Lesson One—Urbanization

Resources Needed:
• Copies of “Brazilian Urbanization” (Handout 1A)
• Teacher Notes on “Causes of Urbanization” (Handout 1B)
• Class set of “Top 16 Brazilian Cities – Population” (Handout 1C)
• Political map of Brazil (CIA World Factbook – Handout 1D)
• Handout of “Brazilians Pour into Cities, Census Shows” article (available at http://forests.org/archive/brazil/pocicens.htm)
• PowerPoint – Brazil

Anticipatory Activity:
• Ask students what the word urban means.
• Brainstorm list of words associated with “city.”
• Have students give examples from their community.

Activities:
1. Give each student a copy of “Brazilian Urbanization” (Handout 1A).
2. Discuss basic causes of urbanization (see “Causes of Urbanization” – Handout 1B).
3. Using the table (Handout 1C) & map (Handout 1D), have students map the top 10 urban areas of Brazil on their outline map (Handout 1A). Answer these discussion questions:
   o Where are the largest urban areas?
   o What might have led to the rise of cities in these areas?
4. Show the PowerPoint on Brazil. What do the students see? How do these areas compare to their own city?
5. Read “Brazilians Pour Into Cities, Census Shows.” Discuss and list (on Handout 1A) the possible problems/benefits of rapid urbanization to these areas of society: political, social, economic, and environmental.

Concluding Activity:
• Write a postcard home from the perspective of a recent migrant. On the front, draw a picture of the city you have moved to. On the back, write at least 3 paragraphs which include the following:
  o What region in Brazil did you move to?
  o Why did you move?
  o What is your life like in the city?

Texas Essential Knowledge & Skills (TEKS)
Brazilian Urbanization

Label the top 10 urban areas of Brazil on this map:

Where are the largest urban areas?

What might have led to the rise of cities in these areas?
### Reasons for Migration

<table>
<thead>
<tr>
<th></th>
<th>Industrialization</th>
<th>Commercial Response</th>
<th>Migration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Definition:</strong></td>
<td></td>
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<tr>
<td><strong>Example:</strong></td>
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<tr>
<td><strong>Illustration:</strong></td>
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</tbody>
</table>

### How will rapid expansion affect these areas of Brazilian society?

- Political
- Social
- Economic
- Environmental
Causes of Urbanization

Urbanization:

• Industrialization
  o Building of industry brings a need for workers
  o Workers need homes & an infrastructure of support (grocery stores, etc.)

• Commercial responses to industrialization
  o Often areas that were former colonies lagged behind in industrialization
  o They became oriented toward providing commercial services instead
    • Example: Natural resources flowed out of Brazil to the United States and Europe, which provided manufactured goods in exchange.

• Migration
  o Desire to improve economic position (jobs)
  o Lack of opportunity in rural areas
  o Population pressures (too many people, not enough food/jobs)
## Top 16 Brazilian Cities—Population

<table>
<thead>
<tr>
<th>Agglomeration</th>
<th>Population (in millions)</th>
<th>Percentage residing in agglomeration, 2003, as percentage of:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1975</td>
<td>2003</td>
</tr>
<tr>
<td>1. Maceió</td>
<td>0.3</td>
<td>1.1</td>
</tr>
<tr>
<td>2. Vitória</td>
<td>0.5</td>
<td>1.5</td>
</tr>
<tr>
<td>3. Manaus</td>
<td>0.4</td>
<td>1.6</td>
</tr>
<tr>
<td>4. Baixada Santista (Santos)</td>
<td>0.8</td>
<td>1.6</td>
</tr>
<tr>
<td>5. Goiânia</td>
<td>0.5</td>
<td>1.8</td>
</tr>
<tr>
<td>6. Belém</td>
<td>0.7</td>
<td>2.0</td>
</tr>
<tr>
<td>7. Campinas</td>
<td>0.8</td>
<td>2.5</td>
</tr>
<tr>
<td>8. Curitiba</td>
<td>0.9</td>
<td>2.7</td>
</tr>
<tr>
<td>9. Brasília</td>
<td>0.8</td>
<td>3.1</td>
</tr>
<tr>
<td>10. Fortaleza</td>
<td>1.1</td>
<td>3.1</td>
</tr>
<tr>
<td>11. Salvador</td>
<td>1.3</td>
<td>3.2</td>
</tr>
<tr>
<td>12. Recife</td>
<td>1.9</td>
<td>3.4</td>
</tr>
<tr>
<td>13. Pôrto Alegre</td>
<td>1.7</td>
<td>3.7</td>
</tr>
<tr>
<td>14. Belo Horizonte</td>
<td>1.9</td>
<td>5.0</td>
</tr>
<tr>
<td>15. Rio de Janeiro</td>
<td>7.6</td>
<td>11.2</td>
</tr>
<tr>
<td>16. São Paulo</td>
<td>9.6</td>
<td>17.9</td>
</tr>
</tbody>
</table>

