

RIO DE JANEIRO URBAN UPGRADING PROGRAM

(BR-0182)

EXECUTIVE SUMMARY

BORROWER: Municipality of Rio de Janeiro

GUARANTOR: Federative Republic of Brazil

EXECUTING AGENCY: Housing Secretariat

AMOUNT AND SOURCE: IDB: US\$180 million (OC)
Local counterpart funding: US\$120 million
Total: US\$300 million

FINANCIAL Amortization period: 25 years
TERMS AND Disbursement period: 4 years
CONDITIONS: Interest rate: variable
Inspection and supervision: 1%
Credit fee: 0.75%

OBJECTIVES: The objective of the Program is to improve living conditions of the urban poor by upgrading basic infrastructure and increasing the supply of urban and social services in targeted neighborhoods. It supports ongoing municipal upgrading initiatives for favelas and irregular subdivisions, involving communities in project definition and implementation.

The Program constitutes both an urban sector initiative and a poverty alleviation effort. It seeks to ameliorate the effects of poverty through a combination of infrastructure investments, improvement in the coverage and quality of social services, regulatory changes, and incentives and assistance for land legalization.

Nearly 25% of the 5.6 million people residing in Rio de Janeiro are estimated to live in favelas (960,000 inhabitants), or illegal subdivisions (380,000). The Program would benefit approximately 220,000 favela and 120,000 subdivision residents, contributing in a significant way to the resolution of urban marginality problems in the city.

Guiding principles of the Program are cost-efficiency of investments, institutional feasibility, and sustainability of interventions. Expected results include improvements in the quality of life of the

beneficiary population in social, urban and environmental terms, integration of the formal and informal cities, and a replicable model with which local governments can tackle the problems of low-income urbanization.

DESCRIPTION:

The program would have three components: (a) favela upgrading; (b) irregular subdivisions formalization; and (c) monitoring and evaluation, sanitary education, and institutional development.

Investments in favelas and subdivisions would include: (a) basic sanitation (water and sewage), (b) street systems; (c) drainage; (d) garbage collection systems, (e) public lighting, (f) hillside stabilization; (g) reforestation, (h) child care centers and (i) land legalization. Construction technologies would be adapted to the particularly difficult favela terrain and environment. Priority would be given to community involvement in project definition, supervision and evaluation.

Common elements in plans for the favelas include the opening of a thoroughfare to allow for garbage collection and public transportation (when possible) to enter the settlements, widening and paving of pedestrian pathways, total coverage of water and sewage systems, storm drainage systems, at least one child-care center and the opening of public spaces and sports areas.

A typical project execution sequence would consist of: (a) selection of locality and contact with the community organization; (b) design of a master plan for the area (for favelas); (c) discussion of proposals with the organized community and adjustment of project designs; (d) preparation of final drawings for investment projects, approved by state and municipal agencies; (e) technical analysis and approval by the executing unit; (f) project implementation by construction companies, with incentives for employing local community labor; (g) operation and maintenance, by city or state agencies; and (i) monitoring and evaluation.

**ENVIRONMENTAL
CLASSIFICATION:**

The Environmental Management Committee, at its meeting of 12/07/94, classified this as a Category III operation.

BENEFITS:

The Program's most important benefit would be the improvement of living conditions for beneficiary families, who represent about one third of all households living in the city's substandard settlements. Infrastructure investments and social programs will integrate these previously marginalized areas to the formal city, reducing the sense of disenfranchisement presently felt by their residents.

Other benefits include improvements in the city's environmental quality, both within the settlements and in surrounding areas due to prevention of flooding, increased garbage collection and better overall sanitary conditions. Measurable results are expected in both health status and community satisfaction.

Tourism is one of Rio's major industries. By improving social, environmental and urban conditions the city would be able to more fully realize its potential in this sector. Impacts in terms of reducing violence in the favelas and in the city can be only expected as a result of concerted social, economic and law enforcement measures: the present program is a significant but not exclusive part of this effort.

Finally, the program represents an advance in terms of integrated urban/social planning. Its planned interventions, community participation and targeting methods, engineering techniques and monitoring methodologies may constitute a replicable model which other local governments can use to address problems of urban marginality.

RISKS:

The program involves a large number of relatively complex interventions, both in engineering and in social terms. Working in favelas requires the use of unorthodox construction methods. It also requires special care in dealing with the prevailing local order in many of these communities. Program implementation entails the administrative challenge of issuing and controlling a large number of contracts in a relatively short period of time and coordination among the many municipal agencies involved.

These risks are minimized by: contracting management support for procurement, supervision and management systems, developing technical guidelines for favela projects and, for the special conditions of working with local communities, relying upon the experience

of project managers and other staff who have ample experience in such projects.

Entry to favelas is sought via the community association. Any eventual disruption of the progress of civil works would mean delays in specific projects but would not affect the Program as a whole, which overall has great support from participating communities.

**THE BANK'S
COUNTRY AND
SECTOR STRATEGY:**

The Program is consistent with the Bank's mandate under the Eight Replenishment, to give priority to social sectors and poverty alleviation initiatives. The Program combines urban development and poverty alleviation goals, given its targeting towards low-income settlements and broad urban and environmental impacts. The Program is a municipal initiative that greatly improves the manner in which social and urban services are planned and delivered. Thus it would comply with the priorities set by the 1995 programming mission to Brazil, which emphasized projects aimed at poverty reduction, decentralization and improvement in the management of social expenditures.

**SPECIAL
CONTRACTUAL
CONDITIONS:**

Conditions prior to first disbursement:

- (a) enactment of a municipal decree establishing the program, and defining, inter alia, organizational structure and operational responsibilities of participating municipal agencies, in accordance with terms mutually agreed with the Bank (par. 4.4);
- (b) that the operations manual previously approved by the Bank be put into effect (par. 3.1);
- (c) signature of an interinstitutional agreement between the Municipality of Rio de Janeiro and the state water company (CEDAE) to ensure that CEDAE would provide technical supervision of projects and assume responsibility for operation and maintenance of basic sanitation works after their completion (par. 3.15).

Conditions regarding the submission of reports:

- (a) for a period of ten years following the year in which the first project was completed, the municipality shall submit annual maintenance plans and budgets for the Bank's review, covering a representative sample of favelas and subdivisions upgraded through the Program. The

reports shall include the maintenance of basic sanitation services, with the obligation to present annual reports included in the terms of the interinstitutional agreement to be signed with CEDAE (par. 3.14).

- (b) Monitoring and evaluation reports produced annually by the evaluation system, and annual program execution reports shall be submitted to the Bank for analysis (par. 3.19).

EXEPTIONS TO THE BANK'S POLICY: The gurantee contract will not include a guarantee by the Federal Government to provide local counterpart funding to the program nor to make good on obligations undertaken by the borrower. The financial analysis shows that the borrower has the financial capacity to furnish the necessary counterpart funding for the program.

POVERTY TARGETING CRITERIA The project qualifies as poverty targeted in terms of the Eighth Replenishment mandate, in that it supports slum upgrading and preschool programs. In addition to its overall poverty focus, program design included a more precise targeting exercise through the selection process (whereby favelas with greatest socio-economic needs were given priority), in an attempt to direct investments to the poorest strata of the eligible settlements (par. 2.14).

I. FRAME OF REFERENCE

A. Process of Low-Income Settlement in Rio de Janeiro

- 1.1 Rio de Janeiro's unique pattern of low-income settlement can be attributed to a combination of barriers posed by the city's mountainous terrain, uneven distribution of transport and other urban infrastructure, and unrealistically high standards for the registration and titling of land subdivisions. While the formal city has grown within the valleys and along the coast, the urban poor have settled on the hillsides scattered throughout the city, forming the "favelas", or located in irregular subdivisions more distant from the central city. 1/
- 1.2 In their search for affordable housing, the urban poor thus face a tradeoff between location and property rights. The favelas offer proximity to employment, commerce, and urban services, while irregular subdivisions offer space and, albeit tenuous, ownership of the plot.
- 1.3 In the past decade, the growth of favelas and illegal settlements has out paced the overall population growth of Rio de Janeiro and its surrounding suburbs. During the period 1980/91 the population of Rio de Janeiro grew at a rate of only 1.1% per year, the lowest growth rate of all the metropolitan regions in Brazil. In contrast, the population of slum dwellers increased 34% during the same period, at a rate of 8% per annum. Underpinning this process has been the increase in poverty, with the proportion of poor households in the metropolitan area growing by nearly 25% during the period 1980/1991.
- 1.4 Inappropriate government policies have contributed the growth of slums and illegal settlements. Tolerance by the state and city governments towards the occupation of hillsides and land invasions, the lack of political will to remove squatters once residence was established, and the inability of the city government to effectively prosecute developers who provide plots without the appropriate infrastructure, have led to an increase in substandard settlements problems. Slum residents feel relatively secure in their tenure, resulting in the growth and consolidation of existing favelas.

1/ Favelas are settlements that lack property rights, constitute agglomerations of sub-standard quality dwellings, suffer shortages of basic infrastructure, urban and social services and/or are located in geologically unsafe or environmentally sensitive areas. In the case of irregular subdivisions, residents purchase their plots, already demarcated, from developers but the lack of necessary infrastructure prevents owners from registering their plots and obtaining formal title.

B. Infrastructure and Social Aspects of the Target Population

- 1.5 The problem of urban marginality has reached enormous proportions in Rio de Janeiro, with nearly 25% of the 5.6 million people residing in the city estimated to live in favelas, or illegal subdivisions. As shown in Table 1.1, more than one-quarter of slum-dwellers reside in the fifteen largest favelas (28%), 16.6% are dispersed in over 351 small favelas, each with less than 500 households, while the "mid-sized" favelas, with between 500 and 2,500 households, account for almost half of the total population (45.2%) residing in those settlements.

TABLE 1.1 - DISTRIBUTION OF FAVELAS BY SIZE				
CLASSES BY # OF HOUSEHOLDS	No. OF FAVELAS	% OF FAVELAS	POPULATION	% OF POP
More than 2,500	15	3.2	246,469	28.0
1,000 to 2,500	42	9.1	249,323	28.3
500 to 1,000	54	11.7	144,226	16.9
Less than 500	351	75.9	146,406	16.6
TOTAL	462	100	880,424	100

Source: IBGE. 1991 Census.

- 1.6 In addition to the favelas, some 381,000 people reside in a total of 590 irregular subdivisions, the vast majority of which are located far from the center of the city. The Regularization Council, founded in 1985 by residents of irregular subdivisions who were fighting to gain access to infrastructure and title to their property, now lists 262 subdivisions, accounting for 42% of the total population of irregular subdivisions (160,000). Like the favelas the subdivisions vary significantly in size, some constituting small cities in themselves, with populations of up to 35,000, while others occupy areas of less than one hectare.
- 1.7 Income distribution in the city of Rio de Janeiro is highly skewed. In 1990, nearly one-quarter of municipal residents were living beneath the poverty line, while the top one percent of income earners accounted for one-fifth of total income earned in 1989. Poverty and income inequality both increased over the 1980's, as the percentage of families in poverty jumped from 19.1% to 23.7%, and the Gini coefficient increased from .552 to a staggering .641. Two-thirds of favela households surveyed in June 1995 had average per capita incomes of one-half the minimum wage or less. 2/

2/ The Bank poverty line for Brazil as of May, 1995 is 54 reales, or 54% of the present minimum wage. With two-thirds of beneficiaries living below the poverty line, the project thus classifies as poverty targeted.

- 1.8 Infrastructure/Living Conditions: In the more than 320,000 residences which make up the universe of favelas and irregular subdivisions, one-fifth are constructed of inadequate materials and one-third occupy an area smaller than 30 square meters. Only 35% of households are linked to the official water network, and a mere one-quarter have access to adequate sewage systems. Municipal estimates indicate that not even one third of the garbage produced in these areas is collected on a daily basis. Street systems and drainage networks are either non-existent or inadequate. The great majority (almost 90%) of families do not hold formal title to their property. Roughly two-thirds of the population reside in private areas, while the remaining third occupy public lands.
- 1.9 Early Childhood Services: Access to childcare and development services is as limited, if not more so, than access to infrastructure. A survey of 15 favelas (see Annex V-2) found that more than 80% of children between the ages of zero and six stay at home during the day, the great majority of whom are cared for by their mothers. Largely uneducated -- three-quarters of those interviewed had failed to complete primary school -- mothers are hard-pressed in terms of time or training to provide their pre-school children with needed care and stimulation. Demand for childcare services is significantly higher than the existing supply, with 60% of the mothers who were surveyed indicating that they would be likely to seek full-time employment outside of the home if they had access to childcare services.

C. Policies for Dealing with the Problem

- 1.10 Reversing previous policies of regarding favelas as an "urban cancer", the Municipality of Rio has accepted the fact that one fourth of its inhabitants deserve recognition of their rights as citizens, and should thus have access to the same services as other city residents. Instead of ignoring or marginalizing the slums, municipal efforts now focus on their stabilization, improvement, and containment.
- 1.11 The municipality is dedicated to upgrading the existing settlements, increasing the vigilance against future land invasions and illegal developments, and creating conditions for increasing the availability of low-cost housing alternatives. The policy for favelas, as expressed in the city's 1993 Master Plan, seeks their integration with the formal city, by legally protecting the rights of residents to remain in these areas and by raising the level of services to that of their surrounding neighborhoods.
- 1.12 Regularization of subdivisions, supported by the Municipality as a viable alternative for the future provision of low-income housing, is addressed through a combination of regulatory changes and remedial programs. A new Land Subdivisions Law has been proposed and is currently in the final stages of discussion by the urban development council. The new law simplifies approval standards and procedures for registration and legalization for subdivisions in

areas considered of social interest. Other laws, such as the Buildings Code and the Land Use and Urban Development legislation are also being updated according to the directives of the Master Plan. A legal assistance program to expedite land titling has been initiated.

- 1.13 Social investments, such as early childhood development programs, primary health care services, health and nutrition education campaigns, and after-school centers for youths, form an essential element of the municipal low-income settlement policy. The municipality intends to increase the number of child-care centers for children under six years of age with new services geographically targeted to the poorest communities, and within these localities, to female-headed households.

D. Program's Conceptual and Operational Approach

- 1.14 The Program aims to support the city's cornerstone programs for implementing low-income urban settlement policy, increasing their scope and improving their effectiveness. Methodological enhancements introduced under the Program include: (i) development of transparent selection criteria to better target beneficiary communities; (ii) use of local integrated urban development plans which draw upon community participation in their design and implementation; (iii) definition and financing of a minimum package of urban and social services in each community; (iv) design of a monitoring and evaluation system; and (v) preparation of a handbook of engineering guidelines for the unique working conditions of favelas.
- 1.15 The Program avoids a piecemeal approach to infrastructure provision addressing overall needs for urban and social services at the community level. It represents a watershed in the development of municipal policy towards low-income settlements, in that it is the first time the full apparatus of the city government has been made available for resolving the problems of residents of favelas and irregular subdivisions.

E. Related Bank Projects and Municipality's Experience

- 1.16 The municipality has recently negotiated a Bank financed "Rio de Janeiro Digital Mapping and Urban Drainage" project (Loan 858/OC-BR). This US\$ 60 million operation will finance drainage for one of the city's largest river basin areas; a geographic information-mapping system for the entire municipality; and complete cadastral survey of the city, including the favelas. The project will be implemented by RIOURBE, in charge of the physical infrastructure works and the Instituto de Planejamento do Rio de Janeiro (IPLANRIO), responsible for the digital mapping system, both agencies who are participating in the present Program.
- 1.17 The Bank is financing a US\$ 8.5 million technical cooperation (ATN SF-TF 4237) aimed at supporting NGO programs that assist street

children, which represents useful experience to draw upon in municipal/NGO coordination in the social area. Another Bank financed ATN which offers useful lessons is the "Jacarezinho" Favela Social Development project (ATN/TF 3152-BR), initiated in 1989. The project benefitted 82,800 favela residents, through dredging and channeling of the river (1.2 Km), street improvement, water, sewage, and drainage works. Finished in 1993, its final cost came to US\$7.8 million, of which the Bank financed US\$1.8 million. Particularly relevant were the experiences gained by the city in designing infrastructure suited for favelas conditions, and in overcoming implementation hurdles arising from its unique social environment.

- 1.18 The municipality has also participated in a World Bank financed "Flood Reconstruction Project". This US\$175 million operation included components of flood control, water supply and sanitation in low-income areas. The experience gained by the municipality in implementing geological protection, macro-drainage, and urbanized plots components can be applied to the present project.
- 1.19 The "Guanabara Bay Basic Sanitation Program" (Loans 782-OC and 916-SF approved 11/93) will finance major sanitation works, industrial pollution clean-up and environmental education in the Bay area, which includes the municipality of Rio de Janeiro. This Bank financed project is being implemented by the state government, through its water company CEDAE; the sewage treatment plants to be financed will be receiving part of the effluents collected in the favelas benefitted by the present Program. The state government is also participating in PROSANEAR, a World Bank financed operation which provides basic sanitation services to low-income areas, complementary to and in coordination with the proposed Program.
- 1.20 For the 1995/97 programming period three projects have been included for the Rio de Janeiro region: (i) extension of sanitation and other urban and social infrastructure to the Baixada region, contiguous to the heavily urbanized northern zone of the city; (ii) strengthening of municipal social programs directed to children in low-income settlements; and (iii) a second stage of the present program, to benefit favelas and irregular subdivisions not included in the first phase. A related small project is the proposed line of credit to support income generation activities in Rio de Janeiro's low-income settlements, administered by *Viva Rio*, an umbrella organization for various NGOs.

II. THE PROGRAM, ITS COST AND FINANCING

A. Objectives

- 2.1 The objective of the Program is to improve social and environmental living conditions of residents of Rio de Janeiro's low income settlements. This will be achieved by upgrading basic infrastructure and increasing access to urban and social services in the favelas and irregular subdivisions targeted for improvement.
- 2.2 With a coverage of nearly one fourth of the favela population and one third of that of the irregular subdivisions, roughly 340,000 beneficiaries all told, the Program will transform the urban landscape. Through democratizing access to basic services for the low income population the Program hopes to achieve a reduction in the scope of urban marginality problems. The specific objectives include:
- (i) Provide coverage of water and sewerage services, drainage, garbage collection, and public illumination to the residents of approximately 60 favelas and 135 irregular subdivisions;
 - (ii) Improve public access to and ability to circulate within these favelas and irregular subdivisions, through the construction of roads and pedestrian walkways;
 - (iii) Eliminate the incidence of geological accidents particularly in hillside favelas;
 - (iv) Increase the coverage of the municipally managed network of early childhood development centers, through the opening of at least one center to serve 100 children in each of the favelas in the program;
 - (v) Reduce the incidence of vector borne diseases, through improvements in sanitary infrastructure and educational programs.
- 2.3 These objectives, along with performance indicators and their means of verification, are further elaborated in the matrix which presents the Program's logical framework. Also presented is the problem analysis which served as an input in the prioritization of program objectives and activities. (see Annex II-1).

