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BUILDING A BETTER HEMISPHERE SERIES NO. 23

*Brazil Builds
a Future*

By

MAURICIO CAMINHA DE LACERA

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POINT 4 IN ACTION

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TECHNICAL COOPERATION ADMINISTRATION

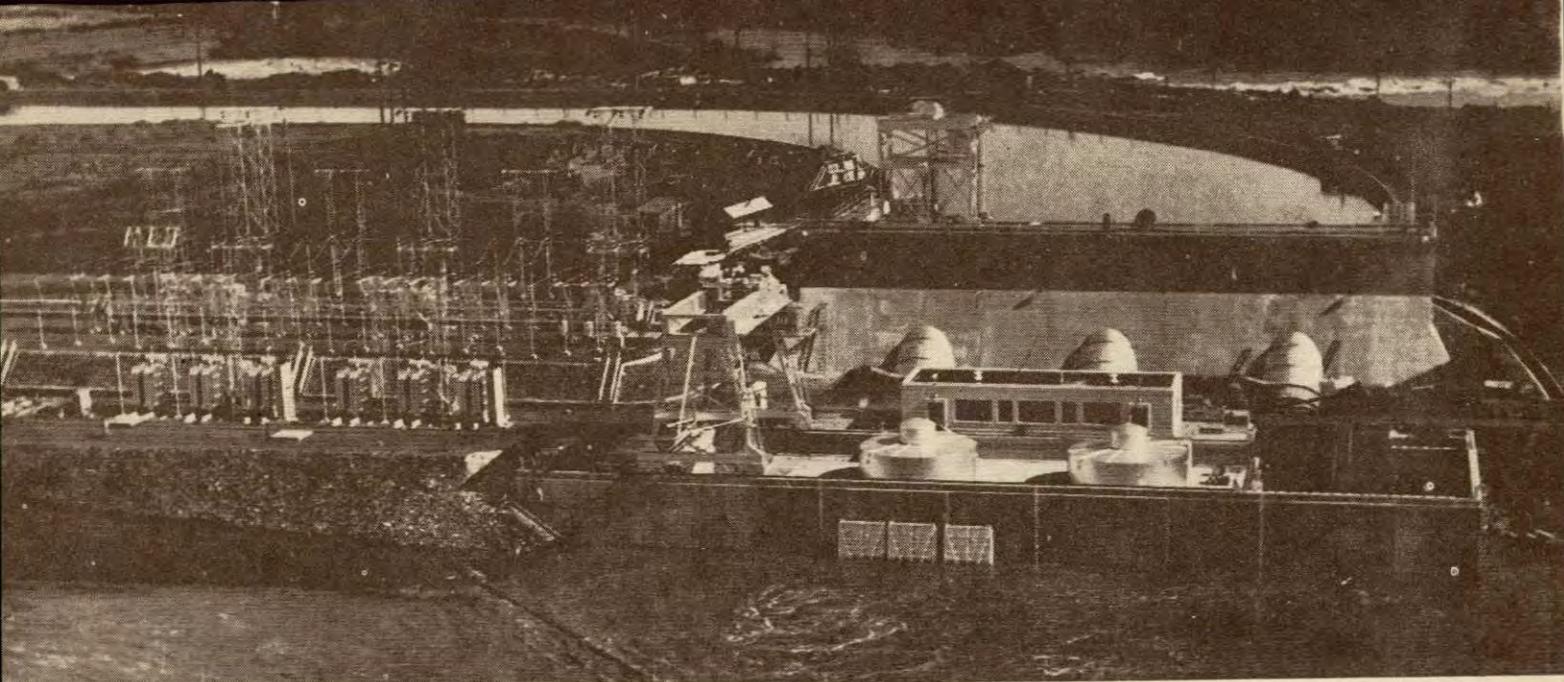
STATEMENT BY DR. ARY F. TORRES

*(President, Brazilian Section of the Joint Brazil-United States
Economic Development Commission)*

The Brazilian railroads are presently being re-equipped and modernized, in accordance with careful technical and financial plans worked out by Brazilian and American engineers and economists of the Joint Brazil-United States Economic Development Commission. This is cooperation between the two countries at its best, and constitutes a major step in providing urgently needed and effective technical aid for the economic development of Brazil.