Source: The figures presented are from the United Nations estimates and projections as revised in 2003 (*World Urbanization Prospects: The 2003 Revision*).
Lesson Two—Mega-Cities

Resources Needed:
- Political map of Brazil (CIA World Factbook – Handout 1D)
- Copies of “Mega-Cities” (Handout 2A)
- Class set of “Largest Urban Agglomerations (Mega-Cities)” (Handout 2B)
- Teacher Notes on “Mega-City Problems and Solutions” (Handout 2C)
- Class set of “City Profiles” (Handout 2D)

Anticipatory Activity:
- Review chart from previous day. What do the students notice about the size of the cities? How have they changed over time?
- What problems might arise due to the size of the city? List examples of problems from the students’ community.

Activities:
1. Pass out copies of “Mega-Cities” (Handout 2A) to every student.
2. Give students copies of “Largest Urban Agglomerations (Mega-Cities)” (Handout 2B) & the political map (Handout 1D). Have the students map São Paulo & Rio de Janeiro on their worksheet (Handout 2A).
3. Answer these discussion questions:
   - Brazil has two of the largest mega-cities in the world. What impact will these have on Brazil?
   - How big are these cities? What might be problems with having a city with such a large population?
   - Brainstorm a list of possible problems & solutions. (Reference Handout 2C.)
4. Pass out class set of “City Profiles” (Handout 2D). Discuss São Paulo & Rio de Janeiro. Answer these discussion questions:
   - What are the problems?
   - What are some possible solutions?
   - What impact do these cities have on the country of Brazil?

Concluding Activity:
- Write an editorial to the São Paulo Times praising or disparaging mega-cities. Be sure to back up your editorial with facts.

TEKS
# Mega-Cities

A mega-city is a city that has a population of 8 million or more.

<table>
<thead>
<tr>
<th>Problems &amp; Solutions of Mega-Cities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problems</td>
</tr>
<tr>
<td>Illustrate the problem you think is the worst:</td>
</tr>
</tbody>
</table>
## City Profiles