B. Program description

- 2.4 The Program is a multiple works investment project with three components: (a) favelas upgrading; (b) formalization of illegal

subdivisions; and (c) monitoring, sanitary education, and institutional development.

1. Favelas Upgrading (US\$192,000,000)

- 2.5 Urban upgrading and social services provision for some sixty communities, benefitting roughly 220,000 people. For each favela the component will finance an urban development plan, to be widely discussed with community members, followed by the basic infrastructure and urban services required for the transformation of the favelas into regular neighborhoods (see eligible sectors in par. 2.13). In every community an early childhood development center will be opened on a pilot basis. Centers will be run by NGOs, providing places for 100 children ages 0 to 6 years, and the physical basis for the implementation of other social programs.

2. Irregular Subdivisions Formalization (US\$48,000,000)

- 2.6 Basic infrastructure and urban services as well as technical assistance in land titling for approximately 135 subdivisions currently enrolled in a regularization program. The component will provide minimum services required for subdivision legalization, according to the newly approved urbanization standards for low-income settlements. Investments will include water and sewage systems, drainage systems, street paving, street lightning, and tree planting. Technical assistance for land titling will support research of titles, preparation of urbanization plans (PALs) and legal assistance to individual owners.

3. Monitoring, Sanitary Education, and Institutional Development (US\$3,000,000) (see Annex II-2)

a. Program Monitoring and Evaluation

- 2.7 The project will be monitored and evaluated throughout its implementation by the Program's System of Monitoring and Evaluation, under the responsibility of IPLANRIO. These activities will take place at 3 moments of the project cycle: Moment 0 (M_0), Moment 1 (M_1) and Moment 2000 (M_{2000}). M_0 assesses the baseline situation in each community; M_1 takes place six months after each project's completion and includes a survey to assess public satisfaction with the new social and infrastructure services; M_{2000} provides a structural assessment of the social and economic conditions and household access to infrastructure services a few years after the completion of the project in all communities, comparing census data from 1991 and 2000. (US\$ 890,000)

b. Environmental and Sanitary Education

- 2.8 The objectives of the Sanitary and Environmental Education Program are to ensure the adequate use of the sanitary equipment and to educate the population of the settlements benefitted by the Program

on basic hygiene and sanitary habits. Sanitary and Environmental Education Agents will be selected from each community and trained to work in their own neighborhoods in identifying areas of sanitary risk and in carrying out epidemiological surveillance. The program will finance training and supply educational material to be used in Centers for Health Education to be created by the municipality in each community. (US\$ 400,000)

c. Institutional Development

- 2.9 The analysis of technical capacity of the executing and participating agencies indicated the need to strengthen internal organization systems, improve management controls over specific programs and provide training for municipal staff. This technical assistance provided to SMH and SMDS will ensure the effectiveness of activities initiated under the Program and serve to enhance the quality of new and existing social services.

(i) Municipal Secretary of Housing

- 2.10 Includes training and technical assistance in the following areas: (i) procurement and contracting procedures; (ii) project management, monitoring and supervision of works and service contracts; (iii) project supervision and implementation; (iv) project planning and programming. Training will be provided for about 50 SMH professional staff. (US\$ 400,000)

(ii) Municipal Secretary of Social Development

- a. Institutional Strengthening: Includes: (a) diagnosis and preparation of a plan for reorganizing critical administrative functions; (b) development and implementation of a financial and administrative control system and a management and supervision system for SMDS's child-care program; (c) staff training in new systems. (US\$ 600,000)
- b. Implementation of Nutritional Monitoring System (SISVAN): Staff training and equipment for nutritional monitoring of children in municipal child-care network. System will include periodic pediatric follow-up, educational workshops for parents, and referral of at-risk children to health care facilities. (US\$480,000)
- c. Study on Alternative Systems of Child Care Delivery and Evaluation of Existing System: SMDS will undertake a study on home-based child-care delivery ("mães crecheiras") to assess their effectiveness, quality and available mechanisms for partnership between SMDS and home-based child-care providers. Continuing the process begun during Program preparation, SMDS will also conduct a more comprehensive evaluation of the existing child-care centers funded and operated by the city. (US\$80,000)

- d. Income Generation Workshops: SMDS will organize a series of workshops to identify possible income generation opportunities in the favelas benefitted under the program, providing training, and mobilizing support for such activities from NGOs, the private sector and other public programs. (US\$150,000)

4. Project eligibility criteria

2.11 Eligibility criteria to be used in project analysis are:

- a. Investments costs per household should be: in the case of favelas US\$ 4,000 maximum and US\$ 3,500 average throughout program implementation. In the case of subdivisions, US\$ 3,500 maximum and US\$ 2,000 average. Exceptions to these values must be approved by the Bank;
- b. Designs shall be in accordance with norms and recommendations of corresponding regulating agencies, adjusted for the favelas' or irregular subdivisions' environment. Technical solutions should comply with SMH design guidelines ("cadernos de encargos");
- c. The number of families to be relocated cannot surpass 5% of the total number of families in each individual settlement, except if justified and approved by the Bank;
- d. Projects should contemplate provisions for adequate operation and maintenance of the resulting system and related equipment;
- e. Land ownership in the areas where works are executed must be cleared.

2.12 These criteria were developed during project preparation. Some of the sample projects did not comply with maximum cost per family limits and will have to be adjusted to become eligible for Bank financing. Adjustments are less feasible, however, for sample projects which did not meet resettlement limits as projects have already been discussed with the community. An exception will be made for the approval of 5 sample projects which exceeded the 5% threshold.

5. Eligible investments

2.13 The Program will finance preinvestment studies, supervision and management support to the executing agency, direct investment and complementary costs. While the specific sectoral mix will be determined for each community, the following types of works are eligible for financing under favelas or irregular subdivisions components:

- a. Water supply: construction, expansion and rehabilitation of one or more of system parts, including pumping stations, tanks,

supply conduits, distribution networks and household connections.

- b. Sewerage: construction, expansion, and rehabilitation of collectors and household connections, including individual septic tanks when necessary to avoid contamination of receptor body. Condominial system will be used to the extent possible. Community training on use and maintenance of these services will also be financed under the Program.
- c. Street systems: construction, rehabilitation, expansion, pavement and complementary works for roadways, walkways, sidewalks, stairways, small bridges; and nomenclature system for streets and houses. In the case of the largest subdivisions, depending on their importance to traffic flows, streets can be either paved or unpaved. In the later case they will include surface drainage, curbs and cement sidewalks.
- d. Drainage: construction, expansion, and rehabilitation of hydraulic works for storm water control, and flood or landslide protection.
- e. Solid waste collection: construction and supply of ducts and communal storage units, which may be either stationary or portable and storage places for equipment.
- f. Street lighting: installation, expansion and rehabilitation of the street lighting system, including poles, brackets, fittings and lamps.
- g. Hillside stabilization: construction of retaining walls for roadways and pedestrian facilities protection; drainage for controlling water on high grade slope areas; works for protecting flood or landslide areas.
- h. Reforestation: construction of small nurseries, trees plantation, protective fences and barriers. The city will contract community labor recruited locally and employed for 3-4 years to plant and maintain seedlings.
- i. Child-care centers: construction, rehabilitation and expansion of buildings, supply of equipment and installations for child care facilities. In the case of new construction, standard facilities are designed for 100 children ages 0 to 6 years, employing designs with 400 m2 modules (specifications by SMDS)
- j. Community centers: construction, improvement, rehabilitation, and equipment of buildings for activities such as community services, reading and meeting rooms, and training centers.
- k. Parks and sport areas: construction, addition, rehabilitation, and equipment supply and installation of parks and multiple use sports courts and soccer fields.

1. Resettlement: demolition, reconstruction, home construction (42 m2 minimum size), lot purchase, and indemnization for occupants of structures which interfere with project civil works or are located in areas of geological/environmental risk.
- m. Land titling: land surveys, title search, Alignment and Subdivision Plans, legal assistance for preparation of necessary documentation.
6. Selection criteria
 - a. Favelas

2.14 The selection process took place in two stages. Pre-eligibility, whereby: (a) favelas ranging between 500 to 2500 households in size were included due to economies of scale in project preparation; and (b) favelas with extraordinary costs of mitigating environmental risks 3/ or with legal impediments for upgrading on existing sites were excluded. This first cut resulted in a selection of 92 favelas. A second stage of targeting ranked the 92 favelas according to the following criteria:

CRITERIA	VARIABLES	OBSERVATION
Infrastructure deficit	% of households in each community with: - <u>inadequate water supply</u> - <u>inadequate sewage services</u>	<u>adequate water services</u> : only households connected to the general water distribution system <u>adequate sewage</u> : only with sanitary installations for the exclusive use of its residents, connected to public sewer systems or to septic tanks connected to a drainage system; hh with toilets shared by members of two or more hhs and connected to the public sewer system.
Socio-economic conditions	- % of children < 4 years; - % of female-headed hh; - % of hh heads earning up to 1 min. wage per month - % of illiterate hh heads	Average of the four variables used as proxy for socio-economic conditions
Degree of Facility	Ease in completing existing infrastructure (water, sewage, drainage, hillside stabilization and street system),	Factors that reduce the cost and expedite project implementation;

2.15 **Strategic dimension**: Considerations related to (i) complementarity to other projects being implemented nearby or in the same favela, (ii) relative facility of engaging community residents in the project, and (iii) physical clustering of favelas (to take advantage of economies of scale and avoid tensions which might

3/ (a) areas of geological risk; (b) floodprone areas alongside superficial waters; (c) protection strips alongside electrical power lines; (d) alongside federal, state and municipal roads; (e) under overpasses, bridges and pedestrian elevated crosswalks.

result from leaving out neighboring communities) where taken into account in the selection process as strategic factors.

- 2.16 Communities were individually graded from one to five in the first three criteria, with their ranking based on an average of these three grades. The strategic dimension was used to cluster some favelas, to include a few favelas with less than 500 households which were neighboring to favelas of high rank and of similar socio-economic profiles and to adjust the order of implementation of favelas selected through the aforementioned criteria.
- 2.17 From this ranking system -- and applying the investment threshold of US\$ 3,500 per household to estimate the number of households that could be supported by the US\$ 192 million earmarked for this component -- the top rated 60 favelas were selected to be included in the Program. A table containing the ranking of all favelas ordered by priority of inclusion in the Program can be found in Operations Manual (Annex III-1).

b. Irregular subdivisions

- 2.18 The criteria employed for ranking irregular subdivisions to be legalized, included: a) community participation; b) number of beneficiaries; c) date of occupation; d) percentage of actual occupation of lots (priority given to subdivisions with a higher % of occupied lots); e) infrastructure deficit (existence of sewage, water and drainage equipment, paving, street lighting); f) pre-existence of an Alignment and Subdivision Plan (PAL - which greatly expedites property regularization).
- 2.19 The subdivisions were graded from 1 (low priority) to 5 (high priority) for each of the above criteria and ranked in a global matrix which included all 262 subdivisions currently enrolled in the regularization council. Of this universe, roughly half have already been urbanized, leaving 135 subdivisions which require additional infrastructure to comply with the minimum city requirements for regularization (see Annex II-3). The US\$ 48 million earmarked for irregular subdivisions will cover all necessary works in these 135 communities.

C. Program cost and financing

1. Program costs

RIO DE JANEIRO URBAN IMPROVEMENT PROGRAM Estimated Total Cost by Component and Source of Financing (in US\$ 000)				
COMPONENT	SOURCE OF FINANCING			
	IDB	LOCAL	TOTAL	% TOTAL
1.Engineering and administration		22,000	22,000	7.3%
1.1 Projects		13,000	13,000	4.3%
1.2 Management Support		3,000	3,000	1.0%
1.3 Supervision of Works		6,000	6,000	2.0%
2. Direct Costs	178,200	61,800	240,000	80.0%
2.1 Favelas Upgrading	160,000	32,000	192,000	64.0%
2.2 Irregular Subdivisions	18,200	29,800	48,000	16.0%
3. Concurrent Costs		9,000	9,000	3.0%
3.1 Land Acquisition/Expropriations		3,000	3,000	1.0%
3.2 Land Titling and Regularization		3,000	3,000	1.0%
3.3 Education, Monitoring & Inst. Dev		3,000	3,000	1.0%
4. Financial Costs	1,800	27,200	29,000	9.7%
4.1 Interests		25,200	25,200	8.4%
4.2 Credit Commission		2,000	2,000	0.7%
4.3 Inspection and Supervision	1,800		1,800	0.6%
TOTAL	180,000	120,000	300,000	100.0%
Percentage of Total	60.0%	40.0%	100.0%	

2. Program financing

- 2.20 The Program will be partly financed by a Bank loan with the following financial terms and conditions:

FINANCIAL CONDITIONS	
Loan Amount	\$180,000,000
Interest Rate	Variable
Credit Fee	0.75% of Undisbursed Balance
Inspection and Supervision	1% of Loan Amount
Disbursement Period	4 years
Physical Initiation of Works	3.5 years
Grace period	4 years
Amortizing Period	25 years

III. PROGRAM EXECUTION

A. The project cycle

- 3.1 Program execution will be based on an operations manual mutually agreed between the borrower and the Bank (see annex III-1). The two investment components of the Program follow specific project cycles. In the case of favelas the sequence is the following:

1. Project selection and identification

- 3.2 The two-stage selection process (par. 2.13) determined the initial 60 communities to be included in the Program. The municipality has the flexibility to define the order of project execution among the qualified favelas, taking into account complementarity to other programs ^{4/}, proximity of settlements, and pre-existence of cartographic and topographic data, all factors which can expedite overall program implementation.

2. Preparation of urban development plans - discussion w/community

- 3.3 The phase that follows is the most critical and innovative aspect of the project. It consists of the preparation of neighborhood urban development plans or "intervention plans" for each favela. Studies of a broad scope are contracted out to consulting firms, who prepare plans in the following four stages:

a. Diagnostic

- 3.4 Study of the following aspects: (i) locational and historical aspects of the settlement; (ii) assessment of environmental and infrastructure conditions, including areas of geological and environmental risk, conditions of sanitation, drainage, garbage, street systems, energy supply, etc.; (iii) assessment of social services, including health posts, schools, recreation and play areas, and child care and development alternatives; (iv) topographic surveying; and (v) land property analysis consisting of land use maps which identify individual plots. This information is presented in the form of descriptive studies, maps and photographs.

b. Action plans

- 3.5 Based on the community diagnostic, an urban development plan is prepared for each favela according to the Program's **general guidelines**. These guidelines require that the project contemplate an integral solution according to the Program's goals and include basic services of water supply, sewerage, drainage, street system,

^{4/} Such as PRO-SANEAR, a World Bank program providing basic sanitation to some of the same favelas.

solid waste collection and disposal, child-care centers, street lighting and hillside stabilization, parks and community facilities as needed.

- 3.6 Action plans (planos de intervenção) are prepared in the form of studies, models and color plates which facilitate their presentation to the communities. Once SMH has approved the draft plans, they are taken to the communities for further discussion and modification in general assemblies and at smaller consultative meetings. The focal points for the meetings are the residents associations (Associações de Moradores), which serve as the main channel of communication employed by SMH. Community agreement with the principal components of the projects must be obtained before proceeding with the next stage of project preparation.

c. Preliminary drawings

- 3.7 Development of preliminary designs for the proposed projects takes place after the initial proposals have been approved by SMH, and by the community. At this stage initial estimates of total and per household costs of projects are required so that technical and socio-economic eligibility criteria can be applied. In case of costs per households exceeding project thresholds, designs or components must be adjusted to comply with set limits. Plans are required at 1:1000 scale, with some details of sanitation and street system works in 1:200 scale.

d. Working drawings/engineering projects

- 3.8 Once the preliminary drawings have been approved by SMH, having met the cost and technical design requirements, they are further developed into final working drawings, ready for contracting. The preparation of these projects must follow the "Cadernos de Encargos", or guidelines created by SMH to consolidate the peculiar design methodologies of favela upgrading projects. They constitute a unique set of architectural and engineering tools introduced by this Program and serve to document the municipality's years of practical experience in favela upgrading initiatives. The production of these guidelines ensures not only technical consistency for this Program, but that the institutional memory of favela upgrading experience will be preserved for future projects.
- 3.9 In the case of **irregular subdivisions**, project preparation involves only the contracting out of working drawings and engineering projects, since their designs are fairly standard. Contacts with the community to discuss the programming of projects are made during the fortnightly meetings of the Regularization Council and monthly regional assemblies with residents.

3. Project technical analysis and approval

- 3.10 The SMH is responsible for approving the overall project concept, design and budget. Technical analysis will center in both engineering and practical feasibility of the projects with particular attention to: (a) compliance with general and sector specific eligibility criteria; (b) scale and scope of proposed works; (c) demand projections; (d) quality of designs; (e) study of alternative solutions; (f) use of suitable technologies; (g) construction costs and specifications.
- 3.11 Consulting firms will be assisted in obtaining needed approval from sector specific agencies by SMH managers assigned to each project. To facilitate and expedite this process, several measures have been taken including : (i) a provision in the municipal decree that formally creates the Program and gives its actions priority status with participating municipal agencies; (ii) definition of the same priority for water and sewage projects in the inter-institutional agreement signed with the state water company; (iii) delegation of authority from the state environmental agency to its municipal counterpart to analyze and approve projects from the environmental perspective within a specified range of characteristics; (iv) establishment of an ad-hoc technical committee comprised of specialists from all technical agencies involved in project approval. This committee will meet as needed, by request of the SMH, to resolve any pending technical issues in project approval. Once projects have been approved and procurement documents prepared, they are sent to the Bank for approval.

