

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

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

FINAL REPORT
THE COMPREHENSIVE SUMMARY

VOLUME 1**

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



Kunihiko Saito

President

Japan International Cooperation Agency

November 2000

Mr. Kunihiro Saito
President,
Japan International Cooperation Agency

Dear Mr. Saito,

Letter of Transmittal

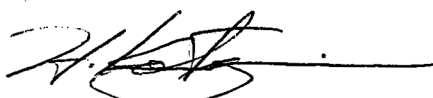
We, hereby, have the pleasure of submitting the "Study on the Economic Development of the Republic of Paraguay." The report describes the results of the Study conducted by Daiwa Institute of Research Ltd. and Pacific Consultants International, in accordance with the contract entered into with the Japan 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		
ANTELCO	National Telecommunications Company	Administración Nacional de Telecomunicaciones
APAL		
APC		
ARP		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		Comisión de Economía Paraguaya
CAH		Crédito Agrícola de Rehabilitación
CAP		Cámara de Anunciadores del Paraguay
CAPECO	Chamber of Paraguayan Cereals and Oleaginous	Cámara de Exportadores de Cereales y Normas y de Cereales
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		Estudios de la Comunicación
CET	Common External Tariff	Tarifa Externa Común
CETAPAR	Comprehensive Agriculture Experimental Center	Centro Tecnológico Agropecuario en Paraguay
CI	Competitive Index	Índice Competitivo
CNV	National Securities Commission	Comisión Nacional de Valores
		Centro de Importadores del Paraguay
COD		Demanda Química de Oxígeno
CODEX	The Joint FAO/WHO Foods Standards Program	
CRIA		Centro de Investigación Agrícola
DGEEC	Statistics and Census Bureau, STP	División General de Estadísticas STP
(CEPAL)	America and the Caribbean	Comisión Económica para América Latina y el Caribe

EDEP	The Study on the Economic	Estudio sobre el Desarrollo
	Paraguay	Económico de la República del Paraguay
EU	The European Union	Unión Europea
	Food & Agricultural Organization	
	State run railroad	Ferrocarril Presidente Carlos Antonio
FDC	Rural Development Fund	Fondo de Desarrollo Campesino
FDI	In	guías de la Producción
FDI (IED)	Foreign Direct Investment	Inversión Extranjera Directa
FECOPROD		Federación de Cooperativas de Producción Ltda.
FEPRINCO		Industria y el Comercio
FIDA		Agencia Agrícola
		Programa de Financiamiento
FOB	Free on Board	
GATT	General Agreement on Tariffs and Trade	
(PIB)		
GTZ	German Agency for International Cooperation	Agencia Alemán para Cooperación Internacional
Gs	Guaraní ()	Guaraní ()
	Hazard Analysis & Critical Control	í
ICOR	Incremental Capital Output Ratio	Proporción del Producto Marginal del Capital / Rendimiento Marginal
IDB (BID)	Inter-	ión Extranjera Directa Americano de
IDP	Productivity Index	Índice de Productividad
IED ()	Foreign Direct Investment	
INAN		Instituto Nacional de Alimentación y Nutrición
INCOOP	ism	Instituto Nacional de Cooperativismo
INTAL	f Latin	ión Internacional
	America and the Caribbean	
	National Institute of Technology and	Instituto Nacional de Tecnología y Nutrición
IPS		Instituto de Previsión Social
ISO	s Organization	Estándar para Cooperación
IVA	Value Added Tax	Impuesto de Valor Agregado
	Japan Bank for International	Internacional
JCIF		Centro del Japón para Finanzas Internacionales
JETRO	Japan External Trade Organization	Organización del Japón
	Japan International Cooperation Agency	Internacional del Japón
JIS	Japan Industrial Standard	Estándar
LF		
MAG	stry of Agriculture and Livestock	Ministerio de Agricultura y Ganadería
MERCOSUR		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

Gs 3,470 / US\$1.00

¥109.45 / US\$1.00

As of September 2000

COMPREHENSIVE SUMMARY
VOLUME 1
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1. INTRODUCTION

1.1 BACKGROUND OF THE STUDY

The Paraguayan government has been pursuing the introduction of market economy principles since the democratic government started in 1989. In the 1990s, after joining MERCOSUR, they proceeded to liberalize trade by abolishing tariffs along with the other MERCOSUR countries. In the course of this liberalization, Paraguay aims to improve agricultural productivity, reduce dependency on agriculture, encourage diversification of industries, strengthen export competitiveness and foster small-sized enterprises.

