TO: World Wildlife Fund-U.S. 1255 23rd Street, N.W., Suite 200 Washington, D.C. 20037 ATTN: Mrs. Nancy Hammond THE JOHNS HOPKINS UNIVERSITY FROM: CHARLES AND 34TH STREETS BALTIMORE, MARYLAND 21218 PROJECT TITLE: The Environmental and Social Impacts of an Unplanned, Underfunded Mega-Project: Grande Carajas PRINCIPAL INVESTIGATOR CO-PRINCIPAL INVESTIGATOR PROJECT DIRECTOR (S): Stephen G. Bunker TITLE: Associate Professor SOC. SEC. NO.: 585-09-8310 DEPARTMENT: Sociology TYPE OF APPLICATION: XX NEW PROJECT CONTINUATION OF RENEWAL OF SUPPLEMENT TO REVISION TO

PROPOSAL

AMOUNT REQUESTED FROM SPONSOR: \$3,179 PROPOSED STARTING DATE: June 15, 1986 212 Months PROPOSED DURATION IN MONTHS:

PROJECT DIRECTOR

SIGNATURE NAME TELEPHONE Stephen G. Bunker 301-338-7629 DATE 10 March 1986 DEPARTMENT CHAIRMAN

Re

INSTITUTIONAL REPRESENTATIVE

University Sponsored Projects

John Dearden, Director

(301) 338-8140

Karl L. Alexander 301-338-7628 DATE 10 March 1986

DEAN

SIGNATURE NAME DIVISION TELEPHONE

George W. Fisher Faculty of Arts & Sciences (301) 338-8212 DATE 3/11/86

\*CONTACT PERSON AT JHU:

DATE

NAME: Milton T. Cole TELEPHONE NUMBER: 301-338-8733

Revised 9/85

- I. COVER SHEET
  - 1) <u>Title</u>: The Environmental and Social Impacts of an Unplanned, Underfunded Mega-Project: Grande Carajas
  - 2) <u>Applicant(s)</u>: Stephen G. Bunker Associate Professor Department of Sociology The Johns Hopkins University Baltimore, Maryland 21218 (301) 338-7629

 3) <u>Institutional Endorsement(s)</u>: The Johns Hopkins University Charles and 34th Streets Baltimore, Maryland 21218 John Dearden, Director University Sponsored Projects Darrell Duggins, Director Office of Accounting Services

- 4) <u>Project Period</u>: June 15, 1986 August 31, 1986
- 5) Total Budget: \$3,179
- 6) Amount Requested from WWF-US: \$3,179
- 7) Support From Other Sources: None
- 8) Anticipated Future Requests: None
- 9) Abstract: (over)

(ITEMS 10 THRU 13 ARE NOT TO BE FILLED BY APPLICANT)

- 10) Previous WWF-US Support:
- 11) Staff Recommendation:
- 12) Expiration Date:
- 13) Staff Project Officer(s):

## 9) Abstract

Support is requested for a five-week preliminary survey of the environmental and social impact of various economic enterprises in the Grande Carajas project area in the south of Para, in the Brazilian Amazon. A brief summary of the history of the project is included, with an explanation of why such a survey is needed at this time. The Environmental and Social Impacts of an Unplanned, Underfunded Mega-project: Grande Carajas

The Companhia do Vale do Rio Doce's (CVRD) Carajas Iron Ore Project in the south of Para, the Brazilian Amazon's easternmost state, has established encouraging precedents in its programs to reduce and to compensate the project's disruption of local ecosystems and human communities. Unlike the earlier large-scale enterprises which hastily and destructively occupied newly opened areas of the Amazon in search of speculative profits or to take advantage of fiscal incentives (Mahar, 1979; Hecht, 1981; Bunker, 1985) CVRD's Carajas project has a solid economic underpinning and is centrally important to the organization and continued strength of its parent company (de Sa and Marques, 1985). CVRD itself has long been recognized as a highly efficient, technically competent organization (Evans, 1979). For all of these reasons, CVRD itself has been very effective in its response to its own experience of public protest of environmental problems which emerged in its operations in Minas Gerais, to the growing sensitivity in Brazil to environmental and indigenous rights issues, and to the exigencies of the various international agencies which expressed concerns about environmental and social impacts during the negotiations for credits. The company has taken a series of effective, and highly visible, steps to set up programs for positive action under qualified technical supervision within well-funded departments. These efforts stand in strong contrast with the Brazilian government's reluctant, politically manipulated, and pro-forma compliance with environmental and social guidelines incorporated into the Polonoroeste project.