4. Project execution and implementation control

- 3.12 SMH will be the technical coordinator and responsible for implementation of all Program components. It will delegate to participating agencies (RIOURBE, GeoRio, etc.) responsibility for procurement and supervision, while retaining overall responsibility, monitoring and administrative supervision for each project. SMF will handle all financial matters, including budgetary allocation of funds to executing agencies, counterpart appropriation and disbursement procedures with the Bank.
- 3.13 A computerized project physical and financial accompanying system is being developed to assist SMH and SMF in managing the Program. A management consulting firm will be providing assistance in administrative matters throughout the period of Program implementation.

5. Operation and maintenance of services

- 3.14 Operation and maintenance responsibilities correspond to either municipal or state agencies. Comlurb is responsible for providing garbage collection services. It has presented a fully funded plan for solid waste collection within favelas which entails the contracting of community workers through neighborhood organizations

and gives priority to the favelas included in the Program. Drainage and street maintenance is the responsibility of DGVU, a municipal agency, whose maintenance budget was considered sufficient to accommodate the additional favelas and subdivisions benefitted by the Program. The same applied to RioLuz, responsible for street lighting. In the case of child-care centers under the responsibility of SMDS, no new public employees will be required as they will be operated by NGOs and community associations using contracted community labor. It is recommended that the loan contract include a clause requiring the Municipality to submit to the Bank, for a ten year period, the annual plans and budgets for maintenance of works and services financed by the Program for samples of favelas.

- 3.15 With regard to water and sewage systems, maintenance and operation is a responsibility of the Companhia Estadual de Aguas y Esgotos (CEDAE), the state-level water company. Its obligation with regard to the systems to be built under the Program is defined in an interinstitutional agreement signed between the state and municipal governments. Under this agreement CEDAE is to review and approve technical designs of projects financed through the Program and, once they have been completed, assume responsibility for their operation and maintenance. The signing of this agreement constitutes a condition of effectiveness for the present Program. CEDAE is currently complying with its contractual obligation with the Bank, by force of Loan BR 782-OC and 916-CF, to maintain a tariff structure that covers its operation and maintenance costs and debt service.

6. Sustainability of investments

- 3.16 Institutional and financial analysis examined municipal capacity to maintain the infrastructure and operate the social services financed by the Program (see paras. 5.5 - 5.9). Increases in property taxes and garbage collection fees would be sufficient to cover increases in operation and maintenance of municipal services, with the exception of child care services. With respect to critical garbage collection services, the system proposed by COMLURB involving the contracting of local workers through neighborhood associations was reviewed by the team and found feasible, based on its successful implementation in 20 pilot favelas. 5/
- 3.17 The contracting of NGOs was found to be the most cost effective alternative for the delivery of child-care services. The Program will finance no more than 60 centers (one in each favela on a pilot basis), entailing a moderate increase over the 300 centers currently supported by the City. Program supported centers will be subject to much more rigorous supervision and result-based evaluations, and will also serve as springboards for the provision

5/ COMLURB's budget is complemented by general municipal revenues, and subsequently will benefit from the increased property tax revenue and user fees generated by the Program.

of family training programs supported by SMDS. Home-based child care centers and other less costly alternatives will be evaluated by SMDS as complementary means of providing these services within acceptable quality standards.

- 3.18 Social sustainability of the projects will ultimately result from the involvement of community members. The active participation of community members is sought in project definition and design, development of resettlement plans, selection and location of community facilities, and monitoring and evaluation. Community members are also the main providers of labor for the project, as construction workers and supervisors and child-care providers. The community-based team of sanitary education agents plays a key role in ensuring the sustainability of all interventions, with house to house visits providing training and information on maintenance of sanitary infrastructure and garbage collection services. Income generation seminars and land legalization programs are other activities which engage community members and further participation. Overall, an explicit effort has been made to encourage community ownership of the projects, as the best strategy for sustainability.

7. Monitoring and evaluation and mid-term review.

- 3.19 The program will be monitored throughout its implementation and after the completion of the projects through a monitoring and evaluation system (see par. 2.7). Monitoring and evaluation activities and program execution reports shall be submitted to the Bank for analysis on an annual basis. By the end of the second year after the effectiveness date a mid-term review will be conducted to assess progress achieved and identify measures to expedite or adjust Program implementation. In addition to the performance indicators presented in the Logical Framework of the project, the mid-term review will also examine project staffing needs, progress in studies and training components, and results of the FINEP-sponsored research regarding the Program's effect on land-use patterns within the municipality.

B. Technical and Operational Aspects

1. Environmental Quality Control System

- 3.20 An Environmental Quality Control System (EQCS) has been designed to include environmental aspects within each project and to incorporate recommendations of state and municipal environmental agencies. (See also par. 5.19)
- 3.21 Only favelas located in nature conservation units and the irregular subdivisions projects located in areas greater than 50 ha will require licenses by the State Environment Agency 6/. The other

6/ According to State Commission for Environmental Control (CECA) Deliberation n. 3378 of 07/25/95.

projects do not require formal environmental licenses. Nevertheless, although these projects may not be subjected to formal licensing, they will be submitted to an analysis by the Municipal Environment Secretariat (SMAC). Their preparation will take into account an "ex-ante" environmental impact analysis and a proposal of adequate environmental measures to prevent, mitigate or compensate possible environmental impacts. These measures involve among other actions: (a) communication and interaction with the populations; (b) relocation of households; (c) environmental control of the works; (d) reforestation; (e) wastewater treatment; (f) environmental and sanitary education; (g) special land use control.

- 3.22 In order to facilitate compliance with environmental guidelines, SMH will incorporate the appropriate requirements for the preparation of environmental studies to the guidelines for contracting pre-investment projects. Later, during project implementation, the environmental requirements and specifications, proposed during project design, together with the environmental agencies' additional requirements, should be included in the bidding process, assuring its implementation monitoring. These procedures are included in the Program's operations manual.
- 3.23 Should the projects require relocation of houses, the following procedures will be adopted: (i) households to be relocated should be informed of project aims, conditions and benefits, and their agreement obtained; (ii) in the case of transfer, new houses should employ good construction patterns with a minimum area of 42m²; (iii) new houses should be located within the settlement limits or as close as possible to the area; (iv) as an alternative, SMH can provide compensation for buildings; (v) in the case of rented houses, current tenants should be offered the equivalent of three months rent and assistance in finding new homes while owners should be compensated for the building; (vi) units to be partially demolished should be rebuilt, if possible, or the owner should be adequately compensated.

2. Land ownership and property registration

- 3.24 Land ownership in favelas can be either public or private. Land use can also be either public (streets, accesses) or private (residences, commercial establishments). In the case of federal or state government ownership, although not a prerequisite for initiating civil works, the city will secure their transfer from the appropriate agencies. An alignment plan will be prepared and approved by Municipal Decree, demarcating areas of public and private use. Once federal and state lands are so transferred or in the case of municipal lands, the city will give concession rights / to individual owners.

/ Right of use of land, generally for 99 years. Can be transferred with approval of conceding entity.

- 3.25 In the case of privately owned lands the municipality will identify streets and other public spaces and prepare an alignment plan (PA). Once this is officialized through a Municipal Decree, works can legally be initiated. The municipality will also assess the land situation in each favela to determine the age of the settlement. If the settlements are found to be eligible for adverse possession (recognized under the Brazilian Constitution after 5 years of undisputed occupation) the city will assist occupants in the obtention of land titles for privately used plots.
- 3.26 Land ownership is not considered a major factor of tenure insecurity by favela residents. Land regularization entails a lengthy process requiring property registration searches, preparation and approval of PAs and PALs, and legal assistance to individuals for legalization. The program will assist residents in applying and obtaining land titles by finance initial cartographic surveys required for the preparation of PAL's and other subsidiary activities. These activities will be carried out in parallel with project implementation.

3. Procurement procedures

- 3.27 Program implementation will involve two main types of contracts: consulting services for the preinvestment drawings and construction contracts. For each favela there will be at least one service contract and one or more construction contracts issued. Models of procurement terms of reference and conditions for construction works and for services have been agreed with the Bank. IPLANRIO, by delegation from SMH, will be in charge of contracting most preinvestment studies, evaluation studies and topographic surveys, when needed. SMH will be in charge of most of the contracting civil works, except when delegated to RIOURBE, in the case of urban development works in subdivisions and to GeoRio, which specializes in hillside stabilization works.
- 3.28 Following standard Bank procedures, procurement of works in excess of US\$5,000,000 equivalent and of goods in excess of US\$350,000 will be undertaken through international competitive bidding, according to the terms set in the Annex "B" of the loan contract. Procurement of goods and services in lesser amounts will follow national bidding procedures without restriction to the participation of bidders from Bank's member countries. The Borrower has agreed to publicize internationally contracts for consulting services which are greater than US\$ 200,000. The Bank will approve terms of reference and fees of selected consulting firms.

4. Bank's review of projects

- 3.29 The operations manual establishes in detail project review and disbursement procedures. The principle to be adopted is to require ex-ante review by the Bank of the 15 initial projects in each category (favelas and loteamentos) for eligibility purposes. There-after, the borrower will proceed to approve projects on its

own, retaining full documentation for ex-post review as required by the Bank.

5. Recognition of previous expenditures

- 3.30 The municipality of Rio has incurred approximately US\$ 1,000,000 of expenditures for feasibility studies and other activities involved in the preparation of the sample of projects for the Program. These costs will be presented to the Bank for recognition as local counterpart funds.

6. Implementation schedule and disbursements calendar

SOURCE	1996	1997	1998	1999	TOTAL
Bank	35,151	56,456	41,186	47,207	180,000
Counterpart	24,897	31,200	24,891	39,012	120,000
Total	60,048	87,656	66,077	86,219	300,000
% of Total	20.0	29.2	22.0	28.7	100.0

7. External auditing

- 3.31 The Municipality will contract an independent firm to perform annual external performance audits of the Program.

8. Ex-post evaluation

- 3.32 The executing agency is committed to evaluating the results of the Program not only because it will invest an important amount of city resources but because it represents its most ambitious poverty-targeted project. The Program incorporates a monitoring and evaluation system which supplies information on project performance in two different moments: (a) shortly after completion of works, and (b) when the data for the census to be undertaken in the year 2000 becomes available. As a means of ex-post evaluation, the qualitative assessments provided by this system will be made available to the Bank. A special monitoring report will be prepared two years after works completion of the last project.

9. Status of preparation

- 3.33 During project preparation, intervention plans have been prepared and approved by the communities and the executing agencies for 15 of the 60 favelas to be included in the Program, and the initial contracts prepared for completion of works. An annual work plan has been agreed upon with the Bank and the projects for both favelas and irregular subdivisions have been prepared for the first year of execution.

IV. INSTITUTIONAL AND FINANCIAL ANALYSIS

A. Institutional framework for program execution

- 4.1 The borrower will be the Municipality of Rio de Janeiro, which will also be responsible for all counterpart financing. The executing agency will be the Municipal Secretariat of Housing (SMH), assisted in financial administration and budgeting functions by the Finance Secretariat (SMF), through its Assessoria de Recursos Externos.
- 4.2 Other city secretariats and related municipal enterprises will be responsible for specialized works and services. Budgetary allocations will be assigned to participating agencies by SMF on an annual basis, with quarterly revisions, to ensure adequate coordination of and funding for Program activities.
- 4.3 The Executive Group for Low Income Settlements Programs (GEAP), headed by SMH, was established in 1994 to coordinate municipal actions aimed at improving the quality of life in low income settlements, to discuss multisectoral strategies, and to guide municipal housing policy. Assisted by a technical working group that will meet when convoked by SMH to resolve critical execution issues, GEAP provides the forum for inter-agency coordination needed to support the delivery of the integrated package of works and services which comprises the present Program.
- 4.4 A municipal decree will formalize the Program, defining its structure and the roles and responsibilities of participating municipal agencies. It is expected to be issued by September, as it constitutes a condition of loan effectiveness.

1. Implementing Agencies

a. Secretariat of Housing (SMH)

- 4.5 Originally located within SMDS, responsible for slum upgrading and other housing related programs, SMH was created as an independent entity in early 1994. SMH, together with the remaining departments of SMDS, responsible for the provision of social welfare services, represented for many years the only municipal agency working directly with the so-called "informal city".
- 4.6 SMH has 357 employees, including approximately 100 architects and engineers with ample experience in favela upgrading projects. This group's most recognizable program for many years was the paid self-help project ("mutirão remunerado"), which implemented small scale infrastructure works in favelas. The field experience gained in those projects -- more than 570,000 beneficiaries in some 380 communities -- including engineering solutions, which have been compiled in a design guidelines handbook, and agile procedures for

the contracting of community labor, has been applied to the preparation of the present Program .

- 4.7 SMH is organized in three main coordinations: **Community Urban Development**, responsible for infrastructure works in favelas and irregular subdivisions and the continued execution of mutirão remunerado; **Land Regularization and Titling**, responsible for titling and registration of municipal property; and **Resettlement and Emergency Action**, responsible for relocating populations in situations of extreme risk. It also has specific programs, including "Favela-Bairro", irregular subdivisions, temporary shelter for homeless population and others. The Program will be implemented by a special coordination to be established within SMH, making use of the existing structure and human resources.

b. Secretariat of Finance (SMF)

- 4.8 Financial execution of the Program will be the responsibility of the SMF, through its Assessoria de Recursos Externos (ARE), which has gained experience in this role by performing similar functions for the Bank financed Drainage and Digital Mapping Project. It's specific responsibilities include, inter alia, coordination with the Bank (disbursements, record keeping), and internal budgetary coordination (programming, funds appropriation, execution control, etc.).

2. Participating Agencies

- 4.9 Rather than establishing a freestanding project executing unit, the Program aims to support the implementation of existing urban and social services within the informal city, thus remedying past marginalization suffered by low-income settlements. Subsequently, the list of participating agencies covers a wide range of existing entities, who, according to the municipal decree establishing the Program, will bring their services to the favelas and irregular subdivisions to be benefitted.

a. Municipal Secretariat of Social Development (SMDS)

- 4.10 SMDS was restructured in 1994, retaining responsibility for the provision of city-wide social services, but focusing mainly in low-income settlements. Activities of the secretariat are organized by age group of the clientele and by general programs and coordinated at the local level in seven decentralized district offices. With about 2,000 direct employees, SMDS is responsible for activities benefiting more than 75,000 children and their families including programs for: (i) children from 0 to 6 years of age (direct operation of about 90 municipal child-care centers and support of about 200 others through arrangements with community, philanthropic and non-governmental organizations); (ii) from 7 to 14 years (food assistance to families and supplementary education); (iii) from 14 to 18 (job placement, training, and cultural activities); and (iv)

programs for elderly, handicapped, and other disadvantaged groups. General programs include income generation, family support services, and assistance to street children.

- 4.11 An institutional analysis of this agency was conducted during project preparation focusing on internal organization and on methods of service provision. Weaknesses in management and cost control of operations were identified. To address these concerns, a technical assistance component aimed at designing and implementing new management systems as well as revising its organizational chart was included in the Program. The goal is to guarantee quality of new social services to be initiated under the Program (child care and development centers and income generation seminars), as well as to strengthen the capacity of SMDS to administer other activities not directly supported by the Program.

b. IPLANRIO

- 4.12 IPLANRIO is the municipal planning agency, responsible for maintaining the city's statistical, fiscal and geographic information systems, producing statistical analyses and sectoral plans, and providing information technology support for the city government. Its staff of 353 professionals is one of the highest skilled in the municipality. Home to a database on the city's favelas and irregular subdivisions initiated in 1981 and updated in 1992, IPLANRIO is currently implementing a city-wide Geographic Information System, financed by the Bank. The agency will be in charge of implementing the Program's monitoring and evaluation system and of selecting and contracting the consulting firms to prepare urban development plans for the favelas.

c. RIOURBE

- 4.13 The Empresa Municipal de Urbanização (RIOURBE) was established in 1975 as a public enterprise in charge of low-income housing and urban infrastructure projects. The company has vast experience in urban development projects and is currently implementing the drainage and resettlement components of the Bank's financed Drainage and Digital Mapping Project. For the present Program RIORBE has provided support in preparing the final budgets for the favelas projects, and contracted out and supervised the preparation of the subdivision projects for the representative sample. Due to its satisfactory performance and experience in these areas RIORBE is expected to continue this role during Program execution.

d. COMLURB

- 4.14 The Companhia Municipal de Limpeza Urbana (COMLURB) is the municipal public enterprise responsible for solid waste collection and disposal. Garbage collection plans for the favelas prepared by the consulting firms and SMH will be subject to its approval. COMLURB will provide regular solid waste collection services to the favelas and subdivisions included in the Program. COMLURB is also preparing

a plan for dealing with the final destination of the garbage collected in the city. This plan constitutes a condition for financing specific garbage components in the Bank financed Guanabara Bay Sanitation Program (see par. 1.19).

e. GeoRio

- 4.15 The Fundação Instituto de Geotécnica (GeoRio) was established in 1967 to execute hillside stabilization works in the difficult topographic conditions of Rio. Its staff of some 60 engineers has been responsible for more than 3,000 projects throughout the city, and has been widely recognized for expertise in this area. Under the present Program, GeoRio will be responsible for the execution of major hillside stabilization works required for the favela projects and for the approval of plans for smaller stabilization works.

f. Secretariat of Environmental Affairs (SMAC)

- 4.16 This recently created secretariat will be in charge of environmental review and approval of projects to be financed through the Program. With authorization of the State Environmental Agency (FEEMA) SMAC will apply the guidelines developed with Bank assistance for environmental analysis of favela and subdivisions projects. SMAC will also be responsible for reforestation projects in favelas. This initiative has been already tested in scores of favelas, and has received positive external evaluations. The key to its success is the long-term involvement of community members in the care and maintenance of the planted areas.

g. Other agencies involved in the program

- 4.17 Other agencies involved in the program include the Municipal Secretariat of Urban Development (SMU), responsible for the approval of PALs and for addressing the integration of informal settlements to regular city regulation; the Municipal Secretariat of Public Works (SMO), responsible for the maintenance of drainage and street systems; Compania Municipal de Energia e Iluminação (RIOLUZ), a municipal public enterprise responsible for public illumination; and CEDAE, the state water company responsible for the operation and maintenance of sanitation infrastructure constructed under the Program.

h. Participation of NGOs

- 4.18 Community, philanthropic, and non-governmental organizations have a crucial role to play in the realization of Program objectives. These groups will, under supervision of and with financial support from SMDS, be responsible for the operation of the child-care centers financed by the Program. Furthermore, NGOs will help coordinate the income generation seminars to be organized by SMDS, and are likely to be key players in the execution of social services and other activities complementary to the Program. SMDS

maintains a roster of NGOs and other community organizations who are currently involved in social development activities, and involves these groups in their monthly regional planning exercises. As with the public sector entities, it is hoped that civil society groups will prioritize those areas included in the present Program, facilitating the "social acupuncture" which could result from the concentrated application of public and private programs in the targeted communities.

