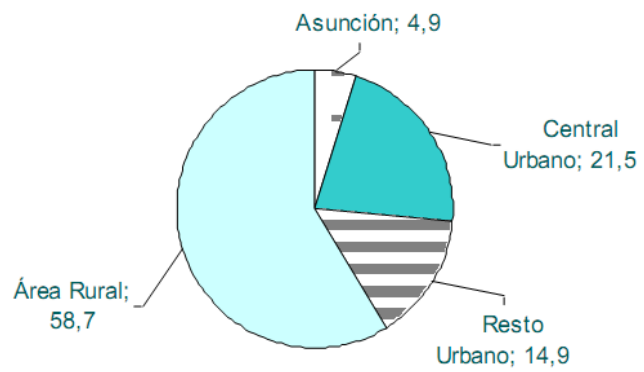


DISTRIBUCIÓN DE LA POBLACIÓN POBRE, SEGÚN DOMINIO GEOGRÁFICO. AÑO 2009



Fuente: DGEEC. Encuesta Permanente de Hogares 2009.

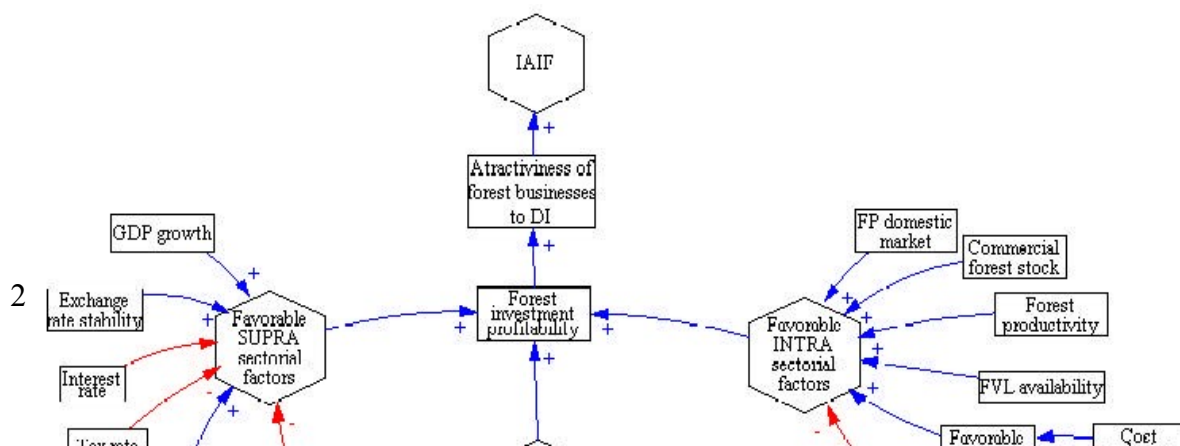
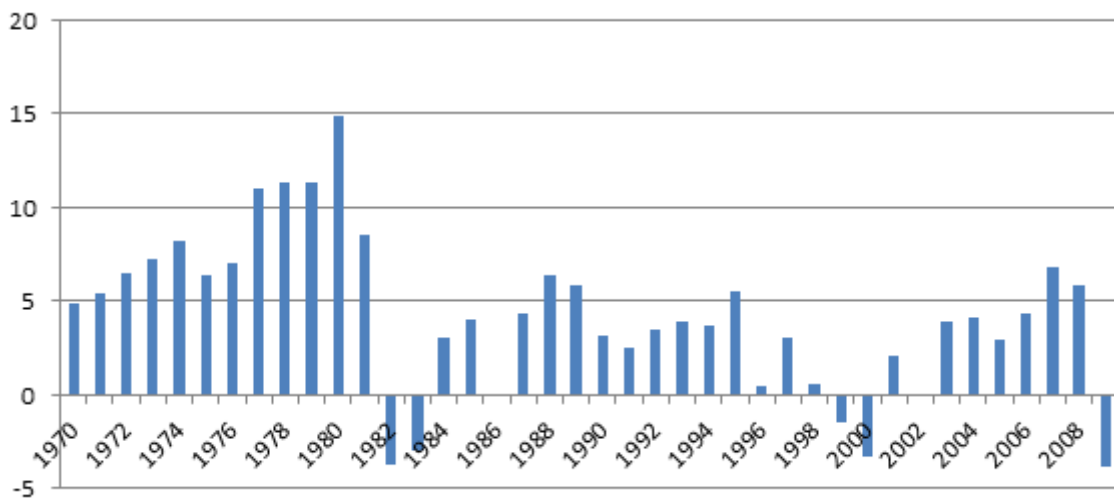
**INCIDENCIA ABSOLUTA Y RELATIVA DE LA POBREZA
TOTAL PAIS, POR AREA Y DOMINIO. AÑO 2009**

