

MINISTERIO DE MINAS E ENERGIA
Secretaria de Minas e Metalurgia
Companhia de Pesquisa de Recursos Minerais

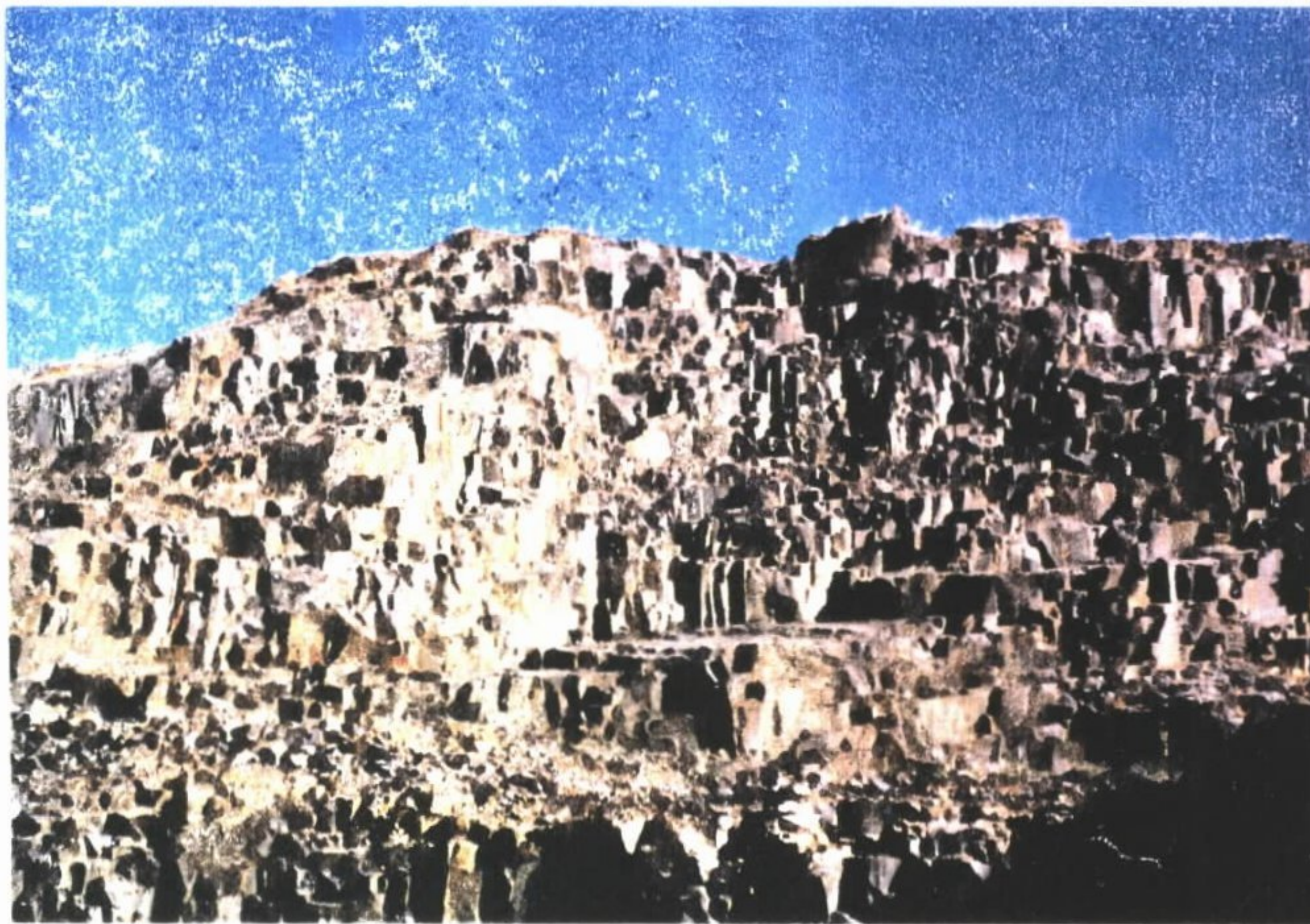


CPRM - Serviço Geológico do Brasil

INVESTING IN THE AMERICAS'96 CONFERENCE

**BRAZIL'S MINERAL RESOURCE POTENTIAL
AND THE ROLE OF ITS GEOLOGICAL SURVEY**

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PHOTO ON COVER:

