

BACKGROUND: Costa Rica, Hydro-electric
Development and the
Indigenous Populations

Costa Rica is in danger of defaulting on its international loans. 'Default is a concept that strikes fear in the hearts of government leaders throughout the world. Fear enough to commit political suicide during an election year. Faced with few choices Costa Rica's President Rodrigo Carazo recently devalued the colón at the suggestion of the World Bank. The World Bank also suggested another devaluation of 20% later this year. International Monetary Fund/World Bank policies usually require a nation to cut government spending, devalue its currency, and reduce imports. Carazo is gambling that these policies and the loans that accompany them will not lose him the upcoming election as surely as 'default' would remove him from power.

Over the years, Costa Rica has accumulated a \$1.4 Billion* debt. Reliance upon bananas and coffee as its primary exports, Costa Rica's cash economy has long been at the mercy of foreigners. Recent declines in agricultural revenues plus a growing dependence on imported products has caused Costa Rica's trade deficit to rise above \$625 million. Working within the international monetary system the government of Costa Rica has few options. To keep from losing any more financial 'stability' the government must consider the following courses of action:

1. Decrease Costa Rica's dependence upon imported products, particularly petroleum products. In 1979, Costa Rica imported approximately 20,000 bpd of crude and refined oil products at a cost of \$200 million. Oil supplies 60% of Costa Rica's energy needs.
2. Secure new loans to pay immediate debts. These new loans are not cheap. Besides accepting IMF/World Bank economic 'stabilization' measures Costa Rica must pay back the borrowed money with interest plus a service charge. The service charge alone amounted to \$240 million in 1979.
3. Develop resources within Costa Rica's boundaries. This usually means attracting investors with the capital and technology to develop the resource. Costa Rica has not proven to be espec-

ially attractive to investors. New private investment amounted to only \$4 million during the first three quarters of 1980. Even after accepting IMF/World Bank policies, Costa Rica received a low investment rating by two financial publications, the Wall Street Journal and Business Latin America.

Development of new hydro-electric power and aluminum industry offers the government a means to accomplish all three of the above. Since 1971, the government has been examining aluminum processing, bauxite mining, and hydro-electric development to solve its financial and energy difficulties.

At least one hydro-electric project, the Arenal Dam is now nearing completion. This dam has an electrical generating capacity of 157-Mw.* Another hydro-electric project, the Corobici Dam, which will also use water from the Arenal Lake is being planned. The Inter-American Development Bank (IDB) approved a \$60 million loan for the Corobici Dam in 1978, payable in 25 years, at an interest rate of 7.5% a year. Estimated to cost \$150 million to complete by 1983, the Corobici power plant will generate 174-Mw of electricity. The Costa Rican Power Institute (ICE) negotiated another \$60.2 million loan from the IDB for the Corobici Dam in 1980. A part of the loan is to finance studies for building the Boruca dam and power plant on the Rio Grande of Tenaba. This huge project which could generate 760-Mw could on its own supply enough electricity for all of Costa Rica. The dam itself would be 260 meters high. Most of the power generated by the dam will be used by an aluminum processing plant nearby, only 15% of the electricity will be used for local consumption. The total cost of the Boruca power plant, dam and aluminum processing plant is estimated at \$1.7 billion. Completion of the Boruca project as scheduled (by 1986) is doubtful, due to lack of financing and Costa Rica's bad economic situation.

The Costa Rican government is also examining the feasibility of establishing free zone ports, specifically the port of Moin on the Atlantic and Caldera on the Pacific. The plan, which would encompass a 4-6 year period starting in 1981, envisions space for more than thirty exporting industries. Priority spaces would be given to electronics, textiles and metalworking industries. Free zones usually involve free

*Eleven mega watts (Mw) of electricity could run approximately 4 million American homes for one year.

or very low government taxation and port fees or tariffs on the industries operating within the zone. Often government regulations, such as labor practice laws and pollution control laws are suspended within the zone.