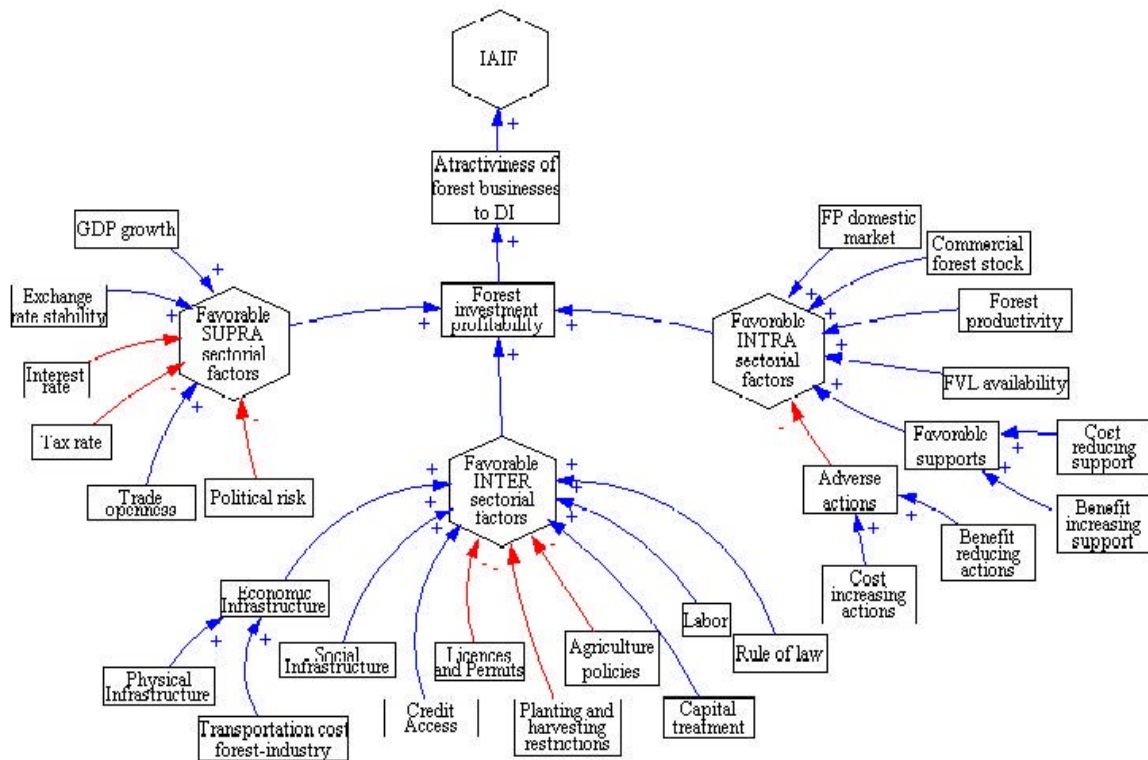
Dominio	Población Total	Población Pobre ¹	% Población Pobre	Población Pobre Extrema	% Población Pobre Extrema
Total País²	6.244.981	2.191.857	35,1	1.175.331	18,8
Area Urbana	3.663.546	905.252	24,7	340.121	9,3
Asunción	505.538	106.470	21,1	44.236	8,8
Central Urbano	1.722.170	471.525	27,4	134.092	7,8
Resto Urbano	1.435.838	327.257	22,8	161.793	11,3
Area Rural	2.581.435	1.286.605	49,8	835.210	32,4

Fuente: DGEEC. Encuesta Permanente de Hogares 2009

¹ Incluye pobres extremos y no extremos

² Se excluyen los empleados domésticos sin retiro, ya que no forman parte de la economía del hogar.