<table>
<thead>
<tr>
<th>São Paulo</th>
<th>Rio de Janeiro</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problems</td>
<td>Problems</td>
</tr>
<tr>
<td>Solutions</td>
<td>Solutions</td>
</tr>
</tbody>
</table>
### Largest Urban Agglomerations (Mega-Cities)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Urban Agglomeration</th>
<th>Population (Millions)</th>
<th>Rank</th>
<th>Urban Agglomeration</th>
<th>Population (Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tokyo, Japan</td>
<td>26.4</td>
<td>1</td>
<td>Tokyo, Japan</td>
<td>35.0</td>
</tr>
<tr>
<td>2</td>
<td>Mexico City, Mexico</td>
<td>18.1</td>
<td>2</td>
<td>Mexico City, Mexico</td>
<td>18.7</td>
</tr>
<tr>
<td>3</td>
<td>São Paulo, Brazil</td>
<td>18.0</td>
<td>3</td>
<td>New York, United States of America</td>
<td>18.3</td>
</tr>
<tr>
<td>4</td>
<td>New York, United States of America</td>
<td>16.7</td>
<td>4</td>
<td>São Paulo, Brazil</td>
<td>17.9</td>
</tr>
<tr>
<td>5</td>
<td>Mumbai (Bombay), India</td>
<td>16.1</td>
<td>5</td>
<td>Mumbai (Bombay), India</td>
<td>17.4</td>
</tr>
<tr>
<td>6</td>
<td>Los Angeles, United States of America</td>
<td>13.2</td>
<td>6</td>
<td>Delhi, India</td>
<td>14.1</td>
</tr>
<tr>
<td>7</td>
<td>Calcutta, India</td>
<td>13.1</td>
<td>7</td>
<td>Calcutta, India</td>
<td>13.8</td>
</tr>
<tr>
<td>8</td>
<td>Shanghai, China</td>
<td>12.9</td>
<td>8</td>
<td>Buenos Aires, Argentina</td>
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</tr>
<tr>
<td>9</td>
<td>Dhaka, Bangladesh</td>
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<td>Shanghai, China</td>
<td>12.8</td>
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<tr>
<td>10</td>
<td>Delhi, India</td>
<td>12.4</td>
<td>10</td>
<td>Jakarta, Indonesia</td>
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<tr>
<td>11</td>
<td>Buenos Aires, Argentina</td>
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<td>11</td>
<td>Los Angeles, United States of America</td>
<td>12.0</td>
</tr>
<tr>
<td>12</td>
<td>Jakarta, Indonesia</td>
<td>11.0</td>
<td>12</td>
<td>Dhaka, Bangladesh</td>
<td>11.6</td>
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<tr>
<td>13</td>
<td>Osaka, Japan</td>
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<td>Osaka-Kobe, Japan</td>
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<tr>
<td>14</td>
<td>Beijing, China</td>
<td>10.8</td>
<td>14</td>
<td>Rio de Janeiro, Brazil</td>
<td>11.2</td>
</tr>
<tr>
<td>15</td>
<td>Rio de Janeiro, Brazil</td>
<td>10.7</td>
<td>15</td>
<td>Karachi, Pakistan</td>
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<td>16</td>
<td>Karachi, Pakistan</td>
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<td>16</td>
<td>Beijing, China</td>
<td>10.8</td>
</tr>
<tr>
<td>17</td>
<td>Metro Manila, Philippines</td>
<td>10.0</td>
<td>17</td>
<td>Cairo, Egypt</td>
<td>10.8</td>
</tr>
<tr>
<td>18</td>
<td>Seoul, Republic of Korea</td>
<td>9.9</td>
<td>18</td>
<td>Moscow, Russian Federation</td>
<td>10.5</td>
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<tr>
<td>19</td>
<td>Paris, France</td>
<td>9.6</td>
<td>19</td>
<td>Metro Manila, Philippines</td>
<td>10.4</td>
</tr>
<tr>
<td>20</td>
<td>Cairo, Egypt</td>
<td>9.5</td>
<td>20</td>
<td>Lagos, Nigeria</td>
<td>10.1</td>
</tr>
<tr>
<td>21</td>
<td>Tianjin, China</td>
<td>9.2</td>
<td>21</td>
<td>Paris, France</td>
<td>9.8</td>
</tr>
<tr>
<td>22</td>
<td>Istanbul, Turkey</td>
<td>9.0</td>
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<td>Seoul, Republic of Korea</td>
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</tr>
<tr>
<td>23</td>
<td>Lagos, Nigeria</td>
<td>8.7</td>
<td>23</td>
<td>Istanbul, Turkey</td>
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<tr>
<td>24</td>
<td>Moscow, Russian Federation</td>
<td>8.4</td>
<td>24</td>
<td>Tianjin, China</td>
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</tr>
<tr>
<td>25</td>
<td>London, United Kingdom</td>
<td>7.6</td>
<td>25</td>
<td>Chicago, United States of America</td>
<td>8.6</td>
</tr>
</tbody>
</table>

A mega-city is defined as a metropolex that contains more than 8 million people.

