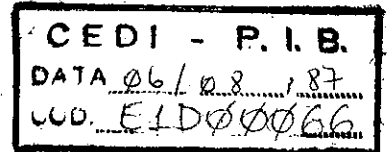


ENVIRONMENTAL DEFENSE FUND

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July 8, 1987



Barber Conable
President
World Bank
1818 H St. N.W.
Washington D.C. 20433

Dear Mr. Conable,

We are writing to express our serious concern over recent developments in the area of influence of the Bank financed Carajas Iron Ore Project in the states of Para and Maranhao, Brazil. We are gravely alarmed by news of the construction and planned construction of charcoal-fired pig iron smelters and other industrial projects in the Bank project area. These projects will entail disastrous environmental and social consequences. We are also greatly concerned by systematic violations of forest reserves and Indian lands in the Project area, including widespread, illegal invasions by squatters and industry, and by the illegal granting of authorizations for mineral research and mining in numerous Indian areas. Of particular international concern is the plight of the Guaja Indians, a highly vulnerable group in the Bank Project area that is threatened with extinction if prompt measures to demarcate and protect their lands are not taken.

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In August, 1982, the Bank agreed to loan the Companhia Vale do Rio Doce (CVRD), a Brazilian state mining company, \$304,500,000 for the construction and start-up of iron ore mining and processing, for construction of an 890 km. railroad from the Carajas mine in Para to Ponta da Madeira, Maranhao as well as for construction of a deepwater port at Ponta da Madeira.

Section 3.10 of the Loan Agreement for this project stipulates that "the Borrower shall take all action, as shall be required to ensure that the execution and operation of the Project are carried out with due regard to ecological and environmental factors...". The area of influence of the project is defined as the area included in a radius of 100 km. from the iron mine and the railroad.

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The Greater Carajas Program, which is not financed by the Bank, has over the last several years approved a number of pig iron smelting and other projects in the area of influence of the Bank's Carajas Iron Ore Project, that would use wood-derived charcoal for fuel. These projects, if allowed to proceed as planned, will result in catastrophic deforestation, destruction of natural resources, and degradation of the already poor quality of life of the residents of Maraba and other regional centers. There is an overwhelming probability that these projects will also result in the devastation of the natural resource base of the indigenous communities of the region, whose interests the Bank has tried to protect in the Special Project for the Amerindian populations associated with the Carajas Iron Ore Project.

The Interministerial Council for the Greater Carajas Program of the Brazilian Government approved eleven industrial projects using wood-derived charcoal by 1986, specifically, nine pig iron smelters and two cement factories. At least five pig iron projects, one in the industrial district of Maraba, and four in Pequia, outside of Acailandia, are under construction. The council is analyzing an additional four such projects, and another ten requests for approval are pending. These projects have been protested by the scientific and environmental communities in Brazil, as well as by local government officials. The first eleven projects alone would require 1.1 million tons of charcoal per year, signifying an increase in charcoal production of 1,300% for the Carajas region in a very short timespan.

The National Environmental Council (CONAMA) resolution number 001 of January 23, 1986, in article 2, states that activities that modify the environment depend on the presentation of an environmental impact statement (RIMA) to the Environmental Secretariat (SEMA) and relevant state agencies for licensing. Paragraphs XII, XIV, and XVI of Article 2, which list examples of kinds of relevant activities, clearly apply to the charcoal-burning industrial projects approved by the Greater Carajas Program. Nonetheless, evidence indicates that government planners ignore the environmental effects of these projects, violating the intent if not the letter of resolution 001. For example, a draft of the decision by the Executive Secretariat of the Interministerial Council of the Greater Carajas Program to approve a tax exempt pig iron project proposed by SIMARA (case number 417/86), has a blank page under the heading "environmental impacts",

although the Secretariat's decision to approve the project is clear. (see annex 1)

Since these pig iron projects are located within the area of influence of the World Bank project, we wish to know whether the Bank is aware of the gravity of their prospective environmental impacts, and whether the Bank is monitoring and reviewing the situation in cooperation with the Brazilian authorities to ensure that Section 3.10 of the Loan Agreement is enforced. In particular, we wish to know whether the Bank has ascertained whether the legally required environmental impact statements (RIMAs) have been, or are being prepared for these projects.