B. Management/technical support

- 4.19 Given the significant expansion in the scale of activities of the SMH, two types of assistance will be contracted out to consulting firms: (a) **Management support**, designed to assist in the development of financial and physical control systems and administrative and logistical support in general (will be provided for both SMH and SMF); and (b) **technical support** in the preparation and analysis of procurement documents and supervision of works. Terms of reference for these contracts have been reviewed and approved by the project team.

C. Municipal financial situation

- 4.20 After an adjustment effort in 1993/94 municipal finances have been restored to a very sound basis. Municipal revenues, which peaked in 1991 have returned to around R\$ 2.1 billion. Recurrent expenditures have been reduced in the last two years, coinciding with the present municipal administration. Personnel costs have been maintained at the reasonable level of about 40% of total expenditures.
- 4.21 Investment levels were particularly high in 1992, the final year of the previous administration. The current administration had to cope with both inherited carryover commitments, fiscal erosion of the property tax base due to indexation problems and outdated cadastral information 8/. The fiscal effort in containing the growth of recurrent expenditures, particularly personnel costs, and restraining capital investments in 1992 and 1993 has resulted in a steady increase of the budget surplus. The significant surplus that has been generated up to the current year is intended to finance an ambitious investment program that includes about R\$390 millions in capital investments in 1995 alone.

8/ Bank financed Drainage and Digital Mapping Project will finance a new land survey for the entire municipality, with important revenue impact.

4.22 The main municipal budget components for the last five years are:

Municipality of Rio de Janeiro: Synthesis of Budgetary Execution 1990-1994 (in R\$ 000s of 1994) (1)					
ITEMS	1990	1991	1992	1993	1994
Revenues	1,852,358	2,249,316	1,836,030	1,472,613	2,183,769
Tax Revenues	586,210	810,818	643,193	405,520	702,340
Current transfers	557,641	399,587	364,866	331,419	408,386
Capital Revenues	69,736	71,861	111,506	90,695	161,876
Other Recurrent (2)	638,771	967,050	716,456	644,880	911,167
Expenditures	1,678,875	2,291,395	2,417,797	1,465,460	1,602,252
Recurrent Expenditures	1,288,781	1,383,691	1,436,189	1,165,932	1,168,874
Personnel	714,645	758,869	714,356	647,074	667,716
Other Recurrent	574,136	624,822	721,833	518,858	501,158
Capital Expenditures	390,094	907,704	981,608	299,528	433,378
Cap. Investment	206,855	488,251	640,352	114,353	164,284
Debt Service	96,544	167,380	82,654	71,865	183,480
Fiscal-Year Expenditures (3)	1,204,497	1,516,439	1,729,850	967,193	1,136,729
FY Surplus (deficit)	173,48	-42,08	-581,77	7,15	581,52

Source: Secretaria Municipal de Fazenda, Rio de Janeiro

(1) Average annual exchange rate of the Real in 1994 was 0.64 to the Dollar.

(2) Includes indexation of financial investments and deposits

(3) Total expenditures minus carryovers

4.23 Deficits shown in 1991 and 1992 were managed by postponing payments to the following year, a common practice in high inflationary periods. Current financial data from the first semester of 1995 show revenues of R\$ 940 million and expenditures of R\$ 811 million. Seasonality in revenues and the increased pace of capital investments account for these results, but financial conditions remain healthy overall.

V. FEASIBILITY OF THE PROGRAM

A. Technical Feasibility

- 5.1 To determine the technical feasibility of the Program, a sample comprised of nine favela projects (11.5% of beneficiaries and 11.7% of investment costs), and four subdivision projects (1.95% of plots and 3.2% of investment costs) was analyzed. The projects are considered technically feasible as explained below.
- 5.2 Consulting firms provided the project designs in compliance with norms and guidance from each sectoral agency, utilizing sound criteria which: (i) employ parameters of commonly accepted use for this type of projects; (ii) guarantee the works' performance and stability; and (iii) facilitate operation and maintenance. Demand forecasting for services considered the demographic and physical characteristics of each project area. When applicable, several alternative solutions that fulfill the technical criteria were studied, and the least economic cost solution was adopted.
- 5.3 The professionals who participated in the preparation and supervision of designs have ample experience with communities of this type. Project design and analysis contemplated: (i) local availability of materials and labor; and (ii) efficiency of construction methods and suitability of equipment for particularly difficult working conditions of favelas.
- 5.4 Costs were estimated based on detailed take offs and unit prices using the EMOP catalog ("Sistema de Custos Unitarios", of Rio de Janeiro State Government). Accordingly, the estimates are accurate within an acceptable range. The projects include technical specifications for construction and feasible execution schedules. Average costs for the favelas and loteamentos projects are:

Table V.1 - Average Cost Per Household (in US\$)				
SECTOR	"favela"		"loteamento"	
Pavement/drainage	854.14	26.66%	1,896.00	58.72%
Water supply	26.94	0.85%	220.09	6.82%
Sewerage	401.641	2.67%	947.68	29.35%
Resettlement	440.32	13.89%	-----	-----
Hillside Stabilization	370.26	11.68%	-----	-----
Child-care Centers	178.47	5.63%	-----	-----
Other sectors	907.59	28.63%	165.19	5.11%
Total Cost	3,170.36	100.00%	3,228.96	100.00%

B. Institutional and Financial Feasibility

1. Institutional feasibility

- 5.5 The SMH staff has been found to be fully capable of executing the proposed Program based on their decade-long experience in favela projects and due to the quality of the sample they prepared for this Program. The scale of operations will remain at the current implementation rate of about 15 favela projects a year. Subdivisions works, of a more standardized nature, will be delegated to RIOURBE, which has extensive experience in such projects. Specialized works have been delegated to the appropriate municipal agencies (GEORIO, IPLANRIO and others). Implementation will be facilitated by the contracting of a management consulting firm to assist in developing and managing computerized information systems, financial controls and logistical support. Supervision of works will be contracted out, thus providing SMH project managers with technical support for on site follow-up of construction activities.

2. Financial feasibility

- 5.6 Financial feasibility assessment found the project's impact on municipal finances to be minimal and the city's capacity to support future financial commitments strong.

a. Program's impact on municipal finances

- 5.7 A study of the Program's budgetary impact was undertaken by SMF. On the revenue side the study considered the incremental effects on tax collections, from property taxes (additional revenues from the registry of new units and increases in property values in areas neighboring program investments) of R\$2.8 million a year and user fees of R\$11.5 million per year. This represents 2.02% of 1994 tax revenues and 0.61% of total revenues (1994 base-year).
- 5.8 For expenditures, the study estimated the additional recurrent costs incurred by the Municipality under the Program as follows:

Table V.2 - Annual Operation and Maintenance Costs (R\$ 000)				
Street Lighting	Garbage Collection	Streets & Drainage	Total Op. & Maint.	% over 1994 Expenditures
803	5,570	3,960	10,335	0.88%

- 5.9 These additional expenditures of R\$10.3 million per year represent less than 1% of municipal recurrent expenditures for 1994 and will be fully covered by additional revenues generated by new taxes and user fees. Incremental recurrent costs for operation and maintenance of child-care centers total R\$11.6 million per year, 1% of 1994 recurrent expenditures, which the municipality has agreed to assume as only marginal cost recovery is expected from this targeted social investment.

- 5.10 Although not offsetting the full increase in recurrent expenditures the Program will expand the city property tax base. Net incremental expenditures are easily within the budget constraint of the municipality.

b. Future commitments

- 5.11 Commitments related to debt incurred up to September 1995, including the present Program, are:

Table V.3 - FINANCIAL COMMITMENTS SCHEDULE (in R\$ Millions)							
ITEMS	1995	1996	1997	1998	1999	2000	After
1. Total Funded Debt Service	220.6	351.7	340.7	247.9	117.6	66.6	518.2
Domestic Borrowing	219.6	349.6	338.6	245.8	115.6	64.5	462.1
International Borrowing	1.0	2.0	2.0	2.0	2.0	2.0	56.1
2. Counterpart to Loans	3.7	30.2	31.0	28.6	35.6	.3	0
3. Total Commitments	224.3	381.9	371.7	276.5	153.2	66.9	518.2

- 5.12 The proportion of total commitments in relation to 1994 recurrent revenues does not exceed 18%. It corresponds to 26% of net savings (recurrent revenues less expenditures), leaving a comfortable operating margin. Local counterpart contributions to the project will total US\$120 million equivalent, to be disbursed over a period of four years, or an average annual contribution of US\$24 million. Considering that city revenues in 1994 were equivalent to US\$ 2.5 billion (at year-end exchange rate) with a surplus of US\$ 1.5 billion, the municipality should have no problems making its annual counterpart contributions.

C. Socio-Economic Feasibility

- 5.13 The economic analysis was used to establish the maximum investment cost thresholds per beneficiary household, which served as an input to establish the Program's scope and coverage, and to guarantee that projects not included in the sample can be evaluated, prioritized, and selected in relatively quick and simple fashion by the program executing agency. Based upon a review of the representative sample, the economic analysis found the projects that will initiate the Program to be feasible except for three favela projects whose designs will have to be adjusted to comply with the US\$4.000 threshold.

1. Poverty Targeting Criteria

- 5.14 The project qualifies as poverty targeted in terms of the Eighth Replenishment mandate, in that it supports slum upgrading and preschool programs. In addition to its overall poverty focus, program design included a more precise targeting exercise,

involving the selecting of settlements with higher socio-economic needs, in an attempt to direct investments to the poorest strata of eligible settlements. (see para. 2.14)

2. Economic Analysis

- 5.15 On the basis of analysis of the representative sample for favelas a maximum threshold of \$US4,000 per family was established, with an average cost of US\$3,170 as presented in Table V.1, and a 25% buffer for contingencies. For subdivisions, an average cost per domicile of US\$2,000 will cover the entire universe currently registered in the Regularization Council.
- 5.16 This maximum investment threshold per household was established in order to allow for flexibility in project design. The ceiling was based upon an analysis of the minimum cost solutions proposed in the representative sample, with unit costs per beneficiary household then compared with estimated benefit streams per household for each type of infrastructure investment. (Table V.4) The cost thresholds thus reflect both technical and economic feasibility conditions. Information on the estimated value of benefits was gleaned from contingent valuation and hedonic estimates of willingness-to-pay for various types of infrastructure provided for other Bank projects in Brazil.

Table V.4 - Cost-Benefit Estimates for Infrastructure Investments		
Component	Present Value of Investments + O & M (US\$/HH/Year)	Willingness to Pay (US\$/HH/Year)
Water Supply		
Favelas	6 - 8	174 ^a
Subdivisions	44 - 60	
Sewerage		
Favelas	88 - 121	134 ^a - 322 ^b
Subdivisions	188 - 257	
Street Systems and Drainage		
Favelas	166	204 ^c
Subdivisions	264	

^a Fortaleza Basic Sanitation, BR-0186, 6/92 (water and sewage)

^b São Paulo Tiete River Decontamination, BR-0173, 3/91

^c São Paulo Drainage, BR-0159, 8/94.

- 5.17 As revealed in Table V.4, the annualized present value of component costs (including operation and maintenance over a 25 year period, with a 12% discount rate), with the exception of street systems and drainage in the subdivisions, is less than the estimated willingness-to-pay for similar types of investments in comparable communities. The upper bound on costs for basic sanitation works assumes yearly operation and maintenance charges of 15% of initial investment costs, the lower bound assumes 7.5%. In the case of street systems and drainage, operation and maintenance costs have been directly estimated by the municipality. The high benefit-cost

ratio, particularly for basic sanitation works, reflects the Program's emphasis on upgrading and complementing existing networks. For the six largest subdivisions (more than 1,000 lots) the Program will pave only the main thoroughfares due to the high cost of this component and the borderline results of the cost-benefit analysis.

- 5.18 In addition to analyzing the economic costs of infrastructure investments, a comparative analysis of costs and quality of various childcare alternatives was carried out using the results of a survey of 15 favelas conducted by SMDS. (see Annex V-2) The study found that municipal child care centers offered the highest quality coverage to favela residents, based on both user surveys and site visit evaluations. The Program will support, on a pilot basis, the expansion of one new center for 100 children aged 0 - 6 in each favela. Intervention plans will prioritize the use of existing structures over new constructions, and services will be contracted out to be executed by NGOs, community, and philanthropic organizations, which was shown to minimize operating and maintenance costs.

D. Environmental Feasibility

- 5.19 The Program was classified by the Environment Committee (CMA) as Category III. An environmental summary has been prepared to review the project's environmental guidelines and analysis criteria. Overall results of the environmental analysis suggest that the Program will have a positive impact. Proposed actions such as water distribution, wastewater and garbage collection will yield improved sanitary conditions. New drainage systems will reduce flood risks and provide stability control for high risk areas. Opening of street systems will improve access, enabling garbage trucks and service cars to enter the areas. Public illumination will lead to better security conditions. Parks, recreational spaces, community and child care centers will encourage social cohesion of community members. Lastly, actions for land regularization will constitute an incentive to households to improve their buildings and lead to an increase in property values.
- 5.20 Potential negative impacts can be avoided or mitigated by applying the following measures, all part of the present Program: (a) communication and interaction with beneficiaries; (b) relocation of households when necessary; (c) environmental monitoring of civil works; (d) worker and community safety during execution of works; (e) urban landscaping and reforestation; (f) wastewater treatment; (g) contention of risk areas; (h) sanitary and environmental education; and (i) land use controls.
- 5.21 Selection and eligibility criteria for the Program ensure that it will only be executed in areas that do not present excessive geotechnical risk and where family relocation needs are minimal. The evaluation of the 13 projects in the representative sample was carried out together with SMAC, according to the methodology of the

Environmental Quality Control System (see par. 3.19). The overall results indicate that the sample projects are environmentally feasible. The only exception refers to Favela Mata Machado that may be submitted to a more detailed analysis, since it is located within a environmental conservation unit.

- 5.22 SMH, in applying environmental guidelines, should: (a) give priority to stabilization works in fragile areas, via reforestation and geotechnical solutions; (b) pay special attention to relocation plans; (c) use community labor in the execution of works and services; (d) include environmental requirements and specifications in the procurement guidelines; (e) promote containment of favelas and environmental monitoring.

E. Impact over Vulnerable Groups: Women and Children

- 5.23 Women and children constitute more than half of the beneficiaries benefitted by Program investments. Provision of basic sanitation, sanitary education, and child-care centers represent investments with particular relevance to these vulnerable groups. Social investments supported by and complementary to the program will be targeted to female-headed households. Direct employment effects for women can be expected through the hiring of sanitary education workers and child-care providers as well as through the hiring of unskilled community labor on construction projects. Child-care centers will also have an indirect employment and income-generation effect for beneficiary mothers. Children in areas affected by the Program will have a better chance of breaking the cycle of poverty, less apt to fall prey to diseases generated by poor sanitary conditions, and more likely to perform better in school in later years.

F. Benefits and Risks

1. Benefits

- 5.24 The most significant benefit is the improvement of living conditions for families directly affected by the Program -- about one third of all households living in substandard settlements in the city. Improvements in the city's environmental quality, both within the settlements and in surrounding areas, can be expected from flood prevention, improvement in garbage collection and better overall sanitary conditions. Measurable results are expected in terms of both health status and community satisfaction.
- 5.25 Tourism is one of Rio's major industries. By improving social, environmental and urban conditions the city will be able to realize its potential in this sector. The present program is but one element of a larger effort to reduce violence in the favelas and the city at large, which includes other social, economic, and law enforcement initiatives. Neighborhood upgrading is hoped to provide social integration of the formal and informal city, reducing the

phenomenon of urban dualism and the sense of disenfranchisement felt by many residents of favelas and irregular subdivisions.

- 5.26 Finally, the program represents a significant advance in terms of integrated urban/social planning. Its planned interventions, community participation and targeting methods, engineering techniques, and monitoring methodologies may constitute a replicable model for other local governments in addressing urban marginality problems.

2. Risks

- 5.27 The program requires a large number of relatively complex interventions, in both engineering and social terms. Working in favelas requires unorthodox construction methods, and also demands special care in dealing with the social order in these communities. The threat of violence remains a significant consideration which could disrupt the progress of civil works. This would mean delays in specific projects but would not affect the Program as a whole, which overall has great support from participating communities.
- 5.28 Implementation will entail issuing a large number of contracts in a relatively short period of time. It will also require a great deal of coordination among municipal agencies. City employees are in general poorly paid, and attrition could be a problem, particularly if private sector demand for professionals with experience working in favelas increases as a result of this Program.
- 5.29 Although the risks of financial constraints affecting the municipality must be considered, this will entail an unlikely reversal of the sound financial policies pursued by the last two administrations. A total reversal of municipal policies concerning low-income settlements by future administrations, although unlikely, is also a possibility.
- 5.30 Risks are minimized by the considerable boost the executing agencies have received in organizational resources, management and technical support. Activities financed under the Program have been more fully incorporated into the municipality's mainstream administrative structure, and are thus able to draw upon the expertise of specialized city construction units and service providers. To assist in the Program's implementation, support for procurement, supervision and management systems for civil works will be provided throughout its execution.
- 5.31 For working with local communities, the program relies upon the experience of project managers from SMH and SMDS, who have been involved in similar projects for many years. Entry to favelas is sought via the neighborhood associations, which have proven to be an effective channel for mobilizing support and participation of community members.