The Aluminum Company of America (ALCOA) and Marietta Aluminum, two U.S. corporations, undertook a joint feasibility study in 1978 for the installation of a smelter plant in Costa Rica. The Costa Rican government solicited two of its own studies for smelter plants in Moin and Puerto Limon. The establishment of free zone docks would definitely affect the outcome of these studies. Although Costa Rica's bauxite has been found economically unfeasible to mine due to its low aluminum content, raw materials for the aluminum smelters could be imported from Aruba, Surnam, Gran Cayman and other Caribbean islands. The Central America Report of March, 1978 mentions a 1976 financing agreement for a smelter plant in Limon. The cost of the smelter was then estimated at \$52.2 million to be jointly funded by the Instituto Mobiliario Italiano (85%) and the Banco Central (15%). The Italian firm, Tecno Engineering Hunter was contracted to install the plant.

The Costa Rican government has also been negotiating loans for several other projects and of course to ease its continuing debt repayment crisis. The following figures were obtained from the Central America Report, September 3, 1980.

LOANS APPROVED BY THE GOVERNMENT

<u>Source</u>	<u>Amount</u>	<u>Project</u>
Bank of America National Trust	\$70 million	\$45.8 million for previous debt repayment \$24.2 million to finance the National Aqueduct Plan
Inter-American Development Bank	\$60.2 million	ICE Corobici hydro-electric project
Venezuelan Investment Fund (FIV)	\$ 6 million	construction of a new Port of Caldera
IDB	\$26 million	rural electrification project
Deutsch Banking Group	\$100 million	tourism, low-cost housing, and CODESA

LOANS PENDING GOVERNMENT APPROVAL

Central American Bank of Economic Integration (CABEI)	\$12.5 million	Highway Baru-Palmar Norte on the south coast
CABEI	\$0.8 million	Highway Ciudad Colon-Puerto Caldera
CABEI	\$0.6 million	Highway Valle Central- Litoral Pacific
CABEI	n.a.	Highway Tarcoles-Loma on the south coast
FIV	\$6.1 million	Highway San Jose'- Siquierres-Puerto Viejo Hwy
FIV	\$0.8 million	Fishing Development Program

ALCOA has a long history of relations with Costa Rica. In 1971, ALCOA began operation for the production and export of bauxite ore in the southeastern zone of San Isidro del General. ALCOA received a 20-year contract to mine bauxite from a multi-thousand acre ore reserve area. President Jose Figueres negotiated a deal with the World Bank, ALCOA, and the Soviet Union (also in 1971) for \$400 million for an aluminum refinery and hydroelectric generating plant in the northwestern province of Guanacaste. Power from the dam was to be transmitted to the ALCOA mining site. In exchange for purchasing Costa Rica's excess coffee, Soviet Union hydroelectric generating equipment was to be purchased for the 500,000-kw dam. Wide-spread public opposition to Soviet involvement eventually stopped the negotiations. ALCOA also quit its bauxite project due to poor ore quality.

Although Costa Rica's bauxite ore is not up to current industry standards cheap electricity is seen as important in producing aluminum. Aluminum is refined by separating alumina from bauxite clay, then separating the aluminum from its oxide. The process basically consists of sending a strong electrical charge through a chemical bath. It is a capital intensive process that requires very few workers. A new process, which combines alumina with chlorine in a chemical reactor was recently developed. The new process requires 30% less electricity, eliminates the need for fluoride which causes the industry's most serious air pollution problems, and reduces the number of workers. Under the

old process 100 workers could produce about 50,000 tons of aluminum per year. It is estimated that a dozen workers could do the job with the new process. Extreme amounts of chemicals and electricity used in production of aluminum expose workers to many health hazards.