Already, two agencies of the Brazilian government, SUDAM and the Barcarena Development Company (CODEBAR) have prepared for the Interministerial Council of the Greater Carajas Program a detailed study which indicates the predictable results of the increased demand for charcoal that will result from the projects. "There is no doubt that once construction on the smelters has begun, an army of charcoal makers will advance and take the areas closest to the industrial districts by assault." ("Problematika do Carvao Vegetal na Area do Programa Grande Carajas", SUDAM/CODEBAR, Belem, maio de 1986: p.55) Citing examples of immediate relevance, i.e., Minas Gerais and Maranhao, the report predicts that charcoal production will contribute to opening of densely forested areas for cattle ranching, which will in turn increase degraded and abandoned pastures and augment the violent social conflicts between landless peasants and ranchers already acute in the region.

Industries may invest in reforestation to satisfy legal requirements to do so, but this will not reduce deforestation. If 20 projects are approved and are to be supplied from eucalyptus plantations, some 2.6 million hectares of industrial forest would have to be planted per year. (Fearnside, P.M., 1987, "Jari aos dezoito anos: Licoes para os planos silviculturais em Carajas." Homen e Natureza na Amazonia, G. Kohlepp & A. Schrader eds., Tubinger Geographische Studien 95.) But given "an army" of impoverished woodcutters and charcoal makers in the region seeking income, as well as a lower cost of production for charcoal from densely forested areas than for other areas, it is clear that virgin forest will provide the charcoal. Small scale charcoal makers, at the mercy of intermediaries, will remain impoverished as the areas they exploit are converted to cattle pasture, adding to the expanses of

degraded, unproductive lands in the region and perpetuating poverty and land conflict.

The SUDAM/CODEBAR study recommends fixing a high initial price for charcoal to stimulate production and ensure an adequate supply for industry. To stabilize prices once initial demand is met, the study proposes charcoal production for export. Initial demand alone will offer enormous incentives for the hundreds of thousands poor and landless peasants in the region to cut the forest for charcoal.

No means to effectively control deforestation once these projects are in place exists. Brazilian forest legislation requires that industrial projects using charcoal supply 50% of their needs from their own land, but the Brazilian Institute for Forestry Development (IBDF) is incapable of enforcing even this insufficient provision.

The Gurupi Forest Reserve, under the jurisdiction of IBDF and in fact in the Bank project area, provides a lamentable example of the institutional weakness of the agency. The reserve is occupied by thousands of squatters, invaded by agro-industrial enterprises and large landowners, and is in part claimed for colonization projects by the Executive Group for Land in the Araguaia-Tocantins (GETAT). IBDF has permitted these infractions to continue with impunity. The SUDAM/CODEBAR study notes the insitutional weakness of the agency as one of the factors likely to contribute to resource destruction.

The environmental effects of the smelters and their location have been the subject of vigorous protest from the Brazilian scientific community. The Superintendent for Environment of CVRD ~~publicly~~ stated, "Once the charcoal fired smelters are installed, socio-economic pressures will increase and could lead to the total eradication of the native forest in the entire region in the not too distant future." He further noted that, "The firms that are preparing to produce pig iron are taking no measures for reforestation." (Journal do Brasil, 07/05/87)

Pollution from smelters, but also from deforestation for charcoal production is likely to interfere with Brazil nut tree pollination, damaging an important export resource. Eight pig iron projects would be located just outside of Acailandia, in an inappropriate area with insufficient water for smelting. The projects will have severe negative impacts on the entire Gurupi River basin, since the industrial water

supply would come from its headwaters. The community of Pequia is located immediately below the plateau where the first smelters are being constructed and will suffer massive air and water pollution. The community has resisted efforts by CVRD to relocate it. The industrial district of Maraba is located upstream from the city on the Itacaiunas river and will pollute the city's water supply. Since Maraba is located in a geographic depression, with very little or no wind for as much as six months of the year, air pollution will be a very serious problem.