Complementing the investment program, a training program for Brazilian railroad experts in the U.S., has been successfully launched under the auspices of The Institute of Inter-American Affairs. The training program is benefiting greatly from excellent cooperation by the United States Department of Commerce and the American Railroad Association.

It will enable Brazil to increase rapidly the number of its railroaders fully familiar with modern operating and administrative techniques. The trainees are destined to play an important role in assuring the economically sound and technically effective functioning of Brazil's railroad system.



Brazilian-U.S. Economic Commission approved new installations to triple generating capacity of Avandava power plant in São Paulo State

Brazil Builds a Future

Mauricio Caminha de Lacerda

PRESIDENT VARGAS once described his big, sprawling country as a giant who must walk slowly because he grows so fast his shoes are always tight. Whatever their political slant, most Brazilians will readily agree with that opinion.

Economically speaking, at least, to make the shoes fit, Brazil needs help from abroad. It has outgrown the old-fashioned colonial pair it wore during adolescence, when it was merely exporting raw materials, and is ready to exchange them for the modern boots of economic independence. For the country is now busily industrializing: building factories, improving its transportation network, and turning millions of gallons of water into electricity to power industry, railroads, and irrigation. To promote a balanced and coordinated development of the country's economic potential, a Joint Brazil-U.S. Economic Development Commission has been at work for the past two years.

In 1950 the Brazilian Government indicated to the United States that technical cooperation was needed for some economic master-planning, and by July 1951 the Commission was ready to go to work. With two co-chairmen—one from each country—its administrative setup is unique among Point Four bilateral activities. Merwin L. Bohan is president of the U.S. section of the Commission, and Ary Torres is president of the Brazilian section. (There are from twenty-five to thirty-five U.S. members and 175 to 200 Brazilians.) The Institute of Inter-American Affairs has participated by providing personnel for basic engineering surveys in the fields of

power and transportation as well as financial advisers. The Commission has spent long, weary hours on programming, and much of Brazil's future economic progress will depend upon the job it does. Not the least of its responsibilities is to break down the traditional skepticism underlying the old saying among Brazilian politicians that "if you *don't* want to solve a problem, hand it over to a commission."

Brazilian taxes earmarked for the purpose finance about 70 per cent of the program, while dollar costs are covered in loan applications to the World Bank and the Export-Import Bank in Washington for fifteen- to twenty-year credits carrying about four and a half per cent interest. At this writing, the Commission has approved twenty-four projects, with additional ones in the preparatory stage. Of the twenty-four, two are in the field of agriculture, one in grain storage, two in harbors, one in dredging, seven in railroads, eight in power, two in industry (metals and alkalis), and one in highways. Loans have been granted by the two Banks to cover the dollar costs of eight of these projects in the amount of \$119,260,000. Cruzeiro costs of these projects total approximately 3.554 billion (about 190 million dollars at the official exchange rate of 18.72 cruzeiros to the dollar). The sixteen remaining projects are now under study by the World Bank.

Wheat production is one of Brazil's biggest problems, for in a country of fifty-two million people self-sufficiency in this crop is indispensable if the economy is to survive. Ever since the end of the Empire, under which it was



Badly needed highway improvements, for which Joint Commission recommended spending some three million dollars, are under way

whereas installations are needed for 1,750,000 tons of wheat, soybeans, and other crops, not including rice.