Cross-border merger and acquisition overview, 1990-2008

(Millions of dollars)

Region/economy	Sales(net)				Purchases(net)			
	1990-2000 (Annual average)	2006	2007	2008	1990-2000 (Annual average)	2006	2007	2008
Paraguay	4	-	10	4	-	-	-	-
Memorandum								
Brazil	5 608	2 637	6 539	8 240	146	18 629	10 785	5 243
Uruguay	14	164	157	8	1	-	-	-
South America	13 863	4 453	13 604	9 378	1 308	19 923	12 942	4 763
Latin America and the Caribbean	18 409	12 718	20 554	15 231	2 865	27 534	38 514	2 584
Developing economies	25 860	89 028	96 998	100 862	13 900	114 119	139 677	99 805
World	257 070	635 940	1 031 100	673 214	257 070	635 940	1 031 100	673 214

Source: UNCTAD, World Investment Report 2009; www.unctad.org/wir or www.unctad.org/infostatistics

For details, see "definitions and sources" in annex B and annex tables B.4 and B.6 in WIR09.

Foreign direct investment (FDI) overview, selected years

(Millions of dollars and percentages)

FDI flows	1990-2000	2005	2006	2007	2008	as a percentage of gross fixed capital formation				
	(Annual average)					1990-2000 (Annual average)	2006	2007	2008	
Paraguay										
Inward	135	54	173	185	320	9.0	9.8	8.7	10.2	
Outward	7	6	7	7	8	0.6	0.4	0.3	0.3	

GUAY'S TEN

iness Freedom
Trade Freedom
Fiscal Freedom
Government Spending
etary Freedom
ment Freedom

Foreign direct investment (FDI) overview, selected years

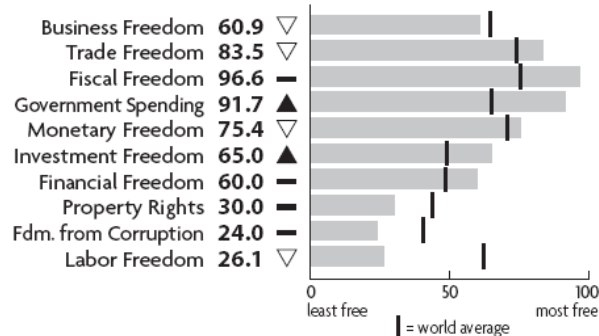
(Millions of dollars and percentages)

FDI flows	1990-2000	2005	2006	2007	2008	as a percentage of gross fixed capital formation			
	(Annual average)					1990-2000 (Annual average)	2006	2007	2008
Paraguay									
Inward	135	54	173	185	320	9.0	9.8	8.7	10.2
Outward	7	6	7	7	8	0.6	0.4	0.3	0.3
Memorandum									
Brazil									
Inward	12 000	15 066	18 822	34 585	45 058	10.8	10.5	14.8	15.1
Outward	1 048	2 517	28 202	7 067	20 457	0.9	15.8	3.0	6.8
Uruguay									
Inward	130	847	1 493	1 288	2 205	5.4	41.5	30.7	36.6
Outward	2	36	- 1	90	1	0.2	- 0.0	2.1	0.0
South America									
Inward	29 525	44 317	43 833	71 324	91 741	13.3	11.8	14.9	15.0
Outward	4 402	12 071	37 000	14 907	34 367	2.0	10.0	3.1	5.7
Latin America and the Caribbean									
Inward	47 125	77 106	93 303	127 491	144 377	14.7	14.7	16.7	15.5
Outward	13 487	35 967	63 619	51 741	63 207	4.3	10.1	6.9	6.9
Developing economies									
Inward	130 778	329 328	433 764	529 344	620 733	9.9	13.0	12.9	12.5
Outward	52 929	122 707	215 282	285 486	292 710	4.1	6.5	7.1	6.1
World									
Inward	492 674	973 329	1 461 074	1 978 838	1 697 353	8.2	13.5	16.6	12.8
Outward	492 528	878 988	1 396 916	2 146 522	1 857 734	8.3	13.0	16.0	14.6