However, the goods that have relative export competitiveness are currently limited to cotton, soybeans and other agricultural products. As the integration of the common market evolves, exports of these products, and industrial products as well, have met increasingly stiff competition from Brazil and Argentina. As a result, the agricultural sector, along with other less competitive sectors, has been declining. Paraguay has been exposed to an increase in unemployment, deterioration of its fiscal balance and an international balance of payments crisis.

With the above background, in 1995, the Paraguayan government requested the cooperation of the Japanese government to support a policy to strengthen economic competitiveness and expand exports. In response to this request, the Japan International Cooperation Agency (JICA) conducted the survey “Current Situation of the Paraguayan economy in MERCOSUR” in 1996. Based upon an analysis of the current situation in the agriculture, forestry, livestock, industry, and services sectors, the JICA study suggested creating a new economic policy to promote a change in the economic environment after entry into MERCOSUR.

The Japanese government then decided to conduct a study and concluded an agreement on the scope of the work (s/w) with the Technical Secretariat of Planning (STP), Presidency of the Paraguayan government, on 3 April 1998. JICA selected a Japanese consultant consortium to implement the study and the study team started the survey in October 1998. In the course of the joint study with the Paraguayan counterpart, the study team held repeated discussions with them, and held various workshops, through which technology transfer to the counterpart was accomplished. In August 2000, the team submitted the draft final report and later had discussions with the Paraguayan government. After taking into consideration relevant comments, the team prepared the final report.

1.2 OBJECTIVE OF THE STUDY

The objective of the study is to carry out the following activities, based upon the scope of work agreed

upon between the government of Paraguay and JICA in April 1998.

- a) to formulate a new strategy to promote economic development, mainly through the diversification of industry, industrialization and export promotion. The strategy should be based upon an analysis of the competitiveness of each of the industries, and aimed at securing economic independence and development under the changing economic circumstances brought by the market liberalization required due to entry into MERCOSUR.
- b) to formulate the action plans necessary for implementation by 2006, considering the impact of the abolition of regional tariff in 2000, and the implementation of a common external tariff in 2006
- c) to carry out technology transfer to the Paraguayan counterparts through the implementation of the study

1.3 STRUCTURE OF THE STUDY

The study is divided into the following four phases.

Phase 1: Analysis of the current situation

To grasp and analyze the socio-economic environment surrounding Paraguay in the MERCOSUR structure

- analyze the economic structure/basis of Paraguay
- study how MERCOSUR and its associated members have coped with
- assessment of the impact to the Paraguayan economy in the MERCOSUR structure

Phase 2: Elaboration of the development strategies

To formulate the development policy for the economic growth of Paraguay, based upon the analysis in Phase 1

- formulation of the basic economic development policy oriented to the common market
- focus on the fields having relative competitiveness and select the items to be promoted
- formulation of the strategy to strengthen the competitiveness of export goods

Phase 3: Elaboration of the action plan

To formulate the action plans targeted for implementation by 2006

- elaboration of the program/project profiles
- formulation of the action plans

Phase 4: Submission of the final report

To conclude the overall study, elaborate the final report based on the discussions with the Paraguayan counterpart on the draft final report.

- elaboration of the draft final report
- explanation of the above report and discussions
- elaboration of the final report

The following reports were prepared and submitted to the Government of Paraguay.

- Inception Report
30 copies in English submitted in October 1998
- Progress Report
30 copies in English submitted in March 1999
- Interim Report 1
30 copies in English submitted in November 1999
- Interim Report 2
30 copies in English submitted in March 2000
- Draft Final Report
30 copies in English submitted in August 2000
- Final Report (total of 6 Volumes)
Comprehensive Summary Report (Volume 1): 50 copies in English and Spanish submitted in November 2000 via JICA
Main Report (Volumes 2-6): 50 copies in English submitted in November 2000 via JICA

1.4 ORGANIZATION OF THE STUDY

1.4.1 Organization

JICA has selected a joint consulting consortium of Daiwa Institute of Research Ltd. and Pacific Consultants International to conduct the “Study on the Economic Development of the Republic of Paraguay” (hereinafter referred to as “the Study”). The study team started the survey in Paraguay in October 1998. JICA also convened a Japanese Advisory Committee in Japan to supervise the study and facilitate smooth implementation of the study. The Republic of Paraguay designated the STP as a counterpart and organized a steering committee chaired by Minister, Executive Secretary of the STP and a counterpart team under it.

1.4.2 Members of the study

Detailed list of the members of the study and the relevant authorities is shown at the end of this report.

2. EXECUTIVE SUMMARY AND PROPOSALS

2.1 PRESENT SOCIOECONOMIC SITUATION

From the second half of the 1980s, the Latin American countries have moved from protectionist import substitution policies to more liberal policies consistent with market mechanisms. Starting with President Rodriguez in 1989, Paraguay also has moved toward more liberal policies.