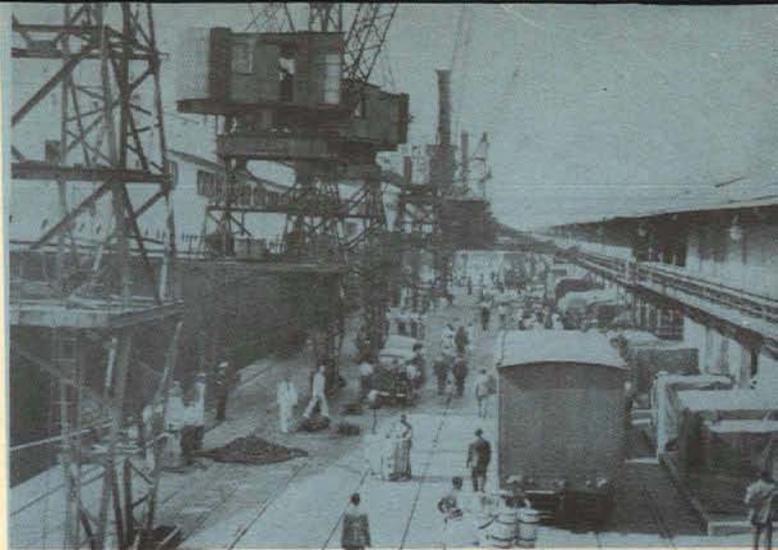
For lack of storage space and because of track differences, the grain frequently must be moved from one train to another, which requires double handling. The projected network of modern elevators will eliminate manual loading of closed railroad cars, for the elevators will be located at the railroad yards. Also, bulk unloading of wheat transported by truck, boats, or rail will greatly reduce handling costs.

Other benefits will be uniform classification, standardized weighing, prices, and transportation costs, and equalized wages. Farmers will receive prompt payment for crops through negotiable storage receipts. The project will make it easier to set up agricultural cooperatives in the vicinity of each elevator; it will improve farming methods and eliminate the middlemen who take advantage of farmers unable to ship or store grain.

The elevators will be equipped to receive grain in sacks from small farms. Special devices will extract the grain from the sacks, which will then be returned to the farmers—something that was never done before. Modern laboratories at each elevator will prepare insecticides. Drying equipment will make it possible to handle different types of grain and beans simultaneously. Quite apart from filling the gap in wheat production, these measures will also stimulate production of other types of grain. In Brazil, as the axiom goes, there's plenty of room for planting, and anything will grow if you plant it.

Under two other Joint Commission projects drafted in cooperation with the Ministry of Agriculture, twenty-three million dollars will be spent to import enough farm machinery and implements from the United States and Canada to continue Brazil's agricultural mechanization (an old dream of Brazilian farmers) at a steady pace for the next few years.

The man in the street is not likely to associate the dredging of ports with his daily supply of goods, even though he may be familiar with what it represents in the country's over-all economy. The consumer in Rio de Janeiro is scarcely aware that he owes his succulent steak from Rio Grande do Sul in part, at least, to the dredging service that keeps the ports clear for navigation.



Thanks to Joint Brazil-U.S. Economic Development Commission project, strategic port of Santos will be enlarged and modernized

On the Commission's recommendation, \$26,809,350 will be invested in dredges for use in the main Brazilian ports,—those handling 90 per cent of the country's total shipping tonnage.

Ports are perhaps more important to Brazil than to most countries. With 5,520 miles of coastline and an area larger than the United States, the nation is made up of so-called "economic islands." Thus there is no land communication between eastern Amazonia and the country's Northeast. Bahia, in central Brazil, and Rio Grande do Sul and Santa Catarina in the South, have inadequate rail and highway connections with Rio or São Paulo. Coastwise navigation is still the cheapest, often the only, method of sending vital products between these "islands"—coal, grain, and salt from the South to the capital and manioc and other staples from the South to the Northeast.

In fact, nearly all Brazilian trade depends on maritime transportation. True, Brazilian exports today are smaller in proportion to national production than they were twenty-five years ago, but both exports and imports have increased considerably. The country depends heavily on imports for equipment and certain raw materials, while exports of products like coffee provide the foreign exchange to pay for them.

The new dredges will raise total capacity from two and a half million to thirteen million cubic yards, and no more precious foreign exchange will be used up on dredging services, which are now provided by foreign companies under contracts unfavorable to Brazil.