FDI stocks	1990	1995	2000	2007	2008	as a percentage of gross domestic product			
						1990	2000	2007	2008
Paraguay									
Inward	418	643	1 327	2 224	2 398	8.5	18.7	18.5	15.0
Outward	134	179	214	225	234	2.7	3.0	1.9	1.5
Memorandum									
Brazil									
Inward	37 143	47 887	122 250	309 668	287 697	8.5	19.0	23.2	18.3
Outward	41 044	44 474	51 946	136 103	162 218	9.4	8.1	10.2	10.3
Uruguay									
Inward	671	1 128	2 088	6 356	8 788	8.0	10.4	26.2	27.3
Outward	186	186	126	337	338	2.2	0.6	1.4	1.1
South America									
Inward	73 481	125 373	309 057	629 653	633 517	9.6	23.4	26.2	22.0
Outward	49 344	63 432	95 939	223 473	255 507	6.4	7.3	9.3	8.9
Latin America and the Caribbean									
Inward	110 547	185 123	502 487	1 125 109	1 181 616	9.9	24.3	29.9	27.3
Outward	57 643	87 892	204 388	500 548	561 433	5.4	10.3	13.7	12.9
Developing economies									
Inward	529 593	852 489	1 736 167	4 393 354	4 275 982	13.8	25.1	29.7	24.7
Outward	145 179	329 927	862 358	2 360 772	2 356 649	4.1	12.9	16.5	14.0
World									
Inward	1 942 207	2 915 311	5 757 360	15 660 498	14 909 289	9.1	18.1	29.1	25.0
Outward	1 785 584	2 941 724	6 069 882	16 226 586	16 205 663	8.5	19.3	29.8	27.3

Source: UNCTAD, *World Investment Report 2009*; www.unctad.org/wir or www.unctad.org/ffdstatistics
For details, see "definitions and sources" in annex B and annex tables B.1-B.3 in *WIR09*.

PARAGUAY'S TEN ECONOMIC FREEDOMS



BUSINESS FREEDOM — 60.9

The overall freedom to start, operate, and close a business is limited under Paraguay's regulatory environment. Starting a business takes an average of 35 days, which is consistent with the world average. Obtaining a business license takes more than the world average of 218 days. Closing a business can be a lengthy and difficult process.

TRADE FREEDOM — 83.5

Paraguay's weighted average tariff rate was 3.3 percent in 2008. Some import bans and restrictions, import taxes and fees, burdensome labeling requirements, weak enforcement of intellectual property rights, and cumbersome and non-transparent customs procedures add to the cost of trade. Ten points were deducted from Paraguay's trade freedom score to account for non-tariff barriers.

FISCAL FREEDOM — 96.6

Paraguay has low tax rates. Both the top income tax rate and the top corporate tax rate are 10 percent. Other taxes include a value-added tax (VAT) and a property tax. In the most recent year, overall tax revenue as a percentage of GDP was 11.7 percent. Tax administration is improving.

GOVERNMENT SPENDING — 91.7

Total government expenditures, including consumption and transfer payments, are low. In the most recent year, government spending equaled 16.6 percent of GDP. Structural reforms are needed to strengthen the budgetary framework and improve the quality of public expenditures.

MONETARY FREEDOM — 75.4

Inflation has been high, averaging 9.6 percent between 2006 and 2008. Most prices are set in the market, but the government controls the price of fuel and influences prices through state-owned enterprises and utilities, including electricity, telecommunications, transportation, and water. Five points were deducted from Paraguay's monetary freedom score to account for policies that distort domestic prices.