Nonetheless, CVRD's programs can only protect a relatively small portion of the total area which will be affected by its activities in Carajas. CVRD is attempting to control the perimeter of its own area, and is doing so relatively successfully, but a series of factors make environmental destruction and social conflict in the surrounding areas highly probable. In the first place, the Carajas project is located within one of the most conflictive zones in the area, near the point where the TransAmazon highway intersects with the Belem-Brasilia highway, an area where an influx of land-extensive ranching operations had dispossessed small-holding peasants long before Carajas had started. The recently opened road into Sao Felix do Xingu is even closer; this road has already stimulated the growth of five substantial urban agglomerations which did not even exist when the road was first planned. Serra Pelada is nearby. Conflicts between large and small landholders, the rapid exhaustion of artisanal mining (garimpagem), and the termination of the large construction projects (the Tucurui dam and CVRD's own railroad) have already created a mass of landless unemployed. At the same time, the railroad itself have the prospect of new markets is attracting a series of large entrepreneurs, some for ranching and timbering, others awaiting profitable opportunities in mining outside the area of direct CVRD control. These factors by themselves would suffice to put the land and its indigenous inhabitants at risk (See Schmink and Wood, 1985).

The problem is complicated, however, by the Grande Carajas project itself. The Brazilian government's and CVRD's primary interest in Carajas was clearly in export-oriented extraction of ore, but both also planned to use the Iron Ore Project as a growth pole, that is, as the dynamic or

propulsive capital intensive project which would stimulate a series of linked investments in the area. This strategy, formalized by Francois Perroux and explicitly incorporated into the government's Polamazonia strategy (Mahar, 1979), was also manipulated politically, perhaps to quiet local politicians' and businessmen's protests that CVRD's plans essentially left local interests out of the picture. Be that as it may, CVRD participated in the planning as well as in the intense publicity efforts which went into the Grande Carajas project. CVRD stood to gain from the project, at least by having other enterprise in the area which would use its railroad, and perhaps by having locally grown foodstuffs available. The major actor was clearly the government, however, even though CVRD was at first quite directly involved (VRD 1981, 1984; Brazil, n.d., 1983).

The debt crisis of 1982, and the subsequent strains in the state's own budget, have led to a series of funding cutbacks, even though tax holidays and other incentives have been made available to at least 28 different companies which submitted proposals to operate within the project area. The interministerial council directing the project had, in any event, stated that its primary goal was to allow unrestricted enterprise in the area, essentially limiting the government's role to providing fiscal stimuli. Previous experience in the Amazon should have been sufficient to make the council aware that, in the least, there would be intense conflicts over land which would necessitate state intervention, and that the environmental pressures would also require policing, but such matters did not appear to concern this group.

Both the government and CVRD have backed off their initial enthusiastic involvement in Grande Carajas, and funding has apparently been cut as well.

Some officials of the World Bank have indicated that they think this may mean that the area will not be occupied as rapidly and destructively as it would have been otherwise. My own experience and analysis of the occupation of the Amazon (Bunker, 1985), however, leads me to suspect that the reduced participation of CVRD and of the government itself has simply removed the two most competent and responsible agencies from a situation which small to medium capitals will attempt to exploit in ways which are now especially prone to social and environmental damage. I believe that a preliminary survey of the agencies which do have jurisdiction in the area (INCRA, SUDAM, GETAT) as well as of the enterprises which are locating there, together with some initial assessment of spontaneous migration into the area is a necessary first step to engaging the government and CVRD once again in this process and to bring some degree of pressure, or at least public knowledge, to bear on a potentially destructive situation. Particularly, I suspect that CVRD would do well to know what is going on in the area. Whatever the legal limits of its liability are, the public image or relations of an internationally prestigious firm cannot be divorced from processes which its own activities are, in quite direct ways, engendering.