For more than fifty years the port of Santos, through which most of Brazil's coffee is shipped abroad, has held a key position in the country's economy. Some 340 miles from Rio, it is fed by the best railroads and highways in Brazil. It is an outlet for the gigantic industrial output of São Paulo, for the agricultural zones of the same state and of northern Paraná, southwestern Minas Gerais, southern Goiás, and Mato Grosso. A project recently approved by the Commission calls for modernizing and enlarging the port of Santos at a cost of 3.7 million dollars plus 349.4 million cruzeiros.

In a report on revamping Rio de Janeiro harbor with a \$2,112,049 loan that has been applied for at the World

Bank, the Commission states: "It is expected that the improvements called for will not only alleviate crowded conditions in the harbor, but also avoid future congestion, thus removing the cause for a surtax on import freight charges and saving millions in foreign exchange."

Rio harbor, besides serving the two and a half million people in the Federal District, is the gateway to an economic hinterland with a population of nine million and about eight million acres under cultivation. It is directly served by the Central do Brasil and Leopoldina Railroads and indirectly by the Minas Gerais Railroad Company—altogether about 7,500 miles of tracks—reaching into the States of Rio de Janeiro, Espírito Santo, São Paulo, Minas Gerais, and even as far as Goiás and Bahia. The constant growth of highways and the prodigious rise in machinery imports for the Federal District's mushrooming industries daily increase the pressure on the harbor. Understandably, the periodic bottlenecks are reflected in the cost of living of a large section of the country's population.

"Quite apart from certain administrative procedures which delay the handling of merchandise and which could be easily remedied," according to the Joint Commission, storage facilities and mechanical equipment are inadequate to handle the merchandise, and work methods are inefficient.

Over one hundred thousand tons of salt are handled through Rio harbor every year. The salt is unloaded in large tubs or vats at the rate of about forty tons an hour and at a cost of roughly eighteen cruzeiros a ton. Current plans call for building a warehouse and buying two unloading units, with an hourly capacity of two hundred tons, as well as equipment to transport the salt from ship to warehouse and from warehouse to railroad cars or trucks. This will cut unloading costs in half, saving approximately a million cruzeiros a year; more important still, it will shorten the stay of ships in port (from 150 hours to thirty in the case of six-thousand-ton vessels), with a corresponding and appreciable reduction in salt freight charges.

Orange exports, an excellent source of exchange, are carried out mainly through Rio harbor—in the last five years 80 per cent of the national exports of the fruit, worth about 7.3 million dollars, passed through that port. Other fruit exports through the port have increased 50 per cent in the past few years. Present refrigerator units hold four hundred thousand crates of fruit, only 12 per cent of the volume handled in 1951. The project calls for a 50-per-cent increase in the capacity of present refrigerating units, an improvement that "will solve the problem." The Joint Commission points out that "as harbor facilities improve, oranges will be shipped in better condition, yielding higher prices and more foreign exchange; the improvements will also ease congestion, aggravated by the inadequacy of existing refrigerating facilities."

Equipment will also be purchased at a cost of seventeen million cruzeiros to remodel electric installations. To speed up unloading at the piers, the project calls for buying mechanical and transportation equipment, including trailers, stackers, movable cranes, and trucks.

Total expenditures for Rio harbor's enlargement are estimated at 233,486,000 cruzeiros, of which 190,717,000 cruzeiros are slated for local construction work and for local purchase of materials. Meanwhile, Brazil's Ministry



*President of the
U.S. section of
Commission
Merwin Bohan
(left) with Brazil's
Finance Minister
Horacio Lafer*

*Below: Point Four
agronomist teaches
Brazilian farmers
better production
methods*



of Transport is also spending about a billion and a half cruzeiros on Rio harbor, building additional wharves, warehouses, and so on.

Another project approved by the Joint Commission calls for modernizing equipment and installations on the main line of the Central do Brasil Railroad. This project will be divided into five stages, to be carried out on an emergency basis.