INVESTMENT FREEDOM — 65

Paraguay guarantees equal treatment of foreign investors, and most sectors are open to private investment. The

government maintains monopolies in oil and gas, cement, electricity, water, and basic and long-distance land-line telephone services. Deterrents to investment include an arbitrary and non-transparent judicial process, weak enforcement of contracts, corruption, and inadequate infrastructure. Residents and non-residents may hold foreign exchange accounts. Most payments, capital transactions, and transfers are permitted and subject to minimal restrictions or reporting requirements. Foreign investors may not purchase land within 50 kilometers of the borders.

FINANCIAL FREEDOM — 60

Paraguay's financial sector has undergone restructuring and modernization following a period of instability that resulted in several domestic financial crises from 1995 to early 2000. Credit to the private sector has grown, and non-performing loans have gradually declined to less than 2 percent of total loans from over 10 percent in 2004. An inefficient legal framework remains a considerable impediment to the creation of a more dynamic financial sector. The adverse impact of the global financial turmoil on the financial system has been relatively minor. The banking sector consists of 13 banks, 14 savings and loan companies, and 24 foreign-exchange companies. The two largest banks are foreign-owned, and foreign banks account for around 30 percent of assets. Capital markets remain underdeveloped.

PROPERTY RIGHTS — 30

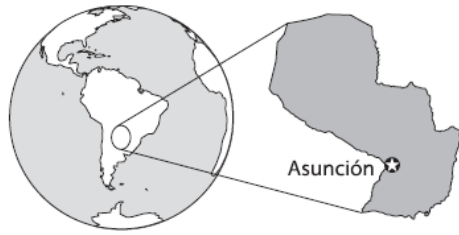
Protection of property rights is extremely weak. Commercial and civil codes cover bankruptcy and give priority for claims first to employees, then to the state, and finally to private creditors. Acquiring title documents for land can take two years or more. Paraguay has increased the seizure and destruction of counterfeit and pirated goods. The government does not have a framework for safeguarding confidential data associated with regulatory approvals. As a result, some companies have decided not to market certain products, such as the latest pharmaceuticals, in Paraguay.

FREEDOM FROM CORRUPTION — 24

Corruption is perceived as widespread. Paraguay ranks 138th out of 179 countries in Transparency International's Corruption Perceptions Index for 2008. Paraguay has a legacy of institutional corruption after decades of dictatorship. The multibillion-dollar contraband trade that occurs on the borders with Argentina and Brazil also facilitates money laundering. Weak institutions impede anti-corruption efforts. The slow pace of judicial reform and continued impunity are barriers to development.

LABOR FREEDOM — 26.1

Paraguay's labor regulations are restrictive. The non-salary cost of employing a worker is moderate, but laying off an employee is difficult. Regulations on the number of work hours remain rigid.



World Rank: **81** Regional Rank: **16**

Paraguay's economic freedom score is 61.3, making its economy the 81st freest in the 2010 *Index*. Its score has increased by 0.3 point from last year, reflecting a modest improvement in investment freedom. Paraguay is ranked 16th out of 29 countries in the South and Central America/Caribbean region, and its overall score is slightly above the world and regional averages.

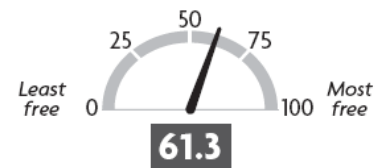
Paraguay scores above the world average in six of the 10 economic freedoms. The average tariff barrier has been gradually lowered, but non-tariff barriers still limit overall trade freedom. Income and corporate tax rates are competitively low. The government has pursued a series of structural reforms to improve the entrepreneurial environment, but Paraguay still lags behind other countries in the region in terms of reform progress.

Overall economic freedom remains challenged by two significant institutional weaknesses that are critically in need of reform. Property rights are not strongly protected, and the judicial system remains weak and inefficient. Widespread corruption also poses a serious impediment to economic development.