DIABASE COLUMNAR DISJUNCTION
"Estrada Iratí, Paraná, Brasil"
(Chierigati, Luiz Antonio/CPRM - 1995)

BRAZIL'S MINERAL RESOURCE POTENTIAL AND THE ROLE OF ITS GEOLOGICAL SURVEY

Ladies and Gentlemen,

Last year, I was here at the *Investing in the Americas Conference*, and invited you, together with various colleagues, to invest in exploration and mining in Brazil.

In my brief presentation, I outlined the stable political conditions backing steady economic progress and an impressive drop in inflation in Brazil, as well as its outstanding infrastructure, particularly in terms of highways, ports, airports, energy, low-cost labor, laboratories, and above all, telecommunications. I told you about the excellence of our highly-qualified professionals and the diversity of our Universities and Research Centers, as well as the friendly hospitality of the Brazilian people, and our pleasant climate.

Highlighting the huge size of Brazil - eight and a half million square kilometers - I also stressed the modernity of our industrial park and our huge consumer market. In general lines, I described Brazil's geological terrains, so favorable to mineral deposits, and the vast tracts of land that still remain unexplored, increasing this potential still further.

Today, as well as confirming everything I told you last year, I would also like to show you some really great opportunities for investment that are appearing in Brazil.

The nation has just completed its first full year under President Fernando Henrique Cardoso, whose most outstanding characteristic is his utterly democratic conduct - firm, transparent, and determined to bring Brazil up to the level of the more developed nations through massive investments in education, streamlined privatization processes, and sweeping constitutional reforms.

The achievements of this past year are mirrored in these data, produced by Price Waterhouse:

Growth	1995
GNP	4.1%
Industry	3.1%
Agriculture	6.1%
Services	4.3%
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Total GNP	US\$ 620 billion
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Balance of Trade	US\$ billion
Exports	46.5
Imports	49.5
Balance	(3.0)
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Inflation rate (FGV %)	15.0
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Treasury reserves (US\$ billion)	50.0
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Particularly outstanding here are the growth figures for Services, as well as Exports/Imports and Foreign Reserves. The drop in annual inflation - firmly curbed by the *Real* Economic Stabilization Plan - is most impressive, and has mainly benefited the thirty million lower-income inhabitants of Brazil.

Outstanding investment opportunities can be classified into two categories: already or nearly firmed up, and those that will appear over the short term.

At least twelve new projects fall under the first category, involving investments of some US\$ 2.5 billion, according to data published by the National Economic and Social Development Bank, and ripe for implementation by 1998.

Handled largely through associations with foreign companies, these projects include: the Salobo Project in the Carajás Mineral Province for gold, copper and silver; iron, nickel and platinum in Minas Gerais; nickel in Goiás; gold in Pará; and ornamental rocks in Rio de Janeiro, Espírito Santo, Ceará, and Bahia.

Companies such as Barrick Gold, Anglo-American, Gencor, Hemlock, Pegasus, Newmont, RTZ, and Homestake already believe in Brazil, and are investing in or analyzing business opportunities throughout the country.

In terms of short-term opportunities, I make special reference to areas surveyed by the CPRM - Mineral Resources Exploration Company.

This institution was set up in 1969 to foster Brazil's mining industry by ore-prospecting in selected areas, transferring mineral rights over potentially rich areas to private enterprise through public tenders.

In late 1994, in step with the institutional restructuring and strengthening of Brazil's mining sector, CPRM was transformed into the Brazilian Geological and Hydrological Survey, taking over responsibility for geological surveys all over the country.