The Bank has devoted considerable attention to the National Indian Foundation's (FUNAI) Special Project for protection of and assistance to the indigenous communities in the Carajas Iron Ore Project area. The Bank deserves credit particularly for helping to negotiate the CVRD/FUNAI agreement whereby consultants approved by the Brazilian Anthropological Association monitor and evaluate the Special Project. The extension of the services of the Special Project in 1985 to 10 areas not previously included in it, which we understand the Bank supported, was a positive step in recognition of the actual impacts on indigenous populations of the development processes that Bank financing has helped to cause.

The Bank's considerable efforts on behalf of the indigenous populations of the region notwithstanding, the Carajas Iron Ore Project and associated development have caused serious long and short term problems for these populations. The greatest immediate threat to the indigenous groups in the Carajas region is the charcoal-fired pig iron projects. Many of the 23 indigenous areas that are the object of the Bank-required Special Project will be prime sources for wood for charcoal since they contain large reserves of forest, and many are already partially occupied by desperate squatters. The indigenous groups themselves in most cases want and need income, but have access to the market only on highly unfavorable terms. They will find immediately lucrative contracts for forest clearance hard to resist. Some National Indian Foundation officials in other areas have already shown a disturbing willingness to encourage Indians to permit unsustainable logging on their lands, in violation of Brazilian law. (See annex 2) If CVRD permits the charcoal-fired iron projects to go forward, the positive contributions of the Special Project to the welfare of the indigenous populations will be undone and their situation will rapidly deteriorate as their resource base is

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severely degraded or destroyed.

Charcoal development has already negatively affected indigenous peoples in the area of influence of the Carajas Iron Ore Project. The rural union of Sao Joao do Araguaia recently reached an agreement with the Ministry for Agrarian Reform and Development (MIRAD) for the resettlement of squatters on the Mae Maria reserve of the Gavioes Indians. The squatters entered the area following the Bank-financed railroad. MIRAD agreed to give priority to expropriation of Fazenda Uba for the resettlement of the squatters, which would have resolved a difficult conflict to the satisfaction of both the Indians and the peasants. The Executive Group for the Tocantins - Araguaia (GETAT), however, approved the sale of the same area to an industry, COSTPA, for charcoal production, blocking resolution of the situation on the Gavioes reserve. As this case indicates, chronic land conflicts in Para and Maranhao can be expected to worsen with the sudden creation of a large market for charcoal, and indigenous areas will suffer serious negative effects.

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Another issue of importance to the welfare of the indigenous populations in the Carajas Iron Ore Project area, and in the Special Project, is that of illegal grants of authorizations for mineral research and mining on indigenous land. The National Department of Mineral Research (DNPM) between 1980 and 1985 issued 11 authorizations for mineral research and mining on Indian lands on five of the areas in the Special Project, and there are various requests for such authorization pending. Most of these authorizations are in fact within the area of influence of the Carajas Iron Ore Project. (Empresas de Mineracao e Terras Indigenas na Amazonia, Centro Ecumenico de Documentacao e Informacao/Coordenacao Nacional dos Geologos; Sao Paulo, abril de 1986) These areas are: AI Catete, and AI Parakana, in Para, and AI Caru, AI Alto Turiacu, AI Bacurizinho in Maranhao. The area covered by these authorizations is substantial - CVRD, for example, has claim to almost the entire Catete Indigenous Area, inhabited by the Xikrin Indians.

Although legislation intending to permit mining on Indian land was decreed under the military government (decree 88.985/83), the National Indian Foundation regulation required for the decree to go into effect is highly irregular. On May 18, 1987, DNPM and FUNAI, in secret, signed an order regulating the decree. The Minister of Mines and Energy, to whom DNPM is responsible, has publicly contested the validity of the regulatory order. The

authorizations were in any case issued before the required regulation was formulated. These authorizations are consequently illegal. The Bank should insist that these authorizations be revoked in the area of the Special Project (and in other Bank project areas, specifically in Rondonia and Mato Grosso), and that no further authorization for mining and mineral research on indigenous lands in Bank project areas be issued until such time as a comprehensive policy for indigenous mineral rights, acceptable to the indigenous communities, is adopted.