**Problems Faced by a Mega-City**

- Inadequate Housing (Shantytowns)
  - created informally
  - often on dangerous ground (unstable)
- Shortage of Affordable Formal Housing
- Strain on Infrastructure of the City
- Increased Pollution
- Massive Social Inequality
- Increased Traffic
  - Influx of cars & buses
  - Overwhelms capacity to maintain roads
- Lack of Formal Employment
  - people switch to informal employment
    - street vendors, performers, garbage collectors, etc.
  - Leads to increase in crime as people become more desperate

**Possible Solutions**

- Housing Developments
  - removal of shantytowns
  - creation of apartment blocks
- Transportation Improvements
  - strengthening of infrastructure
  - better environmental controls of cars / buses
  - creation of mass transport systems (São Paulo & Rio subways)
- Industrialization & Improvement of Economy
  - provides jobs
  - better infrastructure
- Rebuilding / Strengthening Shantytowns
  - Government provides infrastructure / funding for improvements
  - Government allows citizens to form community improvement organizations
- Better Environmental Policy
- Addressing Poverty / Social Inequality
  - Participatory budgeting
  - Small loans to entrepreneurs
City Profiles

São Paulo

City proper: about 580 square miles
Metropolitan area: 3,070 square miles
Population: 17.9 million (as of 2003)

History:
• Founded as a mission by Jesuit priests
• In 1600s, home of *bandeirantes* (explorers to the interior of the continent)
• Grew rapidly after the establishment of the Law Academy in 1828
• Coffee fueled urban growth, industrialization, and finances

Economy:
• Largest industrial and commercial center in Latin America
• Heavy industry
• Banking, finance, corporations
• Agriculture (coffee and soybeans)
• Transportation hub

Urban Problems:
• Congestion
• Pollution
• Lack of adequate housing (at least 4 million residents live in substandard conditions)
• Lack of economic opportunity
• Rise in street crime

Rio de Janeiro

City proper: about 450 square miles
Metropolitan area: about 2500 square miles
Population: 11.2 million (as of 2003)

History:
• Founded by Portuguese explorers
• Grew rapidly upon completion of a road between Minas Gerais (site of gold mining) & Rio
• Became the capital of Brazil in 1763
• Capital moved to Brasília in 1960

Economy:
• Ranks second in industrial production
• Ranks second in stock market
• Tourism & entertainment

Urban Problems:
• Congestion
• Pollution
• Lack of adequate housing (at least 2 million residents live in substandard conditions)
• Lack of economic opportunity
• Rise in street crime

Information compiled from *Fodor's Brazil* (2nd Edition) and Microsoft Encarta Reference Library 2003.
Lesson Three—Urban Problems & Urban Solutions

Resources Needed:

- PowerPoint – “Urban Problems”
- Copies of the following articles, available online:
  - “Slums Continue to Sprawl in Brazil Despite Anti-Poverty Efforts” ([http://www.latinamericanstudies.org/Brasil/slums.htm](http://www.latinamericanstudies.org/Brasil/slums.htm))
  - “Deadly Setback for a Model Favela” ([http://www.guardian.co.uk/brazil/story/0,,1193763,00.html](http://www.guardian.co.uk/brazil/story/0,,1193763,00.html))
  - “Sao Paulo's Troubled Waters” ([http://archive.idrc.ca/books/reports/V221/saopaulo.html](http://archive.idrc.ca/books/reports/V221/saopaulo.html))
  - “‘Cleansers' blamed for murders of Sao Paulo homeless” ([http://www.guardian.co.uk/Brasil/story/0,12462,1293897,00.html](http://www.guardian.co.uk/Brasil/story/0,12462,1293897,00.html))
  - “From the front page to the policy section: In Brazil, media coverage reflects the changing tides of public interest in street children” ([http://www.iadb.org/idbamerica/index.cfm?thisid=2429&lanid=1](http://www.iadb.org/idbamerica/index.cfm?thisid=2429&lanid=1))
- Copies of “Urban Problems, Urban Solutions” (Handout 3A)
- Butcher paper
- Colored pencils

Anticipatory Set

- Create a web on the board to review the previous day’s problems & solutions of megacities.

