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Additional Support for Latin America's Development

## TWELVE NONREGIONAL NATIONS SIGN DECLARATION OF MADRID

The Inter-American Development Bank and 12 industrialized countries from outside the Western Hemisphere signed the Declaration of Madrid in which those countries signify their intention of taking all necessary steps to seek membership in the Bank as nonregional members.

The agreement was signed on December 17 by Antonio Ortiz Mena, President of the Bank, and representatives of the 12 countries at a ceremony carried out at the headquarters of the Bank of Spain in Madrid presided over by Rafael Cabello de Alba, Second Vice President of the Spanish Government and Minister of the Treasury.

The Governor of the Bank of Spain, Luis Coronel de Palma, Marqués de Tejada, gave a brief welcoming address.

In signing the Declaration for the Bank, whose present membership embraces 22 Latin American countries, the United States and Canada, Mr. Ortiz Mena characterized the event as "an extraordinary milestone in the life of the Inter-American Bank and in the economic and financial relations of Latin America and the industrialized world."

The countries which signed the Declaration were Austria, Belgium, Denmark, Germany, Israel, Italy, Japan, the Netherlands, Spain, Switzerland, the United Kingdom and Yugoslavia.

The 12 nations, along with Portugal for whom the agreement remains open for signature, would contribute the equivalent of \$755 million to the Bank. Of that sum a total of \$440 million would be paid in. Of the first sum a total of \$377.5 million would be contributed to the Bank's Fund for Special Operations for lending at concessionary terms and the remainder would be subscribed to a new fund to be known as the Inter-Regional Capital Stock.

The nonregional countries would designate one Governor and one Alternate Governor for each country and would be represented on the Bank's Board of

Executive Directors by two Directors and two Alternate Directors.

The entry of the 12 countries into the Bank would not affect the regional nature of the institution, because under the arrangement the Latin American countries would retain a majority of the voting power.

When the Bank was established 41.2 per cent of the authorized capital was subscribed by just one member—the United States—and 58.8 per cent was allocated to 20 Latin American countries. Once the present negotiations are completed, 14 industrialized countries would account for 45.3 per cent of the capital and 22 Latin American countries would control 54.7 per cent.

"The admission to membership in the Bank of 12 nations from Europe and the Near and Far East on conditions that do not detract from the regional status of our institution—Mr. Ortiz Mena said—is the result of a lengthy process initiated by the Bank to achieve a broader, more permanent cooperation from nonregional industrialized countries in the development efforts of Latin America. This is an event which in itself is historically significant. Yet, even more important is the fact that the negotiations culminate at a time when grave disturbances in the world economy impede the ordinary conduct of business and the orderly coexistence of nations. The fact that these disturbances have not interrupted the progress of our negotiations and that even those countries most sorely beset by external problems or domestic economic troubles have maintained, and in some cases even increased, the contributions which they had agreed to make before such problems arose is most encouraging—and at the same time holds a lesson for us which we should not overlook."

Speaking for the 12 nonregional countries which are seeking membership in the Bank, Dr. Horst Moltrecht, an official of the Economic Cooperation Ministry of Germany, declared that

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IDB Secretary Jorge Hazera reads text of Declaration of Madrid. In middle, Mr. Ortiz Mena and Dr. Horst Moltrecht sign historic document. Below, Mr. Ortiz Mena answers questions at press conference following signing.



exploring ways to attract additional substantial financial resources for Latin America's development from the industrialized countries, including the possibility of bringing them into active membership. As one of the results of the Committee's work, Canada joined the Bank in 1972.

The Bank was created to accelerate the individual and collective development of

the appointment of Emil Weinberg as Chief of Division 2, Region 1, of the Operations Department, effective December 23. This Division is responsible for Bank operations in El Salvador, Guatemala and Nicaragua.

For the past four years, Mr. Weinberg served as Assistant and Advisor to the Executive Vice President, having previously served in the Operations Department.

the statements on procurement arrangements contained in this Declaration and in the letters referred to above, the limitations allowed by this proposed amendment will not apply to the procurement in the nonregional members from the forthcoming replenishment contributions made by regional non-borrowing members.

Done at Madrid, Spain, on the 17th day of December, 1974, in the English, French, Portuguese and Spanish languages.