Clearly, this initial survey will have to be somewhat sketchy, as the area involved is enormous and getting around it can be difficult. The first part of the work would involve talking to academics, government planners, especially in IBDF, EMBRAPA, INCRA and SUDAM, and journalists in Belem. I have good connections to all of these groups, and should be able to lay some of the groundwork by mail and then to move fairly fast once there. The part of the research I cannot clearly specify yet is where in the area I will go after Belem, as I will be choosing certain projects on the basis of what I

learn there. Essentially, though, I will be learning as much as possible about government agency programs, deployment of personnel, and results; next about the organization and activities of the different enterprises operating in the area, and then doing on-site inspection and extrapolation of the environmental and social impacts of these activities. If possible, I will talk to CVRD personnel as well, primarily to get a fix on their perceptions of and relations to these other activites. Finally, I will make very quick trips to Brasilia, to attempt to collect documents and conduct interviews with people who are or were involved in the interministerial council, as well as with the Ministry of Agriculture and SEPLAN personnel who have worked on these projects. I also will stop briefly in Sao Paulo to interview officials of the Associacao dos Empresarios da Amazonia and with the executives of private colonization projects which are operating near Carajas. If it seems advisable after consultation with colleagues, including particularly WWF officers, I could schedule a trip to Rio de Janeiro to meet with CVRD officers as well. This may, however turn out to be redundant of other work that is already going forward.

I would expect to have a general report which incorporated the results of this survey into information I am currently gathering and analyzing on the Grande Carajas project ready to send to WWF within 6 weeks after my return. Whether there are specific follow-up activities of a practical or policy-relevant nature will depend in part on my report, but I plan to continue my own research in the area over the coming years. I do not have specific plans at this moment to ask for further funding, however.

## References

Brazil, Greater Carajas Programme. (Brasilia: SEPLAN, n.d.).

Brazil. 1983. <u>Programa Grande Carajas Agricola: Versao Preliminar</u>. (Brasilia: Ministry of Agriculture, October).

Bunker, Stephen. 1985. <u>Underdeveloping the Amazon: Extraction, Unequal</u> <u>Exchange, and the Failure of the Modern State</u>. Urbana: University of Illinois Press.

CVRD. 1981. Amazonia Oriental: Plano Preliminar de Desenvolvimento.

CVRD. 1984. <u>Aptidao Pedoclimatica: Zoneamento Por Produto</u> (Rio de Janeiro).

- de Sa, Paulo and Isabel Marques. 1985. "The Carajas Iron Ore Project." Resources Policy, December: 245-256.
- Evans, Peter. 1979. <u>Dependent Development: The Alliance of Multinational</u>, <u>State, and Local Capital in Brazil</u>. Princeton: Princeton University Press.
- Hecht, Susanna B. 1981. "Deforestation in the Amazon Basin: Magnitude, Dynamics and Soil Resource Effects." <u>Studies in Third World Societies</u> 13: 61-110.
- Mahar, Dennis J. 1979. <u>Frontier Development Policy in Brazil: A Study of</u> <u>Amazonia</u>. New York: Praeger Publishers.
- Schmink, Marianne and Charles Wood (eds.). 1985. Frontier Expansion in Amazonia. Gainesville: University of Florida Press.

BUDGET \*

| Travel  | • |
|---------|---|
| 11 avei | • |

| 1) Baltimore-Belem-Baltimore<br>2) Internal: Brazil multicity airpass<br>3) Internal: Para                         | \$ 889<br>250<br>500<br>\$1,639 |
|--|---------------------------------|
| Food and Lodging:  |                                 |
| 1) Para: 28 days at \$30 per day<br>2) Brasilia, Sao Paulo, and possibly Rio de Janeiro:<br>8 days at \$50 per day | 840<br>400<br>1,240             |
| Supplies and Miscellaneous Expenses:   |                                 |
| Suppries and miscertaneous Expenses.   |                                 |
| <ol> <li>Books, maps, and documents purchased or<br/>photocopies</li> <li>Film and processing</li> </ol>           | 200<br>100<br>300               |
| TOTAL REQUESTED FROM WWF-U.S.:   | \$3,179                         |
|  |                                 |

\*Given the recent devaluation of the Brazilian currency, and the switch from the cruzeiro to the cruzado, it is impossible to estimate the rate of exchange at the present time.

## AWARDING OF GRANT

A. Institutional signature:

Mr. John Dearden, Director University Sponsored Projects

B. Payment:

Payment should be made to The Johns Hopkins University, and sent to: Mr. Darrell Duggins, Director, Office of Accounting Services. Reference on the check should indicate that the award is being made to Dr. Stephen G. Bunker.

C. Payment Schedule: If a grant is awarded, payment is requested by June 15, 1986 in order to take advantage of airline rates.

## REFERENCES

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Susanna Hecht School of Architecture and Planning University of California, Los Angeles Los Angeles, California 90027 213-455-1923