Activities:

1. Look at the PowerPoint entitled “Urban Problems.” Answer these discussion questions:
   a. What urban problems do students observe?
   b. What could the effect of these be on a city?
   c. What would the effect of these be on the inhabitants of a city?
2. Jigsaw the articles by creating groups of 3-4. Each group will read an article and become the “expert” on that issue.
3. For the presentations, each group must create a handout, a visual (using the butcher paper and colored pencils), and speak for 5 minutes.
4. During the presentations, have students fill out the chart on “Urban Problems, Urban Solutions” (Handout 3A). Discuss possible solutions to the problems not addressed by the articles.
TEKS

Which problems do not have solutions?

What are some possible solutions to these problems?
Lesson Four—Participatory Budgeting

Resources Needed:
- List of urban problems & urban solutions generated in the previous lesson
- Copies of Student Instructions (Handout 4A)
- Role-play Cards (Handout 4B)
- Copies of Budget Worksheet (Handout 4C)

Anticipatory Set:
- Review urban problems & solutions from the previous lesson

Activities:
1. Read copies of the article “Cities Belong to Everyone, Particularly Budget-conscious Brazilians” from the United Nations. Explain participatory budgeting to the students.
2. Give each student a copy of the instructions (Handout 4A). Divide the students into groups of 6 (you can assign a role to more than one student in a group). Assign each student a role (Handout 4B) in a city council meeting, let students with similar roles meet to discuss needs, and have each group conduct a city council meeting. Every group must come to an equitable solution. As the students play out the meeting, have them fill out their budget worksheet (Handout 4C).
3. Have each group role-play a city council meeting, taking the parts of the various groups in the city. Once they have decided on a budget, have them create a pie chart of the proposed budget.

Concluding Activity
- Each group should present their budget to the class. After the presentations, discuss the budget process. What were the positive aspects of the process? The negatives?

TEKS
Handout 4A

Student Instructions:

- Step One: Meet with your counterparts as a group. You must come up with a list of items you want to change in your neighborhood. Add these to your budget sheet (Handout 4C).

- Step Two: Conduct a city council meeting. Members of each group must present their concerns. There must be an equitable budget created.

- Step Three: When a budget has been reached, each group will present their budget to the class. They must create a pie graph of their budget.

The city has set aside $100,000 to address the various concerns of its inhabitants.

<table>
<thead>
<tr>
<th>Services</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road construction / repair</td>
<td>$10,000</td>
</tr>
<tr>
<td>Crime prevention</td>
<td>$20,000</td>
</tr>
<tr>
<td>Building utilities (electrical &amp; water lines)</td>
<td>$40,000</td>
</tr>
<tr>
<td>Land</td>
<td>$30,000</td>
</tr>
<tr>
<td>Public Housing (construction &amp; maintenance)</td>
<td>$50,000</td>
</tr>
</tbody>
</table>
Role-play Cards

Favela dwellers

You live in a favela (a shantytown on the outskirts of the city). There is no infrastructure (roads, electricity, services). You are concerned about gaining these & keeping your land. The biggest issue, however, is the safety of your family & stopping crime in your neighborhood.

Merchants

You are a merchant in the city. Growing markets have greatly increased your business lately. You are concerned with improving city services (like transportation / roads / electricity) to increase profits, and keeping taxes down (again, to increase profits).

Industrialists

You are an industrialist in the city. Growing markets have greatly increased your business lately. You are concerned with obtaining land for development, and keeping taxes down (to increase profits). You are also concerned with attracting workers to the city so that you may raise your profits.