742	4,367	52,681,009	5,230	63,091,751	63,091,751
313	346	4,173,948	414	4,994,261	4,994,261
110	4,264	51,438,476	5,106	61,595,886	61,595,886
527	4,757	57,385,748	5,697	68,725,375	68,725,375
20	648	7,817,104	776	9,361,224	9,361,224
313	346	4,173,948	414	4,994,261	4,994,261
110	4,264	51,438,476	5,106	61,595,886	61,595,886
25	952	11,484,388	1,140	13,752,313	13,752,313
110	4,264	51,438,476	5,106	61,595,886	61,595,886
377	350	4,222,201	419	5,054,578	5,054,578
665	26,146	315,410,504	31,310	377,706,069	377,706,069

equivalent to approximately 12,063.432381 current U.S. dollars.



## New Members Would Contribute



Ambassador von Lilienfeld of Germany



María Pilz, Austrian Representative



L. Muelemans, Belgian Representative



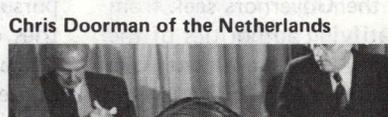
Wilhem Ulrichsen



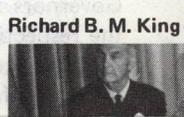
Zvi Tenney, Israeli Representative



Ambassador Shoji Sato of Japan



Chris Doorman of the Netherlands



Richard B. M. King

## Transfer of Technology Poses Thorny Problems

One of the great challenges facing Latin America is the implementation of sound programs for modernizing agriculture so that standards of living and opportunities for social improvement can be increased.

Such programs should proceed faster than population growth. Latin America, with one of the highest rates of population growth in the world, had about 285 million people in 1970. That number will almost triple by the year 2000.

Continued emphasis on projects based on conventional ideas in practice for many years, favoring the expansion of traditional agriculture into unsuitable or fragile environments, will inevitably precipitate ecological deterioration in several parts of Latin America and will not permit production to overtake population. Moreover, it will encourage the propagation of cropping systems with low productivity in terms of digestible energy per acre. Consequently, people depending on such systems will continue to face undernourishment and malnutrition.

To give an illustration, rice is produced with relatively primitive methods in Central America, the Caribbean and the Phillipines at a very efficient caloric gain of about 16, according to estimates made by Gary Heichel of the Connecticut Agricultural Experiment Station.

The caloric gain, or the ratio of digestible energy, may be considered a measure of the efficiency of the total energy utilization. On the average, only six people per acre per year can be fed by the meager yields. On an energy efficiency basis, rice cultivated in the United States is less efficient, but 17 people per acre per year can be fed by the more abundant yields. Modern crop production in North America is less efficient than primitive rice production, but Iowa or Illinois grain will feed 23 people per acre per year. Obviously, high energy efficiency is certainly not an asset if it does not reduce malnutrition or eliminate starvation.

While agriculture remains the overwhelmingly important component of the economy of the Latin American countries, both in terms of employment and production, its development is being impaired mainly by socio-economic, institutional and political constraints rather than by lack of natural resources.

Modernization of agriculture is vital to their overall economic development, for this can generate a consumer surplus that in turn can be saved and invested in other sectors.

On the other hand, modernization depends on global economic development planning, for it requires numerous inputs from other sectors and a fast-growing market for agricultural products.

For agricultural technology to be successfully integrated into the various national sectors better market conditions need to be promoted and created.

Technology cannot merely be transferred to Latin America from the industrialized and developed countries where agriculture is energy intensive. It must be adapted to local conditions. Multiple cropping systems for obtaining higher production per hectare imply essentially more efficient use of irrigation, which is highly energy intensive. More experiments and research are needed to bring about desirable innovative concepts within the broad and complex range of the soil-water-plant-animal ecosystem.

Roger Revelle, Director of the Center for Population Studies at Harvard University, in the September issue of the *Scientific American*, estimates that to establish modernized, irrigated

farming and food processing operations in developing nations, the Food-Energy Yield vs. Mechanical Energy Use necessary would be somewhat similar to that shown in the following table as applied to India.

	Millions of Kilocalories		Ratio of Mechanical Energy Used to
	(Per Hectare)	(Per Ton of Food Grains)	Food Energy Produced
Irrigation from Wells	3.75	.585	.167
Chemical Fertilizers	3.01	.469	.134
High-Yielding Seeds	.15	.023	.002
Plant Protection	.05	.008	.002
Farm Tools and Machinery	1.05	.164	.047
Fuel for Machinery	1.97	.311	.089
Fuel for Drying Crops	.30	.047	.013
Transportation	.18	.028	.008
Storage and Marketing	.05	.008	.002
Food Processing	1.25	.195	.056
Totals	11.76	1.838	.525

The table does not include energy for food preparation in the home. It assumes a harvest of 6.4 tons of food grains per hectare—roughly 2.5 acres—equivalent to the average corn harvest in Iowa.

One option is to increase the allocation of resources to the agricultural sector of Latin America.

This commitment, coupled with local government efforts to properly use these funds to provide small farmers with adequate land reforms, credits and cooperative programs and better financing systems as well as administrative integrity, would create rural development activities that in turn would help to slow down the migratory flow to urban areas.

To increase production, a broader range of irrigation programs should be implemented, together with research or better storage facilities for crops, more adequate use of fertilizers, better dissemination of information and technology to increase crop yields as well as facilities for developing new disease-resistant strains that are more adaptable to different climates, and more advanced research in tropical soil-water management.

To overcome these obstacles, direct international efforts are necessary to give special attention to transportation planning, preparing irrigation projects and evaluating the alternative uses of agricultural resources on a country by country basis from the economic point of view.

At the same time, training programs should be more flexible and practical, so that science and technology can gradually infiltrate the various sectors of the economy and convert them into well organized inter-related and inter-dependent entities.

Unless prompt and systematic efforts are made to solve these problems, Dr. Norman E. Borlaug, Nobel laureate, may have been right when he said that "Only full cooperation among the industrialized nations can prevent chaos in world food supplies—and the stage is set for real trouble."



Educated at Virginia Polytechnic Institute and State University, the author of this article, Pierre-Marie Adrien, an agronomist specializing in Soil Chemistry and Classification works in the Irrigation Section of the IDB's Project Analysis Department. Before joining PRA, Mr. Adrien worked with the Agriculture Economics Section in the Department of Social and Economics Development. He is a member of the Soil Science Society of America (SSSA), the American Association for the Advancement of Science (AAAS), the American Chemical Society (ACS), and various other scientific organizations.

# IDB Approves \$272 Million In Loans to Ten Countries

The Inter-American Bank in recent weeks authorized \$272 million for development projects in five Latin American member countries. The details are as follows:

**ARGENTINA-URUGUAY:** On November 7 the Bank announced the approval of a \$95 million loan—the largest single loan since it began operations—to help finance the second stage of the hydroelectric power plant being built jointly by Argentina and Uruguay at Salto Grande on the Uruguay River.

The Borrower is the *Comisión Técnica Mixta de Salto Grande (CTM)*, an international public authority established jointly by Argentina and Uruguay, which is responsible for the use, impoundment, and diversion of the waters of the Uruguay River.

In December 1972, the Bank authorized a \$80 million loan to finance the

first stage of the 1,620,000-kilowatt power plant, located 225 miles north of Buenos Aires. The first stage, being built at an estimated cost of \$661 million, consists of the construction of civil engineering works for the plant, including an impounding dam for storage of more than 4 billion cubic meters of water and twelve 135,000-kilowatt generators.

**BARBADOS:** On November 27 the Bank announced the approval of a \$9.1 million loan to help expand and improve the port of Bridgetown, the capital city.

The cost of the project is estimated at \$12 million, of which the Bank loan will cover 75.8 per cent and the Government of Barbados the remaining 24.2 per cent.

In addition, the Bank extended \$250,000 in grant technical cooperation for consulting services required in establishing an autonomous Port Authority

and in improving port financial administration, accounting, management information systems, tariffs, operations and maintenance.

**BOLIVIA:** On November 21 the Bank announced the approval of a \$1,150,000 loan to help strengthen the technical capacity of *Yacimientos Petrolíferos Fiscales Bolivianos (YPFB)*, Bolivia's oil agency, and make the feasibility and final design studies of the Sucre-Oruro gas pipeline.

The loan will be used by YPFB to contract the consulting firms required to carry out the two subprojects at a total estimated cost of \$1.4 million, of which the Bank loan will cover 82.1 per cent and YPFB the remaining 17.9 per cent.

**HAITI:** A loan for 100,000 Canadian dollars in grant technical cooperation announced on December 5 will be used by the *Centrale Autonome Metropolitaine d'Eau Potable (CAMEP)*, the national water agency, to draft a project for a water system to serve New Port-au-Prince, a 6.2 square-mile area that has developed near the capital in the last few years.

**HONDURAS:** Also on December 5 the Bank announced two technical cooperations grants totaling \$875,000 to help carry out studies for integrated development and flood control in the Sula Valley and to strengthen the institutional structure of the national forestry agency.

One of the grants, for \$750,000, will be used by the *Dirección General de Obras Públicas y Edificios Públicos* of the Ministry of Communications, Public Works and Transport to hire the consultants needed to undertake studies for the Sula Valley project.

The project will benefit an area of approximately 469,300 acres, 173,000 acres of which are subject to periodic flooding.

The second cooperation, for \$125,000, will enable the *Corporación Hondureña de Desarrollo Forestal (COHDEFOR)*, the national forestry agency, to contract a consulting firm to establish the organizational and administrative structure of the agency and to engage a consultant to advise top-level management on project preparation, loan applications and related procedures.

**MEXICO:** In December the Bank approved three loans for irrigation projects

## BIDDING INFORMATION

Several member countries have requested bids for goods and services which, in some cases, are to be acquired with financial resources furnished by the Inter-American Bank.

**ARGENTINA-URUGUAY:** The *Comisión Técnica Mixta de Salto Grande* has issued a request for international bidding (SG-06) for electrical equipment for the Salto Grande plant. Opening of bids: 3 p.m., February 5, 1975, at Cerrito 264, 4° piso, Buenos Aires, Argentina, in the presence of interested parties.

Pertinent documentation may be examined and acquired at the above address or at Avenida 18 de Julio 1730, 10° piso, Montevideo, Uruguay, week-days between 9:30 a.m. and 12:30 p.m. and between 2:30 and 6 p.m. after November 12, 1974.

Participants in the bidding are required to have a complete set of documents. These are available in Buenos Aires for a fee of 2,000 Argentine pesos or in Montevideo for a fee of 250,000 Uruguayan pesos. Offers should be presented at the *Comisión's* offices at Cerrito 264, 4° piso, Buenos Aires, Argentina, up to the opening date.

**CHILE:** The *Empresa Nacional de Electricidad S.A.* has called for international bids for supplying two three-phase power transformers, 13.8/23 Kv, 175 MVA each, for

the Antuco hydroelectric plant, as well as technical cooperation for installing and putting it into operation.

The *Empresa* is calling for international offers for supplying the goods mentioned above. This procurement will be financed under Loan 267/OC-CH extended to ENDESA by the Inter-American Development Bank.

Suppliers from countries classified by the IDB as eligible under ordinary capital funds regulations may participate in the bidding.

Forms containing bidding conditions are available at Santa Rosa 76, 15° piso, Oficina 1508, Santiago, Chile. Offers will be accepted and opened at 10 a.m., February 24, 1975 at the Auditorium in ENDESA's Edificio Central, Santa Rosa No. 76, entrepiso, Santiago, Chile.

Note:

- A fee of 50,000 escudos in cash will be charged for each set of three documents in English.
- Buyers should fill in a form which will be furnished to them, stating the name of the firm, company, consulate, etc. on whose behalf the purchase is being made and the name of the country of origin of the factory involved.
- Further technical details are available to interested parties, free of charge, at the above address.

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## Agriculture Policy Seminary

Agricultural policy quite often has acted as an impediment to the complete realization of development objectives in the rural sector. As a result, public sector financed programs and projects fall far short of expectations or experience tremendous difficulties in execution.

Panama, for example, in attempting to stimulate rice production encountered problems because of ill defined price-support policy and requested short-term technical assistance from the Bank in its efforts to resolve the issue. Several member countries of the Bank have similar problems and it was felt that, rather than servicing the individual countries on a case-by-case basis, it would be more efficient to organize a seminar on agricultural policy to which member countries would not only be invited as participants but would also

be asked as contributors who would share their particular experiences with the other member countries. The seminar will be conducted March 17-20, at BID headquarters in Washington, D.C.

The objectives of the project are: (a) To strengthen and improve the policy-making capabilities of institutions involved in agricultural planning. (b) To contribute to the effective utilization of the resources supplied by the Bank and the attainment of project objectives by raising the level of awareness among agricultural policy-makers of the possible incidence of agricultural policy on the development process.

The theme for the seminar is "Agricultural Policy: A Limiting Factor in the Development Process." The program, which calls for major papers as well as those dealing with the experiences of some of the member countries of the Bank, includes:

I) Price Policy: Uses, Limitations and Supporting Mechanisms, as well as an Evaluation of Their Application in Latin America. II) Rural Development Policies—(Rural Industrialization and Agro-Industrial Policies). III) The Social Cost of Consumer Oriented Price Policies. IV) Production Stimulants: Alternatives or Complements to Price Policies. V) Export Promotion Policies - The Role of Government and the Place for International Agencies.