The case of the Guaja Indians merits special attention. This group of isolated recently contacted hunter-gatherers is directly threatened with extinction by the occupation of their traditional lands following the commencement of the Carajas Program. The Guaja are among the most vulnerable and most urgently in need of immediate, effective protection of all the indigenous groups in the area. IBDF, responsible for the Gurupi Forest Reserve, which coincides with a large part of the Guaja territory, has in the past presented obstacles to the definition of a reserve for the Guaja. IBDF has reportedly proposed a joint Indigenous Area/Biological Reserve as a solution, but has placed restrictions on Guaja occupation of the reserve. We urge the Bank to make the implementation of its tribal peoples policy in this case the highest possible priority, and specifically to insist on the immediate demarcation of an adequate area for the Guaja.

It is urgent that the Bank assist CVRD and the government to design a regional resource management plan that includes protection of native forest, demarcation of indigenous lands and land reform, and to build institutional capacity to implement it, so that development alternatives that do not cause massive deforestation can go forward. In this case the Bank could help to promote recovery and sustainable use of already degraded areas. Technologies much more efficient than the small scale charcoal kilns most used in the region already exist in Brazil and elsewhere. For example, Florestal Acesita in Minas Gerais produces charcoal from eucalyptus and pine with a 55% conversion efficiency, about twice that of existing small producers. This firm also gets 20 - 40 tons of wood per hectare per year from some of its industrial woodlots. The Antal technology, under development at the University of Hawaii promises improved efficiencies for small producers. Acesita has also reportedly investigated the "plasma smelt" process, which could replace charcoal as a fuel source altogether in steel

production. Such technologies would lower the demand for charcoal, and the Bank should promote their adoption. We must emphasize, however that unless a regional resource management plan and the institutional strength to implement it are in place before industrial projects proceed, the result will be an environmental and human tragedy.

Other, long term, measures should be taken to address the process of deforestation and land conflict already in progress. The SUDAM/CODEBAR study on charcoal identifies a number of measures necessary to avoid repetition of the socially inequitable and environmentally destructive pattern of development evident in the state of Minas Gerais over the last fifty years. These include land reform, stimuli to local food production, and adequate technical assistance and credit for small agriculturalists, which would permit them to plant perennial rather than annual crops. We would point out that the Bank's experience in Amazon development projects strongly suggests that such measures are necessary but difficult to implement and a long term effort. The environmental and social effects of massive deforestation certain to result from charcoal-fired industrial projects under present circumstances would be immediate and devastating. We therefore urge the bank to use its expertise to assist the state and federal governments to develop and implement an agricultural policy that incorporates these long term recommendations.

Companhia Vale do Rio Doce is clearly responsible for environmental protection in the area of influence of the Carajas Iron Ore Project. The approved charcoal and industrial projects are not only located within the World Bank project area, along the Bank-financed railway, but the private enterprises involved chose these sites with information furnished by CVRD. CVRD has direct, economic control over these projects, since it is both the owner of the railroad and the sole source of the iron ore necessary for the manufacture of pig iron. CVRD, in collaborating with these undertakings, is in flagrant violation of Section 3.10 of the Loan Agreement. The magnitude of this violation is such that all of the Bank's efforts at environmental protection, as well as the intent of the Special Project will be seriously undermined if these projects are allowed to proceed.

In summary, it is critical that the Bank use its leverage to whatever extent is necessary to halt all industrial projects using wood-derived charcoal in the project area, and to assist the Brazilian authorities in evaluating alternative development options for the area that will not cause massive deforestation. It is also critical that the Bank undertake measures to deal with the invasions of the Gurupi Forest Reserve and other protected natural and Indian areas, to address the illegal authorizations for mineral research and mining on Indian lands in the project area, and to demarcate and protect with all due speed the lands of the Guaja Indians.

Sincerely,