LOGICAL FRAMEWORK OF THE PROGRAM

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
<p>the quality of life of the urban population of Rio de Janeiro, by increasing the availability and coverage of urban and social services for regular subdivisions.</p>	<p>Level of satisfaction of low-income settlement's population with:</p> <ul style="list-style-type: none"> - spatial/environmental changes resulting from the project - Reduction in diseases resulting from poor sanitary conditions - Reduction in number of cases of diarrhea in infants 	<ul style="list-style-type: none"> - Public Opinion Surveys - Survey on Sanitary Education - Demographic Census 2000 - SISVAN 	<ul style="list-style-type: none"> - Sustained Economic Growth - Community participation in the improvements in life conditions - Urban and environment controls - adequate population density
<p>and widen the coverage of sanitation other essential urban services; improve access to and within settlements; increase child-care service coverage and sanitary and environmental education through adequate education</p>	<p>INFRASTRUCTURE AND URBAN SERVICES:</p> <ul style="list-style-type: none"> - 100% of residents with access to water, sewage and garbage collection services - 70% of residents have improved access to and within settlements; - Risk of geological accidents eliminated <p>SOCIAL SERVICES:</p> <ul style="list-style-type: none"> - 30% increase in the number of children attending municipal day-care centers; - 85% overall reduction in the incidence of vector borne and water borne diseases in children; - 90% of children attending child-care have adequate nutritional indicators; 75% of these children present adequate psico-motor and emotional development indicators. 	<ul style="list-style-type: none"> - CEDAE - Annual Follow-Up Reports - Geo-Rio Data - Comlurb Records on complaints - Mun. Secr. Soc. Devel./Mun.Secr. Health - SISVAN - Survey on Sanitary Education - Mun. Secr. Housing - Records on titles issued 	<ul style="list-style-type: none"> - Enforcement of Agreement with the Municipality concerning operation and maintenance of water and sewage services - Improvements in work conditions of municipal servants - Implementation of policies to improve living conditions and eliminate the impact of drug trafficking in low income settlements - Political compatibility between the Municipality and the Municipal Governments and the
<p>Infrastructure and Equipment Built and Installed; Strengthening and Training of Municipal Staff; and Evaluation System Implemented</p>	<p>For approximately 60 Favelas and 135 subdivisions:</p> <p>SANITATION AND URBAN INFRASTRUCTURE:</p> <ul style="list-style-type: none"> - 100% households in each community connected to public water and sewage systems; - Garbage collection services implemented in 100% of settlements; elimination of non-collected garbage; - 90% of streets and pathways in communities paved; - 100% of streets and 60% of pathways in favelas have public lighting; - all favelas have at least one sports area implemented; - geological risk eliminated in 100% of favelas <p>SOCIAL SERVICES:</p> <ul style="list-style-type: none"> - 100% of favelas with at least one day-care center - 100% of day-care centers provide adequate nutritional and psico-motor development to children - 100% of residents have received sanitary and environment education <p>LEGAL ASPECTS:</p> <ul style="list-style-type: none"> - 50% increase in the number of legally owned property - 50% increase in property taxes collected 	<p>Municipal Secretariat of Housing:</p> <ul style="list-style-type: none"> - Annual Monitoring and Follow-Up Reports - Adm. Records of Approved Projects under Implementation - Comlurb records on residents complaints - Mun. Secretary of Social Development: - Registration Records - SISVAN (w/Mun. Secr. of Health) - Public Opinion Surveys - Municipal Secretary of Housing - adm. records on titles issued 	<ul style="list-style-type: none"> - Financial stability at the municipal level to ensure regular flow of financial resources for the program - High level of community involvement in the definition and execution of projects - equipment maintenance - Effective standards and instruments for monitoring and control - Cooperation between the municipal and state levels of government, in project implementation and land property and other matters - Issue of complementary legislation concerning constitutional articles 156 and 182; Approval of new State Law

RIO DE JANEIRO URBAN UPGRADING PROGRAM (PROAP-RIO)

OPERATING REGULATIONS

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RIO DE JANEIRO URBAN UPGRADING PROGRAM (PROAP-RIO)

OPERATING REGULATIONS

I. INTRODUCTION

- 1.1 The purpose of the present regulations is to govern the execution process of the RIO DE JANEIRO URBAN UPGRADING PROGRAM (PROAP-RIO), establishing the responsibilities and procedures to be observed by the various agencies that will be involved in carrying out the operation.

II. BASIC DEFINITIONS

- | | |
|---------------------------|---|
| 1. Municipality/Borrower | The Municipality of Rio de Janeiro. |
| 2. Bank or IDB | The Inter-American Development Bank. |
| 3. Executing Agency | The Municipal Housing Secretariat.
F/ACR. Financing Advisory Unit. |
| 4. Program or PROAP-RIO | Rio de Janeiro Urban Upgrading Program. |
| 5. Favelas | Areas occupied mainly by clusters of low-income dwellings, with few urban infrastructure and services, located in narrow and winding streets on lots of irregular size and shape where the construction has not been permitted and does not conform to legal standards. |
| 6. Irregular Subdivisions | Parceling and dismemberment of lots in contravention to federal, state and municipal regulations governing such matters. |
| 7. Preinvestment | Action designed to produce, as an end product, the architectural and engineering designs that will be used as the basis of the technical files for program works. |
| 8. Pre-eligibility | An indicator that a given settlement might be included in the program. |
| 9. Eligibility | An indicator of IDB participation in the activities to be conducted under the program. |

10. **The Project**

The group of measures (complete or partial) defined that will make it possible to carry out the investments in the **program**.
11. **Agency**

A public agency that is directly or indirectly administered or consists of a foundation which takes part in executing the **program**.
12. **Consultant**

An individual or legal entity that provides professional services (advisory support, projects, studies, etc.) pursuant to a contract.
13. **Contractor**

A legal entity that undertakes to execute certain works pursuant to a contract.
14. **Contracting party**

The person or agency that engages a consultant or **contractor** to perform certain tasks pursuant to a contract.
15. **SMH**

Municipal Housing Secretariat.
16. **SMF**

Municipal Secretariat of Finance.
17. **GEAP**

Executive Group for Low-Income Settlement Programs, which consists of representatives of the following agencies: SMU, SMH, SMO, SMDS, SMAC, SMF, IPLANRIO, COMLURB, and PGM.
18. **SMDS**

Municipal Social Development Secretariat.
19. **SMU**

Municipal Urban Development Secretariat.
20. **SMO**

Municipal Public Works and Services Secretariat.
21. **SMAC**

Municipal Environmental Secretariat.
22. **PGM**

Municipal Attorney General's Office.
23. **IPLANRIO**

Municipal Data Processing and Planning Corporation S.A.
24. **RIOURBE**

Municipal Urban Development Corporation.

- | | |
|-------------|--|
| 25. GEO-RIO | Rio de Janeiro Municipal Geotechnical Institute. |
| 26. COMLURB | Urban Solid Waste Company. |
| 27. RIO-LUZ | Municipal Street Lighthning Company. |
| 28. CEDAE | State Water Supply and Sewerage Company. |
| 29. CEF | Federal Savings Bank (Caixa Econômica Federal). |

III. THE PROGRAM

- 3.1 The program will be carried out in low-income settlements called "favelas" (shantytowns) or irregular subdivisions in order to provide them with urban infrastructure and basic social services.

A. Program components

- 3.2 PROAP-RIO will consist of three components: (a) urban development of slum areas (favelas); (b) regularization of subdivisions; and (c) monitoring, sanitary and environmental education, and institutional development.

1. Urban development of favelas (US\$192,000,000)

- 3.3 This component consists of urban development works and the provision of social services and support for property and urban registration for some 60 favelas, thereby benefiting approximately 220,000 persons. For each favela, financing will be provided to prepare a local urban development plan, which will be discussed at length with members of the community. Basic infrastructure works will then be built and the services required to transform the favelas into normal community neighborhoods will be introduced. Each beneficiary favela will be given a child-care facility (creche) capable of accommodating 100 children of six years of age and under. Support for property registration will include the preparation of Alignment and Subdivision Plans (PAs), registration of streets and public pathways and legal assistance for land legalization to occupants.

2. Regularization of Irregular Subdivisions (US\$48,000,000)

- 3.4 This consists of the implementation of basic urban infrastructure and urban services, accompanied by technical assistance in the regularization of property lines for land that is now listed in the Subdivision Regularization Body. The infrastructure works should suffice to serve roughly 135 subdivisions which lack the minimum

services required by municipal law for regularization purposes. The investments will include water supply, sewerage and drainage systems; paving; street lighting; and tree planting. The technical assistance for regularizing property status will include title search, the preparation of alignment and subdivision plans (PALs), and legal guidance for the owners.

3. Monitoring, sanitary education, and institutional development
(US\$3,000,000)

3.5 The component consists of the following subprograms:

a. Monitoring and evaluation of PROAP-RIO

3.6 This subcomponent will finance a mechanism operated by IPLANRIO to monitor and evaluate the program. These activities will be performed in three stages: M_0 to be carried out when the basic situation of each community in regard to the existing services is established; M_1 which takes place six months after the end of each project and includes a study to assess the community satisfaction with the services established; and M_{2000} , which will provide an evaluation of social and economic conditions and the residents' access to infrastructure for years following completion of the project in all the communities, comparing data from the 1991 census with those from the one in the year 2000. (US\$890,000).

b. Environmental and sanitary education

3.7 The environmental and sanitary education program carried out by the SMH is designed to ensure proper use of sanitary facilities and impart basic concepts of hygiene and sanitary habits to the population benefiting from the program. Environmental and sanitary education agents will be selected and trained to work in their own neighborhoods to identify areas of sanitary risk and to serve as epidemiological observers. (US\$400,000)

c. Institutional development

i) Municipal Housing Secretariat

3.8 This includes training and advanced studies for about fifty SMH professionals in the following areas: (i) procedures for bidding and the contracting of works and services; (ii) project management and the supervision and monitoring of contracts for works and services; (iii) supervision of project execution and implementation; and (iv) project planning and programming. (US\$400,000)

ii) Municipal Social Development Secretariat

- a. Institutional strengthening: Contracting of consulting services for: (a) a diagnostic study and proposed plan for reorganization of critical administrative functions; (b) the development and implementation of an administrative and financial control system and a system for management and supervision of the SMDS child-care program; and (c) the training of staff in the new systems. (US\$600,000)
- b. Implementation of a nutrition monitoring system (SISVAN): Staff training and equipment designed to monitor the nutritional status of children who come to the municipal day care facilities. The system will include pediatric follow-up, educational workshops for parents and referral of at-risk children to health care facilities. (US\$480,000)
- c. Study on alternative systems of child-care services and evaluation of the present system: The Municipal Social Development Secretariat (SMDS) will produce a study on the home-based child-care delivery to assess its effectiveness, quality and possible ways for the SMDS to assist the centers that provide such care. The SMDS will also conduct a more comprehensive evaluation of the day-care centers financed and operated by the city. (US\$82,000)
- d. Income generation workshops: SMDS will organize a series of workshops to identify possible income generation opportunities in the favelas that benefit from the program, providing training and helping to mobilize support from NGOs and the private sector for these activities. (US\$150,000)

B. Eligible Investment Sectors

- 3.9 The following types of investment will be eligible for financing under the program, in both favelas and irregular subdivisions:
- a. Water supply: construction, expansion and rehabilitation of one or more components of the system, including pumping stations, tanks, supply lines, distribution networks and household connections.
 - b. Drainage: construction, expansion and rehabilitation of collector mains and household connections, including individual septic tanks when necessary to avoid contamination of the receptor body. A condominal system will be used whenever possible. Community training in the use and maintenance of these services will be provided by the program.

- c. Street systems: construction, rehabilitation, expansion, paving and complementary works for roadways, walkways, sidewalks, stairways and small bridges; and a nomenclature system for streets and houses. In subdivisions with more than 1,000 lots, the streets may be paved or unpaved – depending on the volume of traffic. If left unpaved, they will include surface drainage, curbs, gutters and cement sidewalks.
- d. Drainage: the construction, expansion, and rehabilitation of hydraulic works for storm water control and protection against flooding and landslides.
- e. Garbage collection: construction and supply of garbage ducts and communal storage units for garbage (such as dumpsters), which may be either portable or stationary; and the construction of sheds in which equipment may be stored.
- f. Street lighting: the installation, expansion and rehabilitation of public lighting systems, including poles, brackets, fittings and lamps.
- g. Hillside stabilization: the construction of retaining walls; drainage facilities to control water where slopes are steep; and other civil works to protect areas subject to flooding or landslides.
- h. Reforestation: the construction of small nurseries, places to plant trees, protective fences and barriers, using the system of paid community helpers, recruited for periods of three to four years.
- i. Child-care centers: the construction, rehabilitation and expansion of buildings and the equipping and outfitting of premises to be used as child-care centers. In the case of new construction, standardized models designed for 100 children of up to six years of age, using designs for 400 m² of space (in accordance with SMDS specifications).
- j. Community centers: construction, improvement, rehabilitation and outfitting of buildings for community activities, reading rooms, meetings, and training activities.
- k. Parks and sports areas: construction, addition, rehabilitation and the provision of equipment and facilities for parks plus multiple use courts and soccer fields.
- l. Resettlement: demolition, reconstruction, and construction of houses (minimum size: 42 m²); the purchase of lots and payment of compensation to occupants of structures that interfere with the project's civil works or are located in areas of geological or environmental risk.

- m. Land titling: land and topographical surveys, title search, alignment and subdivision plans (for subdivisions) and Alignment Plans (for favelas), and legal assistance in preparing the documents needed for titling.

IV. AREA SELECTION CRITERIA (pre-eligibility)

- 4.1 The criteria described in this section were adopted to select the settlements and determine priorities for their inclusion in the **program**. The results of that selection are described in Table I of these regulations.

- 4.2 Each of the favelas and irregular subdivisions was individually selected in accordance with the following criteria:

A. Favelas:

1. A favela should have between 500 and 2,500 households.
2. Infrastructure deficit, estimated on the basis of the percentage of households with inadequate water supply and sewerage service;
3. Socioeconomic needs, evaluated for each favela on the basis of the following factors: the percentage of heads of family earning up to the minimum wage; the percentage of heads of households who are illiterate; the percentage of households headed by women; and the percentage of children four years of age and under;
4. Degree of facility, or the extent to which the site has been developed and the cost and complexity of adding/ completing the required infrastructure; and
5. Strategic considerations, which takes into account the existence of complementary programs already planned; location of the settlement in relation to other programs planned in the surrounding area; and the feasibility of completing the project on schedule.

B. Irregular subdivisions:

1. Community participation, as evidenced by its part in the Subdivision Regularization Cluster;
2. The number of beneficiary families in each subdivision;
3. The percentage of lots occupied;
4. The estimated overall cost of the works;

5. The availability of urban infrastructure;
 6. The age of the subdivision; and
 7. The existence and situation of the alignment and subdivision project (PAL).
- 4.3 In the case of subdivisions, the criteria were used to determine the order of priority for executing the projects. The goal of this component is to accommodate the majority of 135 subdivisions registered in the council that require civil works for regularization purposes.

V. TECHNICAL ELIGIBILITY CRITERIA

- 5.1 The following technical eligibility criteria must be met by the projects to be financed by the **program**:
- a. The cost of investments by home must not exceed: (1) in the case of favelas, an average of US\$3,500 and a maximum of US\$4,000 for each family, throughout the program execution period; and (2) in subdivisions, a maximum cost of US\$3,500 and an average of US\$2,000 per family throughout the program. Any exceptions to these figures must be approved in advance by the IDB;
 - b. The urban development projects must comply with the standards set by the specialized agencies for projects in favelas, or by their specific recommendations for such cases. The technical solutions must be consistent with those noted in the SMH design guidelines;
 - c. The number of households to be relocated shall not exceed 5% of all homes in each settlement, except when justified and submitted for prior approval from the Bank;
 - d. The projects must include provision for proper operation and maintenance of the systems and works financed by the program; and
 - e. The land status in the areas that will be the site of civil works must be duly resolved prior to the start of each project.

A. Sector criteria

1. Water supply

- a. CEDAE must guarantee to provide a permanent supply of good quality water in the proper quantity by means of household connections; and

- b. The projects must be executed in accordance with the specifications and standards set out in the design guidelines and must be approved by CEDAE.

2. Sanitary sewerage

- a. The projects must call for a complete separation of the storm water drainage system and the site for final disposal of sewage from the sanitary sewer system; and
- b. The projects must be executed pursuant to the requirements and norms of the design guidelines, and must be approved by CEDAE.

3. Street systems

- a. The project must include the installation of blocks of streets, with curbs, gutters, and drainage systems when needed;
- b. The geometric and structural use of the soil must adhere to the norms and specifications of the design guidelines;
- c. The paving must have at least ten years' useful life, and alternatives which respect the technical and least-cost criteria must be taken into account; and
- d. The streets must not be paved until work has finished on the water supply, sanitary sewerage, and micro-drainage systems.

4. Storm water drainage

- a. The drainage systems must be separated from the sanitary sewerage collectors; and
- b. The projects must adhere to the norms and specifications of the design guidelines and must be approved by the SMO.

5. Garbage collection

- a. The plan must be drawn up in accordance with the SMH guidelines and COMLURB norms and specifications and submitted to that agency for approval.

6. Hillside stabilization

- a. The projects must meet the GEO-RIO and SMH standards and recommendations and must be submitted to that agency for approval.

7. Parks and sports and recreation areas

- a. The projects must be executed pursuant to the specifications and standards of the SMH design guidelines.

8. Child-care facilities (creches)

- a. Minimum effective demand must exist to justify establishing the child-care center in the area identified for locating the facility;
- b. The availability of the requisite staff to operate the child-care must be ensured;
- c. The site where the child-care center is to be built must not be subject to flooding or on swampland; otherwise, the necessary defense works must be built. The land must be suitable for construction of the facility, and not subject to possible erosion which might alter its stability status;
- d. Geotechnical studies for the foundations and engineering must be available; and
- e. The blueprints must conform to the program defined by the Municipal Social Development Secretariat and the specifications and norms of the design guidelines.

9. Relocation

- a. Residents to be relocated must be duly informed of the project objectives and the conditions for relocation in order to obtain their consent;
- b. If new residences are to be built, the construction model must be acceptable, occupying at least 42 m²;
- c. New residences should be located in or near the area of the present settlements;
- d. As an alternative, the SMH may offer financial compensation to the residents of the dwellings affected;
- e. When the premises are rented, the present tenants must be given compensation equivalent to three months' rent plus help in finding a new dwelling; the owners should be compensated by the value of the improvements; and
- f. Units that are to be partially demolished or affected by the civil works should be rebuilt, or the owners compensated.

10. Environmental criteria

- a. In general, the projects must meet the requirements set forth in the Environmental Quality Control System.