The prior government of President Stroessner attempted to achieve economic independence through a liberal domestic market that served as a "free-trade zone" for protectionist neighboring countries. But, it did not adopt an industrial policy based on protectionist import substitution because the industrialization faced the limitations of a small domestic market. Thus, structural reform in Paraguay was not as drastic as in neighboring countries, since it consisted of adjusting an already liberalized economy to the liberal policies of neighboring countries.

As MERCOSUR came into existence, Paraguay, which has never had a protectionist policy, had no option but to join despite the lack of a clear compelling reason. At the same time, the benefits of the "free-trade zone", which has always depended on the protectionist tax regimes of neighboring countries, has gradually been declining. Further, domestic industries have faced greater competition from neighboring imports.

In summary, Paraguay - like its neighbors - has been adjusting to a new environment starting in the 1990s by liberalizing financial markets, privatizing state-owned enterprises, promoting agro-industry and courting foreign direct investment (FDI).

However, domestic supply growth of the 1990s was not even half of that for the 1970s. In particular, the industrial sector faltered alarmingly. The growth of domestic demand has been unstable. Although it has grown more than supply, it is not as dynamic as it was in the 1970's. In addition, the domestic savings rate has dropped noticeably starting in 1994, such that the economy has stagnated since 1998. Although, net capital inflows have tended to increase slowly, they have not solved the difficult economic situation of the country. Therefore, the present economic policy has focused on the exchange rate and price stability.

The stagnant economic situation is proof of the ineffectiveness of recent reforms. One factor which has prevented exhaustive reform is the lack of pressure from international organizations to do so. As Paraguay never attempted to promote industrialization through government borrowing, it has not accumulated a large foreign debt.

Nevertheless, the country is having trouble getting rid of the social structure during the 35-year political isolation under the Stroessner government. In this period, almost no investments occurred to add to greater productive capacity because of the weak judicial and administrative structure, the low educational level, the lack of reliable transport infrastructure, delayed rationalization of administration at state-owned enterprises and agricultural organizations of small farmers, and the feudalistic structure of small and medium-sized enterprises. The lack of reform in these areas has meant that the current reform process is not operating in an appropriate manner. In other words, no overwhelming impulse has appeared to implement economic structural reform and the stagnated economic policy from the Stroessner Government has remained. Further, the country underestimated the seriousness of the situation, since the economy under President Stroessner was performing relatively well as compared to neighboring countries.

These circumstances have resulted in an economic growth that does not even match population growth. Without change, the rise in criminal activities seen in the 1990s, and the lack of productive investment will increase the unemployment and the poverty, ensuring that Paraguay will continue among the poorest Latin American countries.

Fortunately, our studies indicate that parts of the private sector still have the dynamism to face up to the country's economic crisis. The study team has proposed an economic development strategy of both macro and micro policy, which utilizes Paraguay's potential to recover economic strength.

2.2 CHARACTERISTICS OF THE IDEA AND THE STRATEGY OF ECONOMIC DEVELOPMENT

Our strategy is oriented towards exports to overcome the problems associated with the limited domestic market and towards the attempts to strengthen the agro-industry. Soybeans and some kinds of agricultural products are the only items that currently possess international competitiveness. It is also difficult for scale economies to create export competitiveness. Therefore, Paraguay should attempt to diversify exports and focus on small-scale production targeted at MERCOSUR. To accomplish this, productivity improvements, stronger financial capacity to cover transport costs and product differentiation are necessary.

Productivity improvements can be achieved through: a) increased processing of national agricultural products, b) reduced production costs by using raw materials efficiently, c) reduced seasonal fluctuation, and d) improved production and management techniques. However, our study revealed that the main problem is the lack of linkage between the raw material producers and the industries, and among the entrepreneurs themselves. Thus, we have built our "Agro-industry cluster strategy" around

the improvement of links between the agricultural and industrial sectors. This should naturally lead to productivity improvements through the four modes mentioned above.

In order to expand the differentiation of agro-industrial products, quality improvement, product standards, inspection procedures and research and development activities are necessary. For target markets, product designs based on the needs of the international market should be offered.

Improved infrastructure and general competitiveness (human resources development, institutional financing, export promotion, investment promotion) will also aid the procedure. In the long run, this support will not only help the agro-industry but also the weak international competitiveness.

Based on these ideas, we have proposed a strategy set consisting of: a "Strategy by sector," a "Strategy to overcome the general constraining factors of competitiveness," and a micro-level "Cluster strategy."