In this new situation, CPRM no longer applies for areas to prospect from Brazil's National Mineral Production Department. Making good use of this booming market and rising interest among local and foreign investors, it will be putting up its mineral rights for public auction from the first half of this year onwards.

Outstanding among the projects to be tendered out are:

a) South/Southeast

- **Coal, Rio Grande do Sul (survey concluded)**
Total reserves: 3 billion tons
Ash content : 35-50%
- **Gold, Vale do Ribeira (survey concluded)**
Total reserves: 1.8 million tons of ore
Estimated reserves: 1,800 million tons of ore
Potential Reserves: 6 million tons of ore
Content: 2.3g/ton Au and 41.6 g/ton Ag

b) Northeast

- **Lead, Bahia (survey under way)**
Potential reserves: 7 million tons of ore
Estimated content: 6.0% Pb; 0.50% Zn; 30 g/ton Ag

c) Center-West

- **Nickel lateritic ore, Morro de Engenho, Goiás (survey concluded)**
Total reserves: 18.3 million tons of ore
Content: 1.325% Ni
- **Nickel lateritic ore, Santa Fe, Goiás (survey concluded)**
Total reserves: 18.1 million tons of ore
Content: 1.025% Ni

- **Copper ore, Bom Jardim, Goiás (survey concluded)**
Total reserves: 4.57 million tons of ore
Content: 1.23% Cu and up to 1.0g/ton Au
- **Zinc / Lead / Copper ore, Palmeirópolis, Tocantins (survey concluded)**
Total reserves: 7.3 million tons of ore
Content: 3.0% Zn + Pb and up to 1.0% Cu

d) North

- **Gold, Rio Jaru, Rondonia (survey under way; quantitative data not yet available, but outlook highly promising)**
- **Niobium / Phosphate / Manganese ore, Seis Lagos, Amazonas**
Estimated reserves: 2,800 million tons of ore
Content: 2.81% Nb_2O_5
- **Kaolin, Rio Capim (Pará)**
Total reserves: 567 million tons of ore
Quality: 75% Al_2SiO_3 , with excellent characteristics for paper production.

Some of these projects will be put out for tender in association with CPRM, to supplement exploration efforts. Others have already been fully surveyed, with their reports approved by Brazil's National Mineral Production Department.

Based on its qualities and reserves, the Rio Capim Kaolin Project will be put up for international tender, through announcements published by the principal newspapers in various countries. The Seis Lagos Niobium Project may also be handled in the same manner.

All reports and information are already available from CPRM, some in English, including facilities for site visits.

Some state-owned mining companies in Brazil are working along the same lines. I recommend contacting some of them, particularly the METAGO Goiás Metals Company, and the Bahia Prospecting Company - CBPM, which I believe are eager to enter into talks designed to set up associations or transfer their mineral rights.

As Brazil's Geological Survey, CPRM is responsible for all geo-scientific information in the country, with a huge data-base and thousands of geological, geophysical, and geochemical maps on various scales. It also has the best-equipped Geo-Processing Center and Chemical/Mineralogical Analysis Laboratory. Its head offices in Rio de Janeiro and Regional Bureaus are staffed by technicians who are fully qualified to provide any type of information on the geology and mineral resources of Brazil.

Its Basic Geological Survey Program has speeded up its surveys of the Brazilian subsoil, with particular emphasis on the Amazon region, which covers some 50% of the country's land mass. This relatively unknown region holds some of the greatest mineral potential on our planet. At the moment, iron, manganese, copper, gold, bauxite and cassiterite mines are currently in operation, as well as natural gas extraction operations that are already well under way.

All these concentrated efforts prove the eagerness of the Brazilian Government to transfer to the private sector a host of outstanding opportunities in what is undoubtedly one of the world's last great mining frontiers: Brazil.

Join us, and let's grow together!

OPPORTUNITIES OFFERED BY CPRM