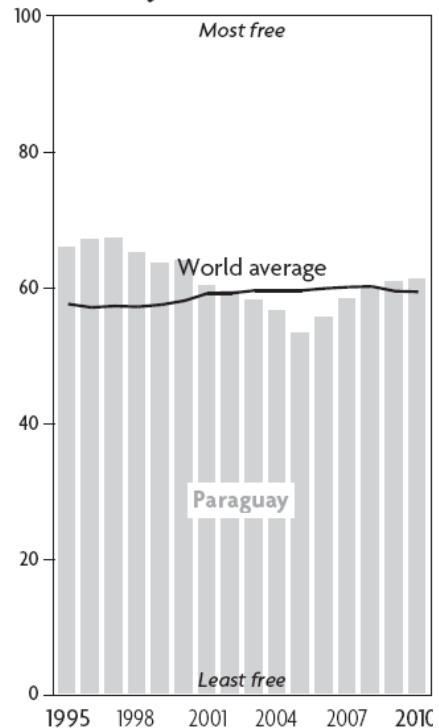
BACKGROUND: Since the end of General Alfredo Stroessner's 35-year rule in 1989, Paraguayans have been working to implement durable democratic rule. Former Bishop Fernando Lugo, supported by the leftist Patriotic Alliance for Change coalition, was elected president in April 2008, ending more than 50 years of domination by the conservative Colorado Party. Lugo promised to support the indigenous population, redistribute land to the poor, and secure more revenue from the Itaipu Dam, a joint hydroelectric project with Brazil. Nearly half of all jobs are in agriculture, the major export earner. Unemployment is high, and more than one-third of Paraguayans live below the poverty line. Improved cooperation with neighboring countries and the United States has led to reduced smuggling and closer scrutiny of suspected Middle Eastern terrorist-supported groups in the tri-border area with Brazil and Argentina.

PARAGUAY

Economic Freedom Score



Country's Score Over Time

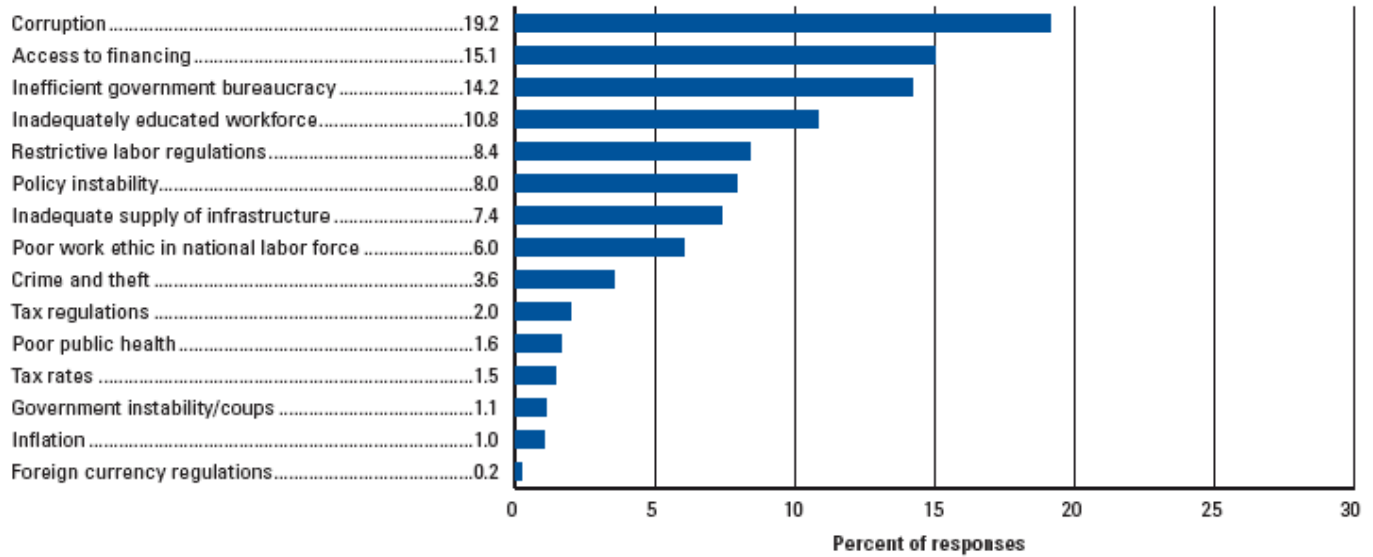


Quick Facