

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
TECHNICAL SECRETARIAT OF PLANNING, PARAGUAY

**THE STUDY
ON
THE ECONOMIC DEVELOPMENT
OF
THE REPUBLIC OF PARAGUAY

FINAL REPORT
AGRICULTURE & INDUSTRY : MAIN REPORT

VOLUME 3**

November 2000

**DAIWA INSTITUTE OF RESEARCH LTD.
PACIFIC CONSULTANTS INTERNATIONAL**

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PREFACE

In response to a request from the Government of the Republic of Paraguay, the Government of Japan agreed to conduct a Study on the Economic Development of the Republic of Paraguay, and entrusted the study to the Japan International Cooperation Agency (JICA).

JICA organized a study team composed of Daiwa Institute of Research Ltd. and Pacific Consultants International. The team, headed by Mr. Hidesuke KOTAJIMA of Daiwa Institute of Research Ltd., visited the Republic of Paraguay five times between October 1998 and September 2000. In addition, JICA set up an advisory committee headed by Professor Akio HOSONO, of the Research Institute for Economics and Business Administration, Kobe University, which examined the study from technical points of view.

The team held discussions and conducted joint field research with the Paraguayan counterpart team, which was headed by the Technical Secretariat of Planning and composed of officials from relevant ministries. Based on these joint efforts, the team prepared the Draft Final Report and presented it to the Government of the Republic of Paraguay in August 2000. After returning to Japan, the team conducted further studies and compiled the final results found in this report.

I hope this report will contribute to forming an appropriate Development Strategy for the Paraguayan economy. I also hope it enhances the friendly relations between the two countries.

I wish to express my sincere appreciation to the Paraguayan counterpart team and others concerned for their close cooperation throughout the study.

November 2000



Kunihiro Saito

President

Japan International Cooperation Agency

November 2000

Mr. Kunihiro Saito
President,
Japan International Cooperation Agency

Dear Mr. Saito,

Letter of Transmittal

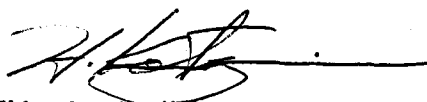
We, hereby, have the pleasure of submitting the "Study on the Economic Development of the Republic of Paraguay." The report describes the results of the Study conducted by Daiwa Institute of Research Ltd. and Pacific Consultants International, in accordance with the contract entered into with the Japan International Cooperation Agency (JICA).

Our Study Team carried out five field surveys between October 1998 and September 2000. While in Paraguay, the Team conducted a joint study with the Paraguayan counterpart team, composed of different ministry officials, to formulate development strategies along with projects for implementation, in order to enhance the economic competitiveness. In the process, skills and technology were also transferred to Paraguay. Based on results of the field surveys in Paraguay and study activities in Japan, the team prepared this report, in cooperation with the Paraguayan side.

In view of the urgency of strengthening the economic competitiveness and the socio-economic development of the Republic of Paraguay as a whole, we recommend that the Paraguayan government implement these suggestions without delay.

We wish to take this opportunity to express our sincere gratitude to the Technical Secretariat of Planning and other authorities concerned in the Republic of Paraguay for the kind cooperation and warm hospitality they extended to our Team. We also wish to express our deep gratitude to your Agency, the Ministry of Foreign Affairs, the Japanese Embassy in Paraguay, and the JICA Paraguay office.

Very truly yours,



Hidesuke Kotajima
Team Leader,
The Study on the Economic Development of the
Republic of Paraguay

ABBREVIATIONS & ACRONYMS

English		Spanish
ABASTO	Central Market of Asuncion City	Mercado Central de Abasto de la Municipalidad de Asunción
ABP	Paraguayan Banks Association	Asociación de Bancos del Paraguay
ACEPAR	Paraguayan Steel Company	Aceros del Paraguay S.A.
ANTELCO	National Telecommunications Company	Administración Nacional de Telecomunicaciones
APAL	Alcohol monopoly corporation	
APC	Paraguayan Quality Association	
ARP	Rural Association of Paraguay	Asociación Rural del Paraguay
ASEAN	Association of South East Asian Nations	
BCP	Central Bank of Paraguay	Banco Central del Paraguay
BID(IDB)	Inter-American Development Bank	Banco Interamericano de Desarrollo
BIS	Bank for International Settlements	
BNF	National Development Bank	Banco Nacional de Fomento
BOD	Biochemical Oxygen Demand	
BVPASA	Stock Exchange and Products of Asunción S.A.	Bolsa de Valores y Productos de Asunción S.A.
CADEP		Centro de Analisis y Difusión de Economía Paraguaya
CAH		Crédito Agrícola de Habitación
CAP		Cámara de Anunciadores del Paraguay
CAPECO	Chamber of Paraguayan Cereals and Oleaginous	Cámara Paraguaya de Exportadores de Cereales y Oleaginosas
CBC		Cámara y Bolsa de Comercio
CCM	Council of Common Market	
CECTEC		Centro de Educación, Capacitación y Tecnología Campesina
CEDIAL		Cooperación Empresarial y Desarrollo Industrial
CEPAE		Centro de Apoyo a la Empresa
CERNECO		Centro de Regulación, Normas y Estudios de la Comunicación
CET	Common External Tariff	Tarifa Externa Común
CETAPAR	Comprehensive Agriculture Experimental Center	Centro Tecnológico Agropecuario en Paraguay
CI	Competitive Index	Indice Competitivo
CNV	National Securities Commission	Comisión Nacional de Valores
CIP		Centro de Importadores del Paraguay
COD	Chemical Oxygen Demand	Demanda Química de Oxígeno
CODEX	The Joint FAO/WHO Foods Standards Program	
CRIA		Centro de Investigación Agrícola
DGEEC	Statistics and Census Bureau, STP	Dirección General de Estadísticas Encuestas y Censos, STP
ECLAC (CEPAL)	Economic Commission for Latin America and the Caribbean	Comisión Económica para América Latina y el Caribe

EDEP	The Study on the Economic Development of the Republic of Paraguay	Estudio sobre el Desarrollo Económico de la República del Paraguay
EU	The European Union	Unión Europea
FAO	Food & Agricultural Organization	
FCPCAL	State run railroad	Ferrocarril Presidente Carlos Antonio Lopez
FDC	Rural Development Fund	Fondo de Desarrollo Campesino
FDI	Industrial Development Fund	Fondo de Desarrollo Industrial
FDI (IED)	Foreign Direct Investment	Inversión Extranjera Directa
FECOPROD		Federación de Cooperativas de Producción Ltda.
FEPRINCO		Federación de la Producción, la Industria y el Comercio
FIDA		Fondo Internacional de Desarrollo Agrícola
FINAEX		Programa de Financiamento à Exportação de Máquinas e Equipamentos
FOB	Free on Board	
GATT	General Agreement on Tariffs and Trade	
GDP (PIB)	Gross Domestic Product	Producto Interno Bruto
GTZ	German Agency for International Cooperation	Agencia Alemán para Cooperación Internacional
Gs	Guaraní (Currency Unit of Paraguay)	Guaraní (moneda paraguaya)
HACCP	Hazard Analysis & Critical Control Point	Control Crítico y Analisis de Peligro
ICOR	Incremental Capital Output Ratio	Proporción del Producto Marginal del Capital / Rendimiento Marginal
IDB (BID)	Inter-American Development Bank	Banco Inter-Americano de Desarrollo
IDP	Productivity Index	Indice de Productividad
IED (FDI)	Foreign Direct Investment	Inversión Extranjera Directa
INAN	National Institute of Food and Nutrition	Instituto Nacional de Alimentación y Nutrición
INCOOP	National Institute of Cooperativism	Instituto Nacional de Cooperativismo
INTAL	Institute for the Integration of Latin America and the Caribbean	
INTN	National Institute of Technology and Standardization	Instituto Nacional de Tecnología y Normalización
IPS		Instituto de Prevision Social
ISO	International Standards Organization	Organización Internacional de Estándar
IVA	Value Added Tax	Impuesto de Valor Agregado
JBIC	Japan Bank for International Cooperation	Banco del Japón para Cooperación Internacional
JCIF	Japan Center for International Finance	Centro del Japón para Finanzas Internacionales
JETRO	Japan External Trade Organization	Organización de Comercio Externo del Japón
JICA	Japan International Cooperation Agency	Agencia de Cooperación Internacional del Japón
JIS	Japan Industrial Standard	Estándar Industrial del Japón
LF	Ladle Furnace	
MAG	Ministry of Agriculture and Livestock	Ministerio de Agricultura y Ganadería
MERCOSUR	Southern Common Market	Mercado Común del Sur
MH	Ministry of Finance	Ministerio de Hacienda
MIC	Ministry of Industry & Commerce	Ministerio de Industria y Comercio

MOPC	Ministry of Public Works and Communications	Ministerio de Obras Públicas y Comunicaciones
NGO	Non Government Organization	Organización No Gubernamental
ODA	Official Development Assistance	Asistencia de Desarrollo Oficial
OEM	Original Equipment Manufacture	
OJT	On the Job Training	Adiestramiento en el Trabajo
OPIT	Integral Transport Planning Office of MOPC	Oficina de Planificación Integral de Transporte de MOPC
ORMIC	Regional Office of Ministry of Industry & Commerce	
PIB (GDP)	Gross Domestic Product	Producto Interno Bruto
PITEX	Temporary Import Program for Exportation	Programa de Importación Temporal para Exportación
PROMODAF	Modernization Program for Development of Agricultural, Livestock and Forestry Sector	Programa de Modernización para el Desarrollo del Sector Agropecuario y Forestal
PROPARAGUAY	The Paraguayan Government Institution for Export Promotion	
R&D	Research and Development	Estudio y Desarrollo
RCA	Revealed Comparative Advantage	
R\$	Real (Currency Unit of Brazil)	Real (moneda brasileña)
SENACSA		Servicio Nacional de Salud Animal
SENAI		Serviço Nacional de Aprendizagem Industrial
SMAW	Submerged Arc Welding	
SNPP		Servicio Nacional de Promoción Profesional
STP	Technical Secretariat of Planning	Secretaría Técnica de Planificación
TRIPS	Treatment of Regulation of the Intellectual Properties' Standard	
UIP	Paraguayan Industrial Union	Unión Industrial Paraguaya
US\$	US Dollar (Currency Unit of USA)	Dolar (Moneda Estadounidense)
VAT	Value Added Tax	Impuesto de Valor Agregado
WTO	World Trade Organization	Organización de Comercio Mundial
¥	Japanese Yen (Currency Unit of Japan)	Yen (Moneda Japonesa)

CURRENCY EQUIVALENTS

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