City Council

You are a member of the city council. You are concerned with attracting business to your city (since it brings jobs) and decreasing the crime level.

Budget Worksheet

Your Group: ________________________
What do the other groups want?

<table>
<thead>
<tr>
<th>Group: __________________________</th>
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<table>
<thead>
<tr>
<th>Areas for Concern</th>
<th>Items for Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Group: __________________________</th>
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<tr>
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<th>Items for Change</th>
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</tbody>
</table>

What compromises did you have to come to in order to reach an equitable budget?
Lesson Five—Favelas, Neighborhoods in Transition

Resources Needed:
- PowerPoint entitled “Growth of a Neighborhood”
- Set of “Favela-Bairro (informal to formal housing)” (Handout 5A)
- Copies of “From Raze to Rebuild: Rather than Eliminate Rio’s Slums, City Residents are Finding Ways to Improve Them” (available online: http://www.iadb.org/idbamerica/index.cfm?thisid=1429)
- Selections from Child of the Dark (Handout 5B)

Anticipatory Set:
“I classify São Paulo this way: The Governor's Palace is the living room. The mayor's office is the dining room and the city is the garden. And the favela is the back yard where they throw the garbage.”

Child of the Dark, Carolina Maria De Jesús (1913-1977)

• What images does this bring to mind? What is the emotion behind the quote? How does she feel about the favela?

Activities:
1. Explain the concept of a “favela” or “shantytown.” They exist in all major urban areas. They are called colonias in New Mexico, slums in Mexico City, shantytowns in Johannesburg. Often, they are caused by rapid over-expansion of a city. The city services cannot keep up with the demands of a growing population (growing by either birthrate or migration).
2. Use the PowerPoint entitled “Growth of a Neighborhood.” Have the students answer the following discussion questions:
   • What are the materials used to build the houses?
   • What amenities do these houses have?
   • Are the houses complete?
3. Discuss the “Favela-Bairro” program (see Handout 5A). Pass out copies of “From Raze to Rebuild.” Answer these discussion questions:
   a. What was the original plan for the shantytowns?
   b. Why did the plan change?
   c. What is happening now to the neighborhoods?
   d. What is the impact of this program on the main city?
4. Read selections from Child of the Dark (Handout 5B).
   • What challenges did she go through?
   • How does she provide a viewpoint into the world of the favela?
5. Stage a class debate around this question: Do the benefits of restoring the favelas outweigh the social/economic cost of them?

Concluding Activity
• Create a piece of sense poetry about the favelas. (Each student must use their senses—sight, sound, taste, touch, smell and feeling—to describe living in the favelas).
TEKS

Favela-Bairro (informal to formal housing)

This program was established to improve the standards of living of people in the favelas. Rather than destroying the favelas and instituting apartments, investments were made to improve the existing structures. Plans included improving/implementing sanitation, transportation systems, social services, access to health care and a basic reduction of poverty.

Favela-Bairro in Numbers
(December 2003)

- 97 day-care centers
- 263,000 square meters of hillside containment
- 2 million square meters of paved streets and alleys
- 173,000 square meters of construction
- 596,000 meters of potable water network
- 637,000 meters of sewage network
- 10,200 points of garbage collection
- 26,300 points of lighting
- 503,000 square meters of leisure areas
- 360 public squares
- 106 sports courts
- 35,000 trees planted
- 22,000 resettled people
- 30 public IT centers
More new people arrived in the favela. They are shabby and walk bent over with their eyes on the ground as if doing penance for their misfortune of living in an ugly place. A place where you can’t plant one flower to breathe its perfume. To listen to the buzz of the bees or watch a hummingbird caressing the flower with his fragile beak. The only perfume that comes from the favela is from rotting mud, excrement, and whisky…

I arrived in the favela: I don’t think I can say I arrived in my house. A house is a house. A shack is a shack. The shack, as much interior as exterior, was dirty. That mess disgusts me. I stared at the yard. The rotting garbage is stinking. Only on Sundays do I have time to clean.