-Although the macroeconomic stability is important, it is more practical to take the micro approach described here, in order to overcome the ineffectiveness of current macro policies for structural improvement. The development of a cluster based on the agro-industry, which takes advantage of existing resources, will create a stable market for agricultural producers. It will also promote an organizational structure in the agricultural sector and foster a product differentiation for regions. At the same time, strengthened quality control and standards and improved industrial productivity will strengthen the export competitiveness of the agro-industrial products. We have analyzed the results of the "National Transport Plan", and have proposed a plan to improve the transport infrastructure needed for cluster activities and export promotion.

-In addition, a proposal related to the institutional factors that hinder competitiveness is presented. These relate particularly to human resource training, institutional finance and export promotion.

-Our Cluster strategy will mainly develop rural zones and suburbs, generating new employment opportunities and preventing increasing poverty.

So that our micro-level strategy contributes to the one for the macro-level, it is necessary to establish and promote pilot clusters with varying characteristics at different places around the country. Through our studies and the voluntary cooperation of the private sector, we have designed a realistic model to achieve this.

If political and economic transparency can be raised, the investment environment in Paraguay will become attractive to foreigners. For this, we propose the attraction of more foreign direct investment through the *maquiladora* system. It is well known that foreign direct investment (FDI) contributes to

investment capital, employment opportunities and technology transfer. In addition, recent studies in Paraguay confirm that FDI also contributes to increased industrial product exports.

Though we are aware that Paraguay is trying to promote a market economy, we also feel it is not realistic to rely only on the private sector to implement the strategies outlined in this study. Here, the participation of government is indispensable. As result, at least at the beginning, the STP should play the dominant role in setting the initial direction of the strategy. This involves coordination within the government itself and, also, between the government and the private sector. At the same time, the creation of a promotion organization based on existing organizations is proposed to reflect the opinions of the private sector.

2.3 ACTION PLAN

The Action Plan defines the development strategy and proposes the 28 most important projects given priority for such strategy and for implementation between 2001 and 2006.

These 28 projects were selected by considering the financial limitations of the country. The process of selection entailed the meeting of the Japanese and Paraguayan representatives to select the macro-level projects, mostly from the mixed feed and vegetable clusters that best reflect our strategy. To these, projects were added that should be given priority for economic development independent of the Cluster strategy. They were taken from the "Strategy to overcome the general limiting factors of competitiveness" and the "Strategy by sector."

The development strategy mentioned above does not include 62 proposed projects. To get an overall view of the strategy, these 62 projects should be considered in addition to the 28 selected projects. If time frames can be adjusted and budgets re-worked, further implementation may be possible. Thus, we have added the list of the 62 projects in the appendix.

2.4 PROPOSALS RELATED TO THE EXECUTION OF THE DEVELOPMENT STRATEGY

Although the items mentioned below are not included in the Action Plan, they are part of our proposal and are necessary for Paraguay's economic development.

(1) Proposals related to the strategy to overcome the general constraining factors of competitiveness

- a) To improve macroeconomic statistics and their publishing time.
- b) To give importance to environmental conservation in order to achieve sustainable growth.
- c) To promote exports by strengthening the trade function of diplomatic bodies located in target markets.

These organs can relay information related to the economy, industry and unique products.

d)To encourage national and foreign investment in productive sectors:

- Immediate implementation of adult education programs (basic education) directed at the economically active population.
- Strengthening the overview capacity in order to recover trust in banks.
- Strengthening the investment incentives through the stability and transparency of politics and the economy, and structural reforms that include privatization and the protection of industrial and intellectual property rights.

e)To formulate and execute the National Plan for Exports(MPE).

(2) Proposals related to the strategy by sector

a)To have more productivity and additional products with high added-value and to support cooperative research between industry, government and academia, with strong participation by industries.

b)To assure adequate human resources for product quality, using standards and inspection practices; and to strengthen human resources through OJT or vocational training.

c)To maintain Paraguayan economic independence in the MERCOSUR framework by carrying out active diplomacy towards international projects and Pacific or Atlantic Ocean transport routes that passes through national territory.

d)To establish a regime that can capably implement and administer transport infrastructure improvement, composed of rural public organizations and private enterprises that have a clear distribution of responsibilities.

(3) Proposals related to the cluster strategy

a)To face and solve the environmental problems that follow from agro-industry exports.

b)To offer special Cluster support to small farmers and small and mid-sized enterprises through experts or non-governmental organizations.

(4) Proposals related to the promoting organization.

a)To include private sector representatives and to absorb actively their opinions when formulating measures and policies.

b)To extend the work hours of responsible institutions from four to eight hours because much of the strategy – led by the Cluster strategy – should be implemented in cooperation with the private sector.