This seminar provides the Bank with an effective instrument in its balanced approach to development, by enabling it to support and provide assistance in important areas which can adversely affect its initiatives and efforts in other spheres. Both in the member countries and in the Bank there is general agreement on the favorable impact and need for the transfer of knowledge by means of a seminar of this type.

## Loans Approved For 10 Countries

(from page 7)

in Mexico. On December 5 it announced approval of two loans totaling \$45 million to foster rural irrigation; and on December 9 it announced approval of a \$45.5 million loan to bring into irrigation about 116,584 acres of farm land in Sinaloa, a state on the northwestern coast.

The two loans for rural irrigation—\$8 million from the Bank's ordinary capital resources and \$37 million from its Fund for Special Operations—will be used for the third stage of the National Plan of Irrigation Works for Rural Development—a vast, nationwide plan for social and agrarian development whose primary purpose is the construction of small-scale irrigation works in economically precarious communities of less than 2,500 population.

The third loan will be used by the *Secretaría de Recursos Hidráulicos* for a project benefitting about 5,000 farm families in Sinaloa. The project will add 116,584 new acres to the 605,150 acres now under irrigation in the San Lorenzo-Culiacán area and the Mocerito River system in Sinaloa and will increase the amount of water available for irrigating 53,600 acres in the Culiacán high valley and on the left bank of the San Lorenzo River.

On November 14, the Bank announced the approval of a \$2,514,000 line of credit to enable Mexico to provide medium-term financing to export equipment and services for a paper and cardboard factory in the Dominican Republic. The line of credit was extended to the *Nacional Financiera, S.A.*, the Mexican Government agency charged with negotiating foreign loans.

*Nacional Financiera* will utilize the credit exclusively in rediscounting at the Inter-American Bank credit documents issued by the *Banco de México, S.A.*, through the *Fondo para el Fomento de las Exportaciones de Productos Manufacturados*, which it administers. The line of credit will help FOMEX finance the export by *Empresa Bufete Industrial Construcciones, S.A.*, of goods and services valued at \$3,480,000 to the Dominican Republic for the reconditioning of existing machinery and the installation of a cardboard plant by *Empresa Industrial Nacional del Papel (INDUSPAPEL)*, a state enterprise, in that country.

**PARAGUAY:** A \$33.6 million loan announced on December 9 will be used by the *Administración Nacional de Electricidad (ANDE)*, the national electrification agency, to expand the generating capacity of the Acaray dam by approximately 240 million kilowatt hours, construct an additional transmission line from the Acaray dam to Asunción, the capital, and expand and improve the distribution network in Asunción and other parts of the country.

The total cost of the project is estimated at \$42,164,000, of which the Bank loan will cover 79.7 per cent and ANDE the remaining 20.3 per cent.

The loan includes \$200,000 in technical cooperation for consulting services in strengthening ANDE's organic and administrative structure.

**PERU:** On December 5 the Bank announced a \$30.5 million loan to be used by the *Dirección General de Obras Sanitarias (DGOS)*, an agency of the *Ministerio de Vivienda*, for the third stage of the National Water Supply and Sewage Plan of Peru, which will benefit an estimated 1.5 million persons, or 20 per cent of the urban population.

The total cost of the program is estimated at \$61 million, of which the Bank loan will cover 50 per cent and the Government of Peru the remaining 50 per cent.

The loan includes \$260,000 in technical cooperation for consulting services in strengthening the administrative, accounting and financial practices of the water and sewage systems DGOS administrators.

By increasing the availability of sanitary services and the overall standards of public health, completion of the program will reduce the incidence of typhoid, lower infant mortality rates and increase life expectancy levels in Peru.

**NICARAGUA:** The Bank also announced the approval of a \$9 million loan to improve the training of medical and paramedical personnel in Nicaragua. The loan will be used by the *Universidad Nacional Autónoma de Nicaragua (UNAN)*, located in the city of León, to expand and modernize its Schools of Health Services and help carry out academic reforms.

In addition to the loan, the Bank approved \$607,000 in grant technical cooperation to help UNAN hire consultants to strengthen university administrative procedures and to improve the academic work of the Schools of Health Sciences, and to provide scholarships for advanced training of faculty members.

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