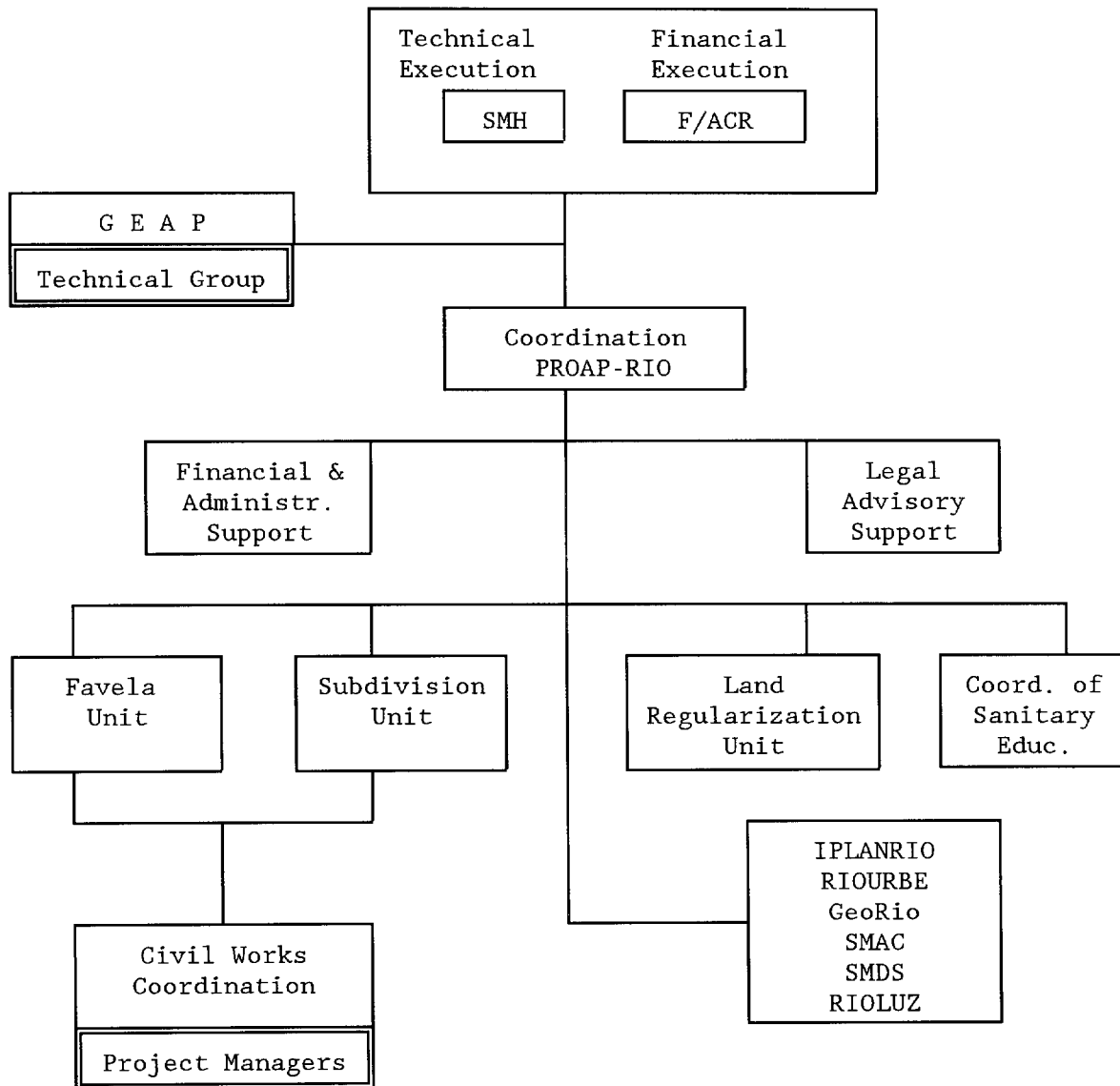
VI. EXECUTION PROCESS, ORGANIZATION AND FUNCTIONS OF PARTICIPATING AGENCIES

A. The execution of program's investments

- 6.1 The different steps which must be carried out to complete a given PROAP-RIO investment will be the following, listed in sequence:
 1. The selection of favelas and subdivisions to be upgraded each year, based on the criteria established for the program.
 2. The identification of valid interlocutors (the municipality and the residents) and announcement of program contents to facilitate initial actions.
 3. The drafting of bills containing the basic data for contracting urbanization studies. (preinvestment)
 4. Completion of the process for contracting consulting firms to conduct the urban development studies, consisting of:
 - a. in the case of favelas: diagnostic studies, action plans, preliminary projects and project execution plans;
 - b. in the case of irregular subdivisions: project execution plans.
 5. In the case of favelas, completion of the first two stages of the preinvestment process (diagnosis of the present situation and drafting of the action plan); in the case of subdivisions: formulation of urban development projects. Support material should be produced to acquaint the community with the global action plan and the preliminary project for each of the favelas involved.
 6. Preliminary approval of the action plans prepared by the consultants for the favelas, to be granted by the SMH.
 7. Distribution of information to the community for its approval of the action plans.
 8. Formulation of the urban development projects (for favelas) by the consultants.

9. Preliminary approval of the project's technical and financial feasibility by the SMH in accordance with the project eligibility criteria. Environmental evaluation of the projects by SMH with support of SMAC.
10. Information concerning the preliminary urban development project to the community.
11. Development of the project execution plans for each investment component.
12. Technical approval of the project execution plans by the competent sector agencies.
13. Presentation of the projects and announcement of the call for bids, to be approved by the IDB (through a declaration of eligibility for investments).
14. Programming and authorization by the executing unit for the public bidding process.
15. Authorization by the Bank for awarding of contracts financed with Bank funds.
16. Bidding by SMH and specialized agencies, contracting and start up of works.
17. Registration by the Bank of the contract signed with contractors.
18. Supervision and inspection during project execution by the contractor and/or project consultant, with follow up by designer, when applicable.
19. Acceptance of works executed by the contractor.
20. Formal acceptance of the works and services performed for operation and maintenance by the competent agencies.
21. Performance of the complementary activities, monitoring, evaluation, etc., in accordance with the approved programming.

B. Execution Structure



C. Organization of the PROAP-RIO executing unit

- 6.2 The **borrower** for this program will be the Municipality of Rio de Janeiro. The execution and technical coordination functions will be assigned to the Municipal Housing Secretariat, with support of F/ACT, which will therefore be responsible for the planning, coordination, and control of its technical and financial execution.

- 6.3 Interinstitutional coordination of the program will be performed by the SMH through the **GEAP**, with full-time assistance from the **PROAP-RIO executing unit**. To carry out this task, the executing unit is authorized to request the **consultant**, the **borrower**, or the participating municipal agencies to provide any assistance, information, or supporting documents considered necessary or helpful, provided that such assistance relates to the program activities.
- 6.4 The SMH, with the support of SMF's External Financing Coordination, will constitute the **PROAP-RIO executing unit**, and will be responsible for technical and financial coordination of the **program**. The Favela Neighborhood Unit, the Irregular Subdivision Unit, the Land Regularization Unit, the Works Coordinating Unit, the Sanitary Education Unit, and the Financial and Accounting Unit will report directly to the **executing agency**.
- 6.5 The **PROAP-RIO** executing unit will serve as liaison with the **IDB** during each implementation stage. These stages may be generally summarized as: **pre-eligibility** information; the request for **eligibility**; the request for authorization or information about the competitive bidding procedures; requests for authorization for awarding of contracts; registration of the contracts; the presentation of requests for **IDB** program funds; preparation and presentation of the periodic reports; and monitoring of full compliance with the general and special conditions of the **IDB** loan.
- 6.6 The Favela-Neighborhood and the Irregular Subdivision units will be responsible for coordinating the activities aimed at attaining the objectives and goals set for the **program**. To that end, they shall:
- Make recommendations to the **PROAP-RIO executing unit** on priority to be assigned to execution of the **program** in the different settlements;
 - Establish relations with the beneficiary community organizations;
 - Request a legal feasibility evaluation of the land regularization procedures;
 - Conduct the **pre-eligibility** evaluation of the settlement.
 - Define and schedule the necessary measures to produce the cadastral and topographical surveys, and the urban and other projects needed to accomplish the **program** objectives in each settlement;
 - Conduct an evaluation of the settlement's **eligibility**;
 - Coordinate action with the Land Regularization unit;

- Coordinate and assign technical priorities with the Works Coordination unit for activities involved in the execution and inspection of civil works;
- Monitor the activities entailed in the respective projects pursuant to the schedules established;
- Establish the coordination measures required for satisfactory operation and maintenance of the works upon completion;
- Coordinate and perform action necessary for any additional activities which may be required;
- Monitor the operation, maintenance, and other activities specified in the respective schedules; and
- Maintain a data base and report each month to the **PROAP-RIO executing unit** on progress of the projects in order to determine the rate of advancement of each projects and stage of the **program**.

6.7 The Land Regularization Unit shall perform the following functions in connection with **PROAP-RIO**:

- Conduct title research on the land on which the populations targeted under the **program** are settled;
- Send monthly reports to the Favela-Neighborhood and Irregular Subdivision units on the progress of all the **PROAP-RIO** projects during the period; and
- Start the activities that will allow each family residing in a settlement subject to **PROAP-RIO** intervention to legalize its occupation of the site where it now lives or the one to which it is to be relocated.

6.8 The **SMH** Works Coordination Unit will perform the following functions in connection with **PROAP-RIO**:

- Prepare the technical documents for the various public bidding packages, in accordance with the modality defined in the agreement with the Favela-Neighborhood or Irregular Subdivision units;
- Program the public bidding procedures;
- Perform and coordinate measures required to carry out the public bidding;
- Draft the technical report proposing award of the contract;

- Coordinate and inspect each of the construction processes introduced for the **program**;
- Administer the works execution contracts assigned to it;
- See to technical monitoring by the consultants and authors of the projects plans in progres, possible adjustments required.
- Draft reports on the monthly progress enabling the Favela-Neighborhood and Irregular Subdivison units to determine the exact extent of compliance with the goals set for each project in the **program**;
- Take an active role in the provisional and definitive procedures for acceptance of the works; and
- Provide qualified technical assistance as needed to support its work.

6.9 The Finance and Accounting unit will perform, as a minimum, the following functions in execution of the **PROAP-RIO**;

- Financial and accounting control of the **program**;
- The preparation of monthly progress reports enabling the **PROAP-RIO** unit to carry out the physical and financial planning of the **program** pursuant to the goals proposed in the loan contract;
- Presentation of annual requests for external auditing of the **program**.

D. Functions of the remaining participating agencies:

- 6.10 The GEAP will be responsible for expediting interinstitutional coordination and will approve the recommendation of the **contracting body** for each **PROAP-RIO** civil work or service. Work proposals will be referred to the GEAP by the **program** executing agency.
- 6.11 The project Working Group will consist of representatives of the SMH, SMU, SMAC, SMO, SMDS, RIOURBE, GEO-RIO, COMLURB and RIO-LUZ. The Group will be coordinated by the SMH, and its main function will be to grant technical approval of proposed projects.
- 6.12 Other agencies may participate in execution of the **PROAP-RIO**, and possible functions to be performed by each – in addition to those described above – will be defined. Such agencies will carry out their functions as indicated by the Municipality in each case, or under specific agreements with the SMH.

SMDS: Responsible for dimensioning, start-up, operation, and maintenance of the child-care facilities that will be built in the favelas or subdivisions in the PROAP-RIO.

SMAC: Responsible for environmental assessment of the projects financed by the program – in some cases, in conjunction with FEEMA – and for the inspection thereof. Also responsible for the execution of reforestation projects.

SMU: Will help to draw up the norms to regulate urban development control of the construction to ensure that suitable urban standards are observed in the favelas and irregular subdivisions; will also inspect and issue licenses for private construction in accordance with the pertinent norms.

SMO: Will perform the functions inherent to its competence in areas of interest for the **program**; will approve drainage projects, and may also serve as the **contracting agency**, to which end it must perform the pertinent functions assigned to the Works Coordination Unit.

IPLANRIO: Responsible for the **program** monitoring and evaluation and for the compilation, treatment and analysis of basic data concerning the **program** settlements. It could also serve as a **contractor** for any studies, projects and services necessary for execution of the **program**, in which case it would assume the pertinent duties assigned to the Works Coordination Unit.

RIOURBE: Will be an alternative choice for executing and contracting projects and works assigned to the SMH, in which case it would perform the functions assigned to the Works Coordination Unit.

GEO-RIO: Responsible for hillside stabilization and containment projects; also for the construction thereof, in which case it will take over the functions assigned to the Works Coordination Unit.

COMLURB: Responsible for performing the tasks of garbage collection, street cleaning, and the hauling and final disposal of household and public waste in each of the **program's** settlement areas.

RIO-LUZ: Responsible for operation and maintenance of the street lighting system and for approval of the project to provide street lighting in the favelas.

- CEDAE: Will be responsible for technical analysis and approval, assigning priority to water supply and sewerage projects executed by the **municipality** in the areas encompassed by **PROAP-RIO**. It will also provide technical assistance for those projects and works construction. Later, it will operate and maintain the potable water supply and sewerage systems, ensuring the quality of those services.
- PGM: Will work with the Land Regularization Unit in the various activities in which its presence is required.

VII. COORDINATION DURING THE EXECUTION PROCESS

- 7.1 The **PROAP-RIO executing unit** will bear responsibility for performing the planning, coordination, and control of the **program**, technical and financial development. It will also be responsible for complying with the commitments undertaken by the Municipality contained in the general and special conditions and the annexes to the loan contract.
- 7.2 The **PROAP-RIO executing unit** will conduct operations through the Favela-Neighborhood Unit; the Irregular Subdivision Unit; the Land Regularization Unit; the Works Coordination Unit; and the Finance and Accounting Unit, all of which report directly to the executing unit.
- 7.3 The SMH shall establish and formalize the necessary linkages with all of the municipal agencies which are to help execute the **program**, whose functions are included in the **municipality's** regular operating system.
- 7.4 The executing unit of PROAP-RIO will act as liason with the IDB in each of the required project execution stages, which can be summarized as follows: - information about pre-elegibility; report of elegibility; request authorization or inform about national or international bidding processes to be implemented, either for contractors or consulting firms; request authorization for contract adjudication; request program's IDB funds; approve contracts, prepare and send to the IDB, periodic reports and ensure the compliance with general and special contractual conditions of the loan agreement with the IDB.
- 7.5 For the specific performance of these functions, the **executing unit** may contract out to third parties all or part of the services required for efficient management of the operation, subject to prior approval of the corresponding terms of reference by the IDB.

- 7.6 A legal pre-feasibility study for land regularization purposes – as well as the technical prefeasibility of the comprehensive urban development solution – will have to be performed. During this stage, the offices coordinating the civil works and land regularization should be asked for their views in order to determine the **pre-eligibility** of the settlement.
- 7.7 The Favela-Neighborhood or Irregular Subdivision units, together with the **PROAP-RIO executing unit**, will propose to the GEAP the municipal agencies that will be responsible for works execution.
- 7.8 Once these agencies have been defined, the Favela-Neighborhood or Irregular Subdivision units will carry out the required procedures to execute the cadastral and topographical surveys and the required urban development studies.
- 7.9 The **unit or agency** charged with execution of the urban development plans will be responsible for returning them, duly approved, to the Favela-Neighborhood or Irregular Subdivision units. The meetings at which the committee approves projects will confirm the designs presented, acting through these coordination units.
- 7.10 The Favela-Neighborhood or Irregular Subdivision units, through the **PROAP-RIO executing unit**, will obtain the declaration of eligibility for investment issued by the Bank. Presentation of the request must include in the substantiating documents an examination of the technical eligibility criteria defined for the program.
- 7.11 Once the declaration of **eligibility** has been obtained, the executing agency will confirm the existence of a budget that will cover any bidding procedures that may be required. The following steps must then be coordinated with the Land Regularization and Works Coordination units. Those units must answer requests using their own staff or through special consulting agreements or contracts if needed, or by calling for bids on the pertinent construction works.
- 7.12 The Finance and Accounting Unit will register the financial data and provide the information necessary to facilitate the planning work to be performed by the **PROAP-RIO executing unit**.
- 7.13 At the same time, the F/ACR will take the necessary steps to administer the program resources in such a way that the special program accounting system and the flows of funds therein are clearly identifiable during the partial reviews conducted by the IDB and/or the annual external audits.
- 7.14 When the **consultants** or the **contractors** have complied with the terms of their contracts, the units or **agencies** that have served as **contracting parties** will inform the Favela-Neighborhood or Subdivision units.

- 7.15 The Favela-Neighborhood or Irregular Subdivision units must perform the necessary coordination activities to ensure proper maintenance and operation of the works or services for which the urban infrastructure was provided. This will include the necessary coordination of the additional support activities under this program.
- 7.16 Throughout the **program**, the **PROAP-RIO** executing unit must see to it that the system for evaluation, follow-up and monitoring and evaluation is kept duly informed by all of the units involved, so that the attainment of goals and the physical and financial progress of the **program** overall and of each project can be ascertained.
- 7.17 The **PROAP-RIO** executing unit will report to the IDB periodically on the status of program progress, as stipulated in the loan contract.
- 7.18 The different **agencies** that take part in the **program** may contract out to third parties all or some of the services required. The expenses incurred by this modality may be charged to the **program**, provided that the norms contained in Annex B to the loan contract are observed and the contracts in question are awarded through a locally announced bidding processing; and that there are no impediments or restrictions to participation by local and international companies and/or **consultants**.

VIII. FINANCIAL AND ACCOUNTING ADMINISTRATION

A. General costs table of PROAP-RIO

APPLICATION AND SOURCES OF PROAP-RIO FUNDS (in US\$000s)				
COMPONENTS	SOURCES OF FINANCING			
	IDB	PCRJ	TOTAL	% OF TOTAL
1. Engineering and Administration		22,000	22,000	7.3%
1.1 Projects		13,000	13,000	4.3%
1.2 Management support		3,000	3,000	1.0%
1.3 Supervision		6,000	6,000	2.0%
2. Direct costs	178,200	61,800	240,000	80.0%
2.1 Favelas	160,000	32,000	192,000	64.0%
2.2 Irregular subdivisions	18,200	29,800	48,000	16.0%
3. Associated costs		9,000	9,000	3.0%
3.1 Land acquisition/Expropriations		3,000	3,000	1.0%
3.2 Land regularization		3,000	3,000	1.0%
3.3 Monitoring, sanitary edu. & inst. development		3,000	3,000	1.0%
4. Financial costs	1,800	27,200	29,000	9.7%
4.1 Interest		25,200	25,200	8.4%
4.2 Credit fee		2,000	2,000	0.7%
4.3 Inspection and supervision	1,800		1,800	0.6%
TOTAL	180,000	120,000	300,000	100.0%
Percentage of total	60.0%	40.0%	100.0%	

8.1 The **program executing unit** will make alternative use of the mechanisms provided by the IDB for disbursing the loan resources. To that end, it will open such special accounts as may be necessary in American dollars and local currency, pursuant to IDB procedures, at the Caixa Econômica Federal (CEF). The denomination of those accounts will be determined by the type of disbursement required.