During the first stage, eleven sidings between Belo Horizonte, capital of Minas Gerais State, and Lafaiete, another important rail town, will be extended and Lafaiete's terminal yard will be enlarged. The stretch between Belo Horizonte and Lafaiete has a single track 111 miles long, with seventeen sidings that will hold freight trains of no more than eighteen gondolas and a small locomotive or a maximum of fourteen cars in combined passenger-freight trains. With the extensions, these sidings will hold forty-four or more cars, reducing the number of trains needed to take care of daily traffic. The cost of this first stage in national currency will be 18,092,841 cruzeiros.

The second stage involves ballasting of beds, changing of tracks and ties, and so on, in various stretches of the Central Railroad that are now inadequate to haul iron and manganese for export and take care of the heavy traffic of raw materials shipped to Volta Redonda, the largest steel-producing center, as well as to the steel

industry in the Paraíba Valley and in São Paulo. The cost of this construction program, which may be finished within five years, is estimated at 652,278,000 cruzeiros, with an additional \$1,531,357 for imported materials. The acquisition of repair equipment for Diesel locomotives, generators, and so on, making up the third stage of the program, will cost \$427,700.

The fourth stage concerns the terminal yards serving Rio harbor, which handle all railroad traffic in and out of the port except for coal and ore. The volume of goods is building up (more than five million tons in 1946 and over seven million in 1951), and present inadequate storage, loading, and unloading facilities are causing congestion. The projected expansion—to take care of a thousand freight cars—will cost 13,229,300 cruzeiros and an additional ninety thousand dollars for yard equipment.

The final stage calls for replacing 2,075 all-wood freight cars with 1,500 steel cars. According to estimates, \$8,675,280 worth of equipment must be imported and local expenses will run to 370,570,874 cruzeiros.

Power supply is one of the most serious problems facing the Catanduva region, in São Paulo State, with its 130,000 people. Despite the promising growth of its coffee, cotton, and cottonseed production, and of local industries based on cotton and vegetable oils, the zone has been stifled by a lack of sufficient power.

A project approved by the Joint Commission will provide a dollar loan to the company holding Catanduva's power concession for the purchase of 51,614,000 cruzei-

ros' worth of equipment. The company's present generating capacity stands at 4,200 kilowatts, which it hopes to increase to 13,800 kw.

Project Number 12 concerns harnessing Paulo Afonso Falls in the São Francisco Valley to provide industrial power for a desert zone. Similar to the Tennessee Valley Authority, though on a smaller scale, it will revolutionize a large slice of Brazilian territory and, as one government expert put it, "will give rise to a new country within Brazil." The World Bank recently loaned fifteen million dollars to the project.

Although 36 per cent of the country's rural population lives in the region, local electrical output is less than 18 per cent of total national production. A victim of general poverty and above all of droughts and barren lands, the population, made up mostly of farmers, periodically emigrates to avoid starvation. Living conditions have been so difficult in the past two years that over 2 per cent of the people in Alagoas State, for example, migrated to São Paulo. In all, a quarter million people left the Northeast, going to the Federal District, São Paulo, and Goiás.

Two new generating units are now under construction, and the Joint Commission has approved a third. On it will depend to a large extent whether or not irrigation projects for the lower São Francisco region will be carried out. The area supports a surprising number of local industries, some fairly large, and power is needed for plants producing preserves, candies, sugar, textile products, cement, vegetable oils, ceramics, fibers, and so on. Actually, the needs of Recife, Salvador, and Maceió (capitals, respectively, of Pernambuco, Bahia, and Alagoas States) will completely take up the electric power produced by one of the two plants to be built during the first stage of the projects. These have been approved, calling for a supply of 1,002,000 kilowatts, and for an expenditure of about 143 million dollars.

