stages:

- First stage – initial overall data on the community is collected, and in some cases in-depth studies are carried out to collect the residents’ view.
- Second stage – impact studies in areas where intervention was finalised covering three issues: level of satisfaction and benefits with services and infrastructure; evaluation of institutional and administrative changes (including property rights and taxes); and dweller satisfaction with their borough.
- Last stage – use of census data to evaluate the impact of the projects.
  (Source: Fiori, Riley and Ramirez 2000)

Unfortunately this system has been demonstrated not to be clear and efficient enough. It is difficult to assess through this system whether the programme has fulfilled its aims, or to evaluate its positive and negative effects and its main constraints and potentials.

In the case of the “Programa de regularización de loteamientos” launched by Rio municipality, data on the results are not organised. A study in progress developed by the Municipal Secretariat of Urbanism (SMU) supported by BID might shed light on the problems of land subdivision irregularity existing in the city. The result of this study is expected to allow a better assessment of the results of the public and private actors in housing policy, pinpointing the need for monitoring programmes and controlling results.

In relation to programmes launched by the federal government, information, if available, is not centralised, making it impossible to provide any evaluation or monitoring of those programmes within the scope of this report.
One of the lessons to be learned from the programme may be the fact that despite great success in adopting a multi-sectoral approach to the problem, some imbalance still exists between its physical and social components, favouring the provision of infrastructure and other urban improvements over social projects that could tackle poverty directly.

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