B. Financial administration of the resources

8.2 The global resources of the **program** – both those of foreign origin and the local counterpart funds – will be managed by the SMF in **special accounts**; and they will be utilized for direct payments to

cover contracting and debt service, or for transfers stemming from contracts executed by other participating agencies.

- 8.3 The resources provided by the loan will be administered through the two municipal accounts indicated below:

1. Special current account at the Caixa Econômica Federal

- 8.4 This current account is set up to receive resources in US dollars from disbursements of IDB foreign exchange. The funds will be withdrawn for conversion into local currency, and then deposited in another municipal account (b) to meet immediate needs.

- 8.5 The movement of funds in this account will be recorded in the periodic reports on progress of the **program**.

2. Current account of "PROAP-RIO IDB Funds"

- 8.6 This current account will receive the funds converted into local currency from the special account at the Caixa Econômica Federal, and used to defray program expenses for those contracts accepted as eligible for financing with IDB resources, direct payments or transfers.

- 8.7 At the same time, the municipal resources (counterpart funds) will be administered by the Municipal Treasury in monthly allotments that will be available in the municipal current account to be opened at the CEF.

3. PROAP-RIO counterpart funds current account

- 8.8 This account will receive the municipal funds earmarked to defray program expenses, including transfers resulting from the contracting of services, civil works and debt service (interest and credit fees).

- 8.9 Movement in the accounts cited above will be posted and controlled by means of the "Program Financial Control" presented in the periodic progress reports.

a. Payments made directly by the Municipality

- 8.10 Payments for services, civil works and debt service will be made directly from the current accounts described above, whether from the IDB loan resources or from the municipal counterpart funds.

b. Payments made by other agencies

- 8.11 Each of the other agencies which serve as contracting parties for execution of the program must open a current account with the CEF that will be used exclusively for the "project" covered by the

contract, in which they will receive resources of the program - either from the loan or from the local counterpart funds - which they will use to make the corresponding payments. Substantiating documents must be sent to the PROAP-RIO **executing unit** no later than five days after such payments are made.

c. Budgetary control of the program

- 8.12 The municipal budget shall clearly establish the resources to be disbursed by the IDB in connection with the "PROAP-RIO Debt to the IDB" once they have been converted into local currency and deposited in the current account bearing that title. Debt service control will be conducted by the Municipal Treasury and entered into the Municipal Records of Credit Operations, which are prepared pursuant to Brazil's Central Bank regulations.
- 8.13 Other **program** expenses will be controlled through the "Financial Control of the Program," the purpose of which will be to allocate expenses in the investment categories identified in the **Program** Financial Table, as well as to monitor activity in the current accounts labeled "PROAP-RIO Funds to the IDB" and "PROAP-RIO Counterpart Fund," plus accounts of the agencies managed indirectly and by foundations.
- 8.14 The monthly figures in the records cited will be included in the periodic progress reports.

d. Disbursements

- 8.15 The current general standards for such procedures will be used to request disbursements from the IDB. Disbursements may be made as advances of funds; for reimbursement of expenses defrayed; or charged automatically to the financing (retroactive financing) as stipulated in the loan contract.
- 8.16 The documents substantiating advances of funds and reimbursement of payments made are to be presented at the IDB Country Office.
- 8.17 The information contained in the request for disbursement must be duly substantiated. The SMF will retain original documents and/or copies of the contracts, orders, invoices, receipts, payment vouchers, measurements or other documents confirming the data specified in the disbursement requests. This documentation must be properly identified and filed and available for review by authorized officers of the IDB and by the external auditors. The documents cited must be kept for at least five years from the date of the final disbursement of the IDB loan.
- 8.18 The IDB Country Office representative, in his inspection visits, will peruse a selective sample of disbursement supporting documents for review purposes. At the time of a technical and/or financial

inspection, a spot check will be made to verify the presence of documents to support disbursement requests and to ensure that the resources included in requests for reimbursement are being used for the purpose stipulated in the loan contract. Should any errors be found, the executing agency must correct them and adjust the corresponding amounts.

e. Accounting control of the projects

1. Project financing

- 8.19 The volume of public bidding on a project will be approved by the **program executing unit** and reported to the SMF so that the corresponding budgetary allocations may be made.

2. Control of contract execution

- 8.20 Irrespective of the agency acting as the contracting party, contracts financed by PROAP-RIO will be monitored by the **PROAP-RIO executing unit** from the time the contract is awarded until its completion date. The results will be included in the progress reports to show the use made of resources expended or received, the balance of the financing, and an itemization of the cancellation until the total amount of the contract has been used.

f. General accounting system of the program

1. Accounting Plan

- 8.21 The executing unit will set up a "Accounting Plan" for the program in accordance with the project's cost components and the financing contemplated in the loan contract.

2. Auxiliary record of projects

- 8.22 Payments for service and works contracts will be posted in advance in the detailed control of contracts and immediately entered into a data base according to the project code and the cost component to which it belongs. All payments will be converted to US dollars at the exchange rate in effect on the date the check is received by the contractor and posted to the loan and/or the local counterpart account.

3. Central accounting record

- 8.23 The reports on the monthly activity in the auxiliary record of projects will be combined in accordance with the prior classification in the respective accounting code (Chart of Accounts) in a data base backed by an accounting voucher. The data base is used to provide the necessary information to draw up the balance sheet for the program as quickly as possible.

4. Presentation of accounts

- 8.24 Substantiation of expenses paid, as part of both the IDB loan and the local counterpart, will be obtained from the auxiliary project record, which will provide itemized reports of payments for each cost component, indicating the IDB share of each.

IX. PHYSICAL AND FINANCIAL FOLLOW-UP

- 9.1 The purpose of the physical and financial monitoring system is to support the PROAP-RIO management function and operating control by providing execution reports required by the IDB for the executing unit and the management executing reports required by each of the agencies involved in execution of the program.
- 9.2 The control function to be performed by the PROAP-RIO executing unit must comply with the basic parameters of timeliness, efficiency, and effectiveness. This will require a management information system with a constantly updated data base to maintain an exact and complete record of the progress (physical, financial and administrative) of each project or activity completed, the agency that did so; and the date on which it was accomplished.
- 9.3 Information about the physical and financial monitoring of each activity or specific project must reflect the planning and original programming conducted as part of the initial program to serve as monitoring indicators. These figures will permit operational adjustment to the program and adoption of the requisite administrative and managerial measures.
- 9.4 The monitoring system must be equipped to provide a status report on all of the program components at any time. This means that the process for entering data into the system must function in a prompt, continuous and reliable manner. Responsibility for such information is borne by each of the participating agencies charged with specific activities financed by the program. The role of the executing unit is to assume responsibility for processing the information and turning out the periodic reports.
- 9.5 The indicators to be produced by the system must be simple, up to date, and easy to interpret. If cross-tabulation is present, instruction as to the way to read and interpret it must be included.

X. MONITORING AND EVALUATION SYSTEM

- 10.1 The most general objectives of the PROAP-RIO Monitoring and Evaluation System are the production of effective socioenvironmental knowledge of the settlements (favelas and subdivisions) comprising the program to permit:

- a. evaluation of the impact of activities performed in connection with the program, which will be used to guide future action for similar purposes.
- b. monitoring of the activities that will be implemented and assessment of their effects as a basis for any corrections that may be indicated in the PROAP-RIO so as to tailor it more closely to the communities' emerging needs; and
- c. assessment of the efficiency of the investments in order to maximize their impact and provide social and public accounts of the PROAP-RIO results.

10.2 The Monitoring and Evaluation System is based on three different modules: Moment 0 (M_0) for each group of settlements entering the project every year, denoting the current situation of each favela and subdivision; Moment 1 (M_1) six months after completion of the M_0 works, to measure the socioeconomic changes that have taken place in each individual settlement as a result of project implementation; and finally, Moment 2000 (M_{2000}) – labeled thus because of its close dependency on the IBGE Population Census in the year 2000 – which features a global assessment of the changes that have taken place in the entire group of program settlements.

10.3 The Municipal Housing Secretariat, which serves as general coordinator of PROAP-RIO, and IPLANRIO, which is responsible for the municipality's planning and information systems, will share responsibility for implementation of the monitoring system, with the latter agency in charge of centralizing the information system.

10.4 IPLANRIO will be assigned the following tasks:

- a. Identification of the indicators to be used and the monitoring and evaluation procedures to be followed, pursuant to the guidelines provided by the program's LOGICAL FRAMEWORK;
- b. Drafting of the announcements and terms of references for contracting the technical services required for execution of the necessary activities;
- c. Contracting and technical, administrative and financial management of contracts with the companies providing services;
- d. Final approval of the studies;
- e. Presentation of the program monitoring reports; and
- f. Coordination of the systematic and periodic discussion of the results obtained by the monitoring and evaluation system, with input from the different agencies participating in PROAP-RIO.

XI. EXTERNAL AUDIT

- 11.1 The PROAP-RIO **executing unit** shall undergo administrative, technical and financial audits by an outside auditing agency operating independently of the public administration. The audit process shall be guided by generally accepted accounting principles and by the IDB norms.

TABLE I: Summary Table of Favela Classifications

FAVELA NAME	DEMOGRAPHIC DATA				SELECTION CRITERIA				STRAT. DIME
	POP. 94	HH. 94	POP. cumul.	HH. $\frac{1}{2}$ cumul.	Soc-Ec Deficit	Infras. Deficit	Degree of Facility	Gen. Ave.	
que Royal	3,115	780	3,115	780	3.00	4.50	4.25	3.92	Favela-Bairro
al das Tachas/Vila Amizade	2,580	637	5,695	1,417	3.00	4.00	3.80	3.60	Favela-Bairro
que Proletário de Grotão	1,992	516	7,687	1,934	4.20	3.50	3.10	3.60	Favela-Bairro
rinha	2,605	633	10,292	2,567	4.20	4.50	2.10	3.60	Favela-Bairro
l. dos Funcionários/Pq. São Sebastião	2,288	579	12,579	3,146	3.00	3.00	3.90	3.30	Favela-Bairro
quinho do Job	2,278	585	14,857	3,730	3.50	3.00	3.40	3.30	Favela-Bairro
ro do Escondidinho	3,737	793	18,595	4,523	3.00	3.00	3.75	3.25	Favela-Bairro
ro da Fé	2,301	588	20,896	5,111	2.50	3.50	3.60	3.20	Favela-Bairro
a Candido/Guararapes/Cerro-Corá	3,158	766	24,054	5,877	4.20	1.00	4.30	3.17	Favela-Bairro
icara de Del Castilho	2,387	625	26,441	6,502	3.50	1.00	4.67	3.06	Favela-Bairro
a Machado	2,170	571	28,611	7,073	1.75	3.50	3.88	3.04	Favela-Bairro
ro dos Prazeres	4,817	1,204	33,428	8,277	3.00	3.00	2.50	2.83	Favela-Bairro
ro União	6,248	1,667	39,676	9,944	2.50	2.50	3.00	2.67	Favela-Bairro
s Pontes	3,776	968	43,451	10,912	2.25	1.50	3.50	2.42	Favela-Bairro
j. Res. Fernão Cardim	3,001	762	46,452	11,675	2.50	1.00	3.70	2.40	Favela-Bairro
elia	3,052	874	49,505	12,549	2.50	5.00	3.00	3.50	Favela-Bairro
ro da Cotia	4,055	921	53,560	13,470	4.80	5.00	4.63	4.81	
ro do Fubá/Morro de Iguaiba	3,092	733	56,652	14,203	4.75	5.00	3.20	4.32	
ro da Cachoeira Grande	5,113	1,285	61,765	15,488	4.00	5.00	3.60	4.20	
que Proletário de Vigário Geral	7,054	1,735	68,819	17,223	3.50	4.50	4.50	4.17	
ro Nova Aliança	2,479	644	71,298	17,867	4.50	4.50	3.50	4.17	
ro São João	4,878	1,240	76,176	19,107	4.50	4.50	3.50	4.17	
ro Proletário do Dique	4,039	1,045	80,215	20,152	3.25	5.00	4.10	4.12	

FAVELA NAME	DEMOGRAPHIC DATA				SELECTION CRITERIA				STRATEGY DIMENSION
	POP. 94	HH. 94	POP. cumul.	HH. 1/ cumul.	Soc-Ec Deficit	Infras. Deficit	Degree of Facility	Gen. Ave.	
Parque do Sossego	2,436	635	82,651	20,787	4.00	4.50	3.75	4.08	
Parque Congonhas/Faz Quem Quer/M. do Sape	5,572	1,399	88,223	22,186	3.60	5.00	3.45	4.02	
Parque Santo Amaro	2,204	608	90,427	22,794	4.00	3.50	4.25	3.92	
Parque Santa	950	230	91,377	23,024	4.00	5.00	2.50	3.83	Favela-Bairro
Parque Siqueira	4,117	1,010	95,494	24,034	3.25	5.00	3.20	3.82	
Parque da Bacia/Encontro	5,640	1,422	101,133	25,456	4.25	4.00	3.13	3.79	
Parque dos Telégrafos	6,308	1,503	107,442	26,958	2.75	4.50	4.00	3.75	
Parque do Maria	2,242	581	109,683	27,539	2.00	5.00	4.00	3.67	
Parque Sapê	3,199	805	112,882	28,344	3.25	4.00	3.70	3.65	
Parque dos Macacos	5,074	1,327	117,956	29,671	3.75	5.00	2.13	3.63	
Parque da Casa Branca	2,656	693	120,612	30,365	3.75	3.00	4.10	3.62	
Parque do Urubu	3,659	927	124,270	31,291	2.50	3.50	4.70	3.57	
Parque do Céu	3,130	798	127,400	32,090	3.50	3.50	3.63	3.54	
Parque da Liberdade	4,535	1,179	131,935	33,269	3.25	4.00	3.38	3.54	
Parque João Paulo II	2,438	628	134,374	33,897	2.00	4.50	4.10	3.53	
Parque Siqueira	6,777	1,751	141,151	35,648	3.75	3.00	3.80	3.52	
Parque Aré	5,386	1,396	146,537	37,044	3.25	3.50	3.75	3.50	
Parque Anália	5,985	1,524	152,522	38,568	2.50	3.50	4.38	3.46	
Parque Vista da Pichuna	3,083	814	155,605	39,382	3.50	3.50	3.30	3.43	
Parque Chico Mendes/Rua 8W 500	1,366	279	156,970	39,662	3.00	4.00	3.25	3.42	Complexo Car
Parque dos Cabritos	2,736	826	159,706	40,488	3.00	3.00	4.25	3.42	
Parque da Barra da Tijuca	2,102	572	161,808	41,060	3.25	3.50	3.50	3.42	
Parque do Boqueirão	3,245	734	165,053	41,795	4.00	3.50	2.75	3.42	
Parque do Moinho	10,379	2,124	175,431	43,919	N/A	N/A	3.40	1.13	

FAVELA NAME	DEMOGRAPHIC DATA				SELECTION CRITERIA				STRAT. DIME
	POP. 94	HH. 94	POP. cumul.	HH. 1/ cumul.	Soc-Ec Deficit	Infras. Deficit	Degree of Facility	Gen. Ave.	
Esperança	4,121	821	179,552	44,739	3.60	2.50	4.10	3.40	
São Jorge	4,008	1,044	183,561	45,783	3.00	3.50	3.63	3.38	
Botafogo/Margem da Linha	5,803	1,421	189,364	47,204	1.75	3.50	4.70	3.32	
ão/São José Operário	2,588	633	191,952	47,837	2.40	4.50	3.00	3.30	
que Proletário Águia de Ouro	3,907	984	195,859	48,821	3.50	1.50	4.88	3.29	Linha Amarela
Vitória/Pq. B. Esperança/Q. Caju/Pq. Quista	6,831	1,694	202,690	50,515	2.90	3.25	3.70	3.28	Projeto Caju
el	7,780	1,983	210,470	52,498	2.75	4.50	2.60	3.28	
M. Fazenda do Mato Alto	3,759	874	214,229	53,372	2.50	3.50	3.80	3.27	
s de Maio	3,073	739	217,303	54,111	4.50	1.50	3.80	3.27	
ro da Formiga	5,469	1,522	222,772	55,633	2.50	5.00	2.25	3.25	
João Lopes	3,700	995	226,472	56,628	1.75	4.00	3.90	3.22	
que Vila Isabel	6,341	1,563	232,813	58,191	3.75	3.00	2.88	3.21	
igal	9,374	2,567	242,187	60,757	2.75	3.50	3.30	3.18	
ro do Juramento	10,179	2,424	252,365	63,181	3.00	4.00	2.50	3.17	
ro do Catumbi	5,919	1,556	258,285	64,737	3.50	3.50	2.50	3.17	
Arara	5,458	1,443	263,743	66,181	4.00	2.00	3.38	3.13	
ro do Dendê	10,639	2,614	274,382	68,794	2.75	2.50	4.10	3.12	
uti	4,973	1,264	279,355	70,059	3.00	2.50	3.70	3.07	
que Candelária	3,232	824	282,586	70,883	3.25	2.00	3.75	3.00	
Campinho	4,225	879	286,811	71,762	N/A	N/A	3.00	1.00	
Sereno/Frei Gaspar 279/M. Caixa gua/M. Car	4,981	1,226	291,792	72,988	3.33	1.75	3.60	2.89	Complexo Car
que União de Del Castillo	3,243	780	295,034	73,768	3.25	2.00	3.40	2.88	Linha Amarela
Mangueiral	3,955	1,060	298,989	74,828	1.75	3.00	3.88	2.88	