Other projects embrace more power plants, highway equipment (three million dollars), machinery for building highways, and the like. All this, of course, is only the beginning. But no one can deny that the Joint Economic Development Commission has made a crucial contribution in helping Brazil build for the future. ♦♦♦



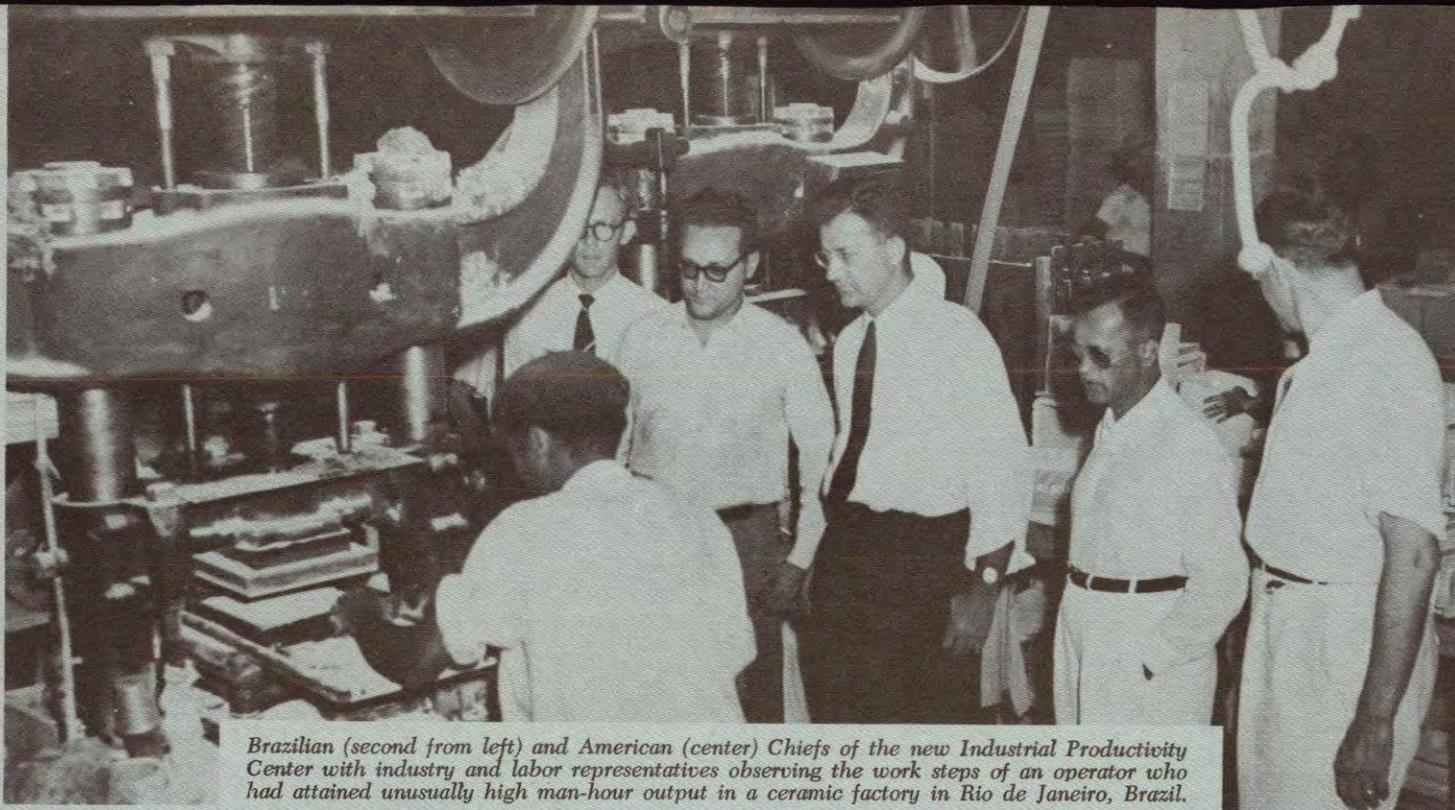
Paraná farmers harvest wheat with a combine. Farm machinery and implements are imported from the United States and Canada



Industrial hub of São Paulo turns out products for export that bring in precious foreign exchange



Crowded conditions on suburban trains in Rio de Janeiro cause unnecessary deaths and injuries to the passengers. U.S. technical consultants are working with the Brazilian Government to alleviate these hazardous conditions.



Brazilian (second from left) and American (center) Chiefs of the new Industrial Productivity Center with industry and labor representatives observing the work steps of an operator who had attained unusually high man-hour output in a ceramic factory in Rio de Janeiro, Brazil.

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