Aluminum is used extensively in modern technology. In fact, use of aluminum now exceeds that of any other mineral except iron. The technology to produce aluminum is concentrated primarily in five transnational corporations. These corporations and their total sales in 1979 are as follows:

1. ALCOA.....\$4.8 billion
2. ALCAN.....\$3.7 billion
3. Reynolds Metals.....\$2.9 billion
4. Kaiser Aluminum.....\$2.9 billion
5. AMAX.....\$2.4 billion

ALCOA, the world's largest aluminum company, had more sales revenues last year than Costa Rica's total Gross Domestic Product of \$4 billion. ALCOA mines bauxite in seven nations on four continents and produces alumina in five countries. It owns more than 50 plants worldwide as well as a shipping company, equipment manufacturing plants in Pittsburgh, Pennsylvania, U.S.A. ALCOA sells aluminum products almost exclusively to other major companies. The Mellons, a very wealthy American family which controls large amounts of U.S. Steel, Gulf Oil, the Mellon Bank and keeps its fingers in many other transnational corporations, owns controlling interest in ALCOA. It seems that ALCOA determines the world price of aluminum and develops most of the aluminum technology for the industry. Each year all five of the major aluminum corporations set record profits. ALCOA, ALCAN and Reynolds have doubled their profits since 1978.

The major bauxite producing countries attempted to gain some control and profits from the aluminum companies by forming the International Bauxite Association (IBA) in 1974. Eleven nations joined the cartel. They were Jamaica, Sierra Leone, Surinam, Yugoslavia, Australia, Ghana, Guinea, Guyana, Haiti, Indonesia, and the Dominican Republic. The cartel was largely unsuccessful due in part to Australia's refusal to enforce the IBA's pricing formula and the abundance of bauxite. Bauxite production has been well below mine capacity for several years. The

IBA's formula related the price of bauxite to the price of finished aluminum and set about to tax it accordingly. The aluminum corporations responded by slowing down their operations in IBA countries. Some IBA countries did negotiate higher prices for their bauxite and many bought 51% of the mining operations within their country. Without skills to manage the technology or control over shipping these countries still find themselves powerless to affect the aluminum corporations.

With the threat of 'default' looming over Costa Rica's government leaders, they are not in a position to pick and choose the means of Costa Rica's future development. They must take money from any and all available sources. All too often the needs of Costa Rica's people are set aside to meet the short term requirements of the cash economy.

This kind of rapid technological development has proven disastrous for people throughout Central and South America. Rural and indigenous peoples have particularly felt the brunt of economic development. For example, in 1966 the Surinamese government working with Suralco (an ALCOA subsidiary) and Billiton, two aluminum companies, built the Brokopondo dam and power plant. More than 5,000 indigenous peoples were forced from their homes with the promise of jobs in the bauxite industry. Today, fourteen years later, these people and their descendants are still among the unemployed army in the slums of Paramaribo. The Yanonami people of Brazil, the Colvilles of the United States, tribal people in the Philipines and many others could tell similar stories.

After their initial investment, transnational corporations like ALCOA contribute to an economy through tax revenues, wages, and some local expenditures. It is unlikely these contributions can ever make up for the lost livelihoods destroyed by dams and mining. In fact, Costa Rica will only become more dependent upon the international monetary system by going further into debt to build the dams discussed above.

No government has yet been allowed to 'default' on its loans. As recently witnessed by Jamaica, even threats of 'default' can make life so difficult, that a government more disposed to IMF/World Bank policies of 'stabilization' and loans for development will quickly be instituted. Costa Rica does not need another hydroelectric dam to benefit indigenous peoples. It needs the dam and the aluminum plant to

justify a loan so the country can avoid defaulting on past loans. The major beneficiary will be ALCOA Aluminum as it uses an expensive electricity. Those who will benefit the least, indigenous peoples in Costa Rica, will also be the people who will experience the greatest burden for Costa Rica's debt. The Costa Rican government has bowed to public pressure in the past. Stopping or even slowing development is no easy task, but if indigenous peoples in Costa Rica are to avoid devastation of their homes as a result of a hydroelectric dam then they must move to prevent its construction.

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