FAVELA NAME	DEMOGRAPHIC DATA				SELECTION CRITERIA				STRAT. DIMEN.
	POP. 94	HH. 94	POP. cumul.	HH. 1/ cumul.	Soc-Ec Deficit	Infras. Deficit	Degree of Facility	Gen. Ave.	
éia	4,508	1,190	303,497	76,018	2.50	2.50	3.63	2.88	
ro de São Carlos	7,366	1,987	310,863	78,004	3.00	2.50	3.00	2.83	
Catiri	2,916	754	313,778	78,758	3.00	2.00	3.50	2.83	
Joaniza/Barbante	6,699	1,755	320,478	80,513	2.00	2.00	4.30	2.77	
Eugenia	5,603	1,393	326,081	81,906	3.25	2.50	2.50	2.75	
Turismo	6,048	1,648	332,129	83,554	2.50	1.00	4.63	2.71	
ro da Providência	3,163	827	335,292	84,381	2.75	2.50	2.80	2.68	
ícola/Furnas/Fazenda	1,151	281	336,444	84,662	1.20	4.00	2.80	2.67	APARU-Alto
que Acari	3,446	874	339,889	85,536	3.00	1.00	4.00	2.67	
rada do Tijuaçu	570	144	340,460	85,680	1.60	3.50	2.75	2.62	APARU-Alto
ro da Baiana	2,287	612	342,746	86,292	2.75	1.50	3.60	2.62	
ro do Cariri/Merendiba	4,507	1,209	347,253	87,500	1.25	3.00	3.30	2.52	
Proletária da Penha	8,765	2,248	356,018	89,748	2.75	1.00	3.63	2.46	
arabu	5,444	1,423	361,432	91,172	1.75	2.00	3.50	2.42	
que Oswaldo Cruz	3,300	898	364,762	92,069	1.75	1.00	4.30	2.35	
ão-Pavãozinho	3,306	925	368,068	92,994	2.25	1.00	3.75	2.33	
que Alegria	4,988	1,357	373,057	94,351	3.00	1.50		1.50	Projeto Caju
ro N. S. das Graças	9,483	2,487	382,540	96,838	2.00	1.00	3.50	2.17	
ro da Coroa	3,611	945	386,150	97,783	1.25	1.50	3.10	1.95	
TOTALS									

TABLE II: Classification of Subdivisions and Urban Development Costs

CLASSIFICATION	NAME OF SUBDIVISION	NO. OF LOTS	CUMUL. NO. OF LOTS	ESTIMATED COST ²	CUMULATIVE COST
SAMPLE	N. SRA. DAS GRAÇAS, JRD/18098(2)	1,116	1,116	3,119,190	3,119,190
"	CARIOCA, VILAR/18077 (2)	3,301	4,417	2,912,366	6,031,556
"	MARAVILHA, JRD/26014 (2)	5,877	10,294	10,905,790	16,937,346
"	VILA DAS FLORES / 18005 (3)	108	10,402	285,501	17,222,848
"	ANDRÉ ROCHA / 16062	356	10,758	549,975	17,772,822
"	FILISMINO DE MOURA / 18036 (3)	94	10,852	282,818	18,055,640
"	SÃO PAULO, JRD / 18226	229	11,081	216,958	18,272,598
"	CAM. DO TUTÓIA / 18019 (3)	122	11,203	289,199	18,561,797
"	COND. PLANALTO / 18001 (3)	145	11,348	400,404	18,962,201
"	BAIRRO UNIÃO / 19015	370	11,718	761,919	19,724,120
1	ESTRELA D'ALVA, JRD / 19046	106	11,824	312,072	20,036,191
2	ESTR. DA FONTINHA / 15012	50	11,874	123,935	20,160,127
3	MONTE S. DOS GARCIA, JRD / 18006	209	12,083	112,068	20,272,195
4	ÁGUA SANTA, JRD 13002	69	12,152	173,755	20,445,949
5	GAL AZEREDO / 17076	16	12,168	36,317	20,482,266
6	JORDÃO 893 / 16081	32	12,200	95,456	20,577,722
7	PALMARES, VILA DOS / 18103	482	12,682	524,453	21,102,175
8	ESPERANÇA COND. / 16043	32	12,714	33,294	21,135,469
9	PALLAS 296 / 25021	18	12,732	19,585	21,155,054
10	BOA ESPERANÇA / 16035	44	12,776	43,046	21,198,101
11	BARAÚNA / 22001	42	12,818	86,195	21,284,295
12	MOT. LUIZ DE ABREU / 22031	109	12,927	325,146	21,609,441
13	RUA DOS LIMITES / 17082	49	12,976	120,447	21,729,888
14	MACEMBU / 16085	16	12,992	40,905	21,770,793
15	TRAV FERREIRA DE ABREU / 22035	10	13,002	25,565	21,796,358
16	CAMINHO DO PADRE / 25003	274	13,276	40,736	21,837,094
17	ALVARO CAMPELLO, JRD / 18033	56	13,332	3,967	21,841,061
18	HERD ALZ. CAROL. PEIXOTO / 25031	14	13,346	34,702	21,875,763
19	JÚLIA MIGUEL II / 19118	32	13,378	86,280	21,962,043
20	FAZENDA UNIÃO / 16019	58	13,436	143,765	22,105,808
21	BELA VISTA, JARDIM / 18046	457	13,893	50,158	22,155,966
22	IRACEMA, BAIRRO / 18184	120	14,013	125,900	22,281,865
23	PROJ. I. VILA / 16044	66	14,079	53,346	22,335,211
24	CAMBOATÁ, VILINHA / 22002	24	14,103	7,854	22,343,065
25	PALMARES, CID, JARDIM / 19036	300	14,403	198,487	22,541,551

CLASSIFICATION	NAME OF SUBDIVISION	NO. OF LOTS	CUMUL. NO. OF LOTS	ESTIMATED COST ²	CUMULATIVE COST
26	D. OLINDINA, PQ / 26018	70	14,473	96,237	22,637,789
27	PQ. MORADA DE ANCH / 22013	144	14,617	368,141	23,005,930
28	MORAIS PINHEIRO /22007	27	14,644	80,541	23,086,470
29	CRISTO REDENTOR/COND. N. /22020	105	14,749	309,128	23,395,598
30	LEOCÁDIO DE FIGUEIREDO / 22037	56	14,805	143,166	23,538,764
31	MARIO LOMBARDI, BRR / 18044	319	15,124	22,598	23,561,362
32	MAPUÁ, VILA / 16034	641	15,765	49,889	23,611,251
33	JARDIM VILA / 18254	314	16,079	124,499	23,735,751
34	PACIÊNCIA 1220, ESTRADA/ 18204	73	16,152	31,131	23,766,882
35	SÃO JORGE, BRR / 16017	31	16,183	9,888	23,776,770
36	PÇA. SECA, JRD / 16018	100	16,283	213,008	23,989,778
37	SÃO JOSÉ, JRD / 17045	163	16,446	170,757	24,160,535
38	VITÓRIA, JRD / 19023	69	16,515	145,288	24,305,823
39	BELA VISTA DAS PITANG / 20003	192	16,707	393,130	24,698,953
40	JARAGUÁ / 22011	76	16,783	79,736	24,778,689
41	RODRIGUES CALDAS 2135 / 16029	142	16,925	335,182	25,113,871
42	JRD CRISTINA-CAPRI/22016	50	16,975	104,837	25,218,708
43	SÃO JORGE, PARQUE / 18021	140	17,115	15,366	25,234,074
44	S. CRUZ (L.14), JRD / 19011	401	17,516	143,390	25,377,464
45	OUTEIRO STO. 742 / 16015	30	17,546	17,509	25,394,973
46	PQ. SÃO PEDRO / 17042	50	17,596	97,153	25,492,126
47	BORE / 16003	39	17,635	47,482	25,539,608
48	SÍTIO LARANJEIRAS / 18192	164	17,799	71,407	25,611,015
49	VITÓRIA, JRD / 16002	64	17,863	32,819	25,643,834
50	SOL I. VILA DO / 16039	70	17,933	153,438	25,797,272
51	VILAR GUANABARA II / 18080	25	17,958	61,968	25,859,240
52	POUSADA DOS SABÍAS / 16078	46	18,004	100,439	25,959,678
53	ARAÚJO ROZO / 22036	28	18,032	71,583	26,031,261
54	ATI, VILA / 16024	60	18,092	34,508	26,065,769
55	STA. HELENA / 12009	84	18,176	84,133	26,149,901
56	JRD. II PINHEIRO /22040	87	18,263	153,599	26,303,501
57	CALHARES, VALE DOS / 16052	196	18,459	261,837	26,565,338
58	PRE. BAIRRO VILAR DO / 18142	91	18,550	9,988	26,575,325
59	ALCOBAÇA / 22010	36	18,586	31,648	26,606,973
60	CRASSITUBA / 22012	50	18,636	59,718	26,666,691
61	NOGUEIRAS, PQ DAS / 17027	100	18,736	58,364	26,725,055
62	BELA VISTA II, JRD / 19071	150	18,886	131,866	26,856,921

CLASSIFICATION	NAME OF SUBDIVISION	NO. OF LOTS	CUMUL. NO. OF LOTS	ESTIMATED COST ²	CUMULATIVE COST
63	N. SRA. DA PAZ, JRD / 17079	300	19,186	615,675	27,472,596
64	SÃO JOSÉ, JRD/PQ 17080	140	19,326	170,690	27,643,287
65	SÍTIO STA. ISABEL / 16086	159	19,485	302,422	27,945,709
66	FREI VICENTE / 25036	42	19,527	82,862	28,028,571
67	CAMBOATÁ 3083 / 22018	121	19,648	156,917	28,185,488
68	GUERENGUÊ 1104 / 16050	22	19,670	20,664	28,206,151
69	DANIEL THOMPSON /18233	23	19,693	10,014	28,216,166
70	MACEMBU 511 / 16031	45	19,738	29,517	28,245,682
71	PROF. LUÍS DE M. CAMPOS / 22014	42	19,780	75,786	28,321,468
72	STA. MARIA (VELHO)/ 18187	30	19,810	1,167	28,322,636
73	BELMONTE MORANGA, VILA / 18139	41	19,851	6,095	28,328,731
74	AZUL, VILA / 22019	80	19,931	175,357	28,504,088
75	RUA GUAIBA / 11004	10	19,941	29,830	28,533,918
76	JRD. I PINHEIRO /22039	31	19,972	15,897	28,549,815
77	PROF HENRIQUE COSTA 609/16096	36	20,008	9,230	28,559,045
78	ITALIA D'INCAU/12011	28	20,036	49,434	28,608,480
79	CASTELINHO/ 17071	23	20,059	6,595	28,615,075
80	MANOEL NOG. DE SÁ 245 / 17025	62	20,121	36,186	28,651,260
81	RUA PADRE LUIS RIOU / 18261	20	20,141	53,147	28,704,407
82	BASE, ESTRADA DA / 19083	97	20,238	34,685	28,739,092
83	MANGUEIRAL, PARQUE /18039	40	20,278	119,320	28,858,412
84	LIMOEIROS / 18092	50	20,328	29,659	28,888,071
85	IMPERIAL, VILA / 17019	110	20,438	16,354	28,904,424
86	MANAUS 77 / 17084	50	20,488	159,617	29,064,041
87	OLAVO GAMA, RUA / 26028	50	20,538	149,150	29,213,191
88	OLIMPICA, VILA/ 18217	293	20,831	32,158	29,245,349
89	ALEXANDRINO, BAIRRO/ 19044	50	20,881	149,150	29,394,499
90	PROF. PAULO ROBERTO/ 18158	17	20,898	9,922	29,404,420
91	ESTR DO PEDREGOSO /18265	26	20,924	64,628	29,469,049
92	N. SRA. DAS GRAÇAS VILA /19103	225	21,149	33,451	29,502,499
93	MACABU/JURUMIRIM/25011	50	21,199	149,150	29,651,649
94	RIO PEQUENO / 16082	50	21,249	102,962	29,754,611
95	ANA GONZAGA / 18064 (2)	1,516	22,765	2,897,380	32,651,991
96	FELIZARDO GOMES / 15014	50	22,815	102,962	32,754,953
97	ORTA. LOTEAM. DA/ 17088	50	22,865	131,271	32,886,223
98	JARDIM PIEDADE/17087	50	22,915	127,379	33,013,602
99	VITOR BECHERETE/18056	65	22,980	62,985	33,076,587

CLASSIFICATION	NAME OF SUBDIVISION	NO. OF LOTS	CUMUL. NO. OF LOTS	ESTIMATED COST ²	CUMULATIVE COST
100	PIAÍ/19116 (2)	3,500	26,480	4,491,732	37,568,319
101	SERRA VERDE /18231	178	26,658	530,972	38,099,291
102	AMENDOEIRAS, COND/ 18259	50	26,708	74,445	38,173,736
103	MORAIS PINHEIRO/22032	50	26,758	88,276	38,262,012
104	INDEPENDÊNCIA, JARDIM/25005	50	26,808	24,865	38,286,877
105	CARUMBÉ 152 /17097	50	26,858	50,079	38,336,956
106	MANUEL DE JESUS, TRAV/18089	40	26,898	119,320	38,456,275
107	CARUMBÉ 709/17007	18	26,916	16,628	38,472,903
108	ALAN KARDEC, VILA/25028	56	26,972	167,047	38,639,950
109	XAVANTES, TRAVESSA/17072	50	27,022	84,734	38,724,684
110	IMPERIAL COND/26029	50	27,072	18,229	38,742,912
111	DANIEL THOMPSON (PROJ B) 18224	23	27,095	68,609	38,811,521
112	CARUMBÉ 630-580/17012	50	27,145	5,488	38,817,009
113	HELENA, TRAVESSA /17067	20	27,165	59,660	38,876,669
114	BANDEIRANTES 18080/18080	27	27,192	80,541	38,957,209
115	COND. ESTR DA POSSE/ 18047	22	27,214	83,524	39,040,733
116	ROLLAS, BAIRRO/19035 (2)	3,500	30,714	3,087,937	42,128,670
117	CAMBOATÁ, VI. CAMBOATÁ/22004	50	30,764	149,150	42,277,820
118	VIEIRAS/36500	322	31,086	960,523	43,238,342
119	STA EDWIGES/18264	50	31,136	149,150	43,387,492
120	SÃO BENTO, BAIRRO/17075	50	31,186	149,150	43,536,641
121	GLÓRIA, JARDIM/29026	50	31,236	149,150	43,685,791
122	CORREIA TEIXEIRA/17092	50	31,286	149,150	43,834,940
123	SARG. ANT. ERNESTO 632/25032	50	31,336	149,150	43,984,090
124	RUA SALES/19117	50	31,386	149,150	44,133,239
125	ITÁPOLIS, JARDIM/18111	180	31,566	26,761	44,160,000
135	TOTALS	31,566		44,180,000	

SOURCE: SABREN-IPLANRIO System / SMH Classification - Subdivision Regularization Office

- NOTES:
1. Estimated cost with full urban development
 2. Estimated cost with partial urban development
 3. Budgeted cost based on basic project (RIOURBE)

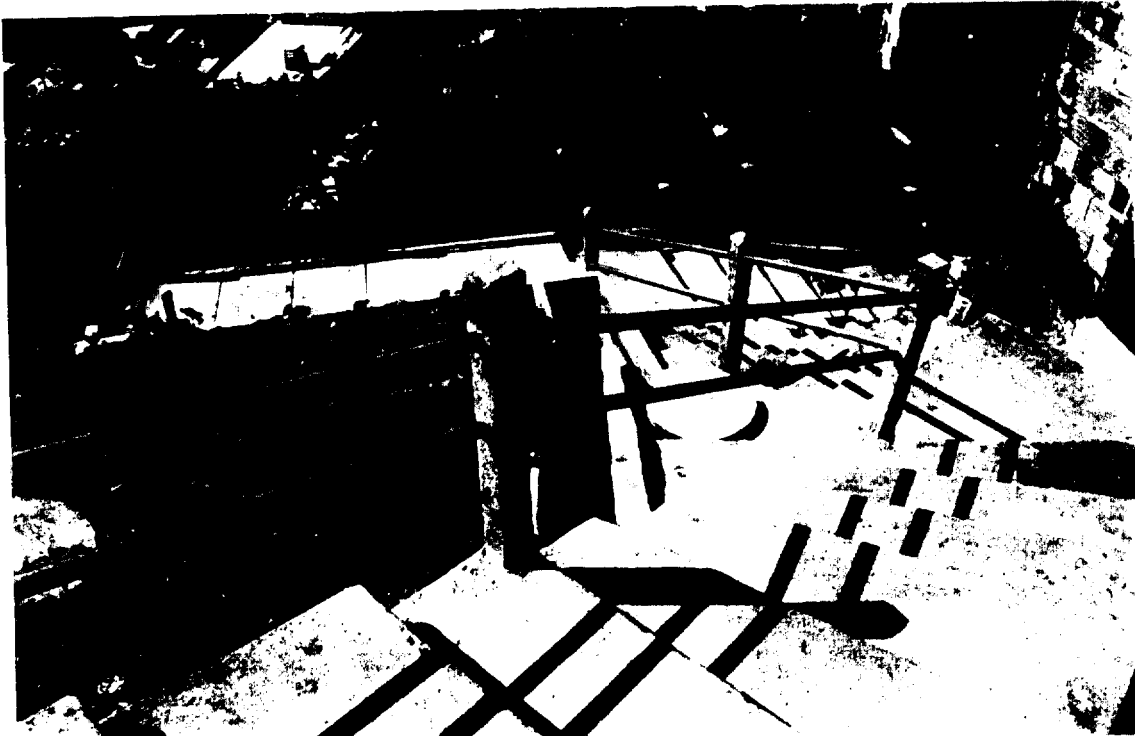


**Stairway, water,
sewage and
drainage works.**





Stairway employing community labor



PROPOSED RESOLUTION

BRAZIL. LOAN /OC-BR. TO THE MUNICIPALITY OF RIO DE JANEIRO
(Rio de Janeiro Urban Upgrading Program)

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with the Municipality of Rio de Janeiro, as Borrower, and the Federative Republic of Brazil, as Guarantor, for the purpose of granting the former a financing to cooperate in the execution of the Rio de Janeiro Urban Upgrading Program. Such financing will be for the amount of up to one hundred and eighty million dollars of the United States of America (US\$180,000,000), or its equivalent in other currencies, except that of Brazil, which are part of the Ordinary Capital resources of the bank, and it will be subject to the "Special Contractual Conditions" and the "Terms and Financial Conditions" of the Executive Summary of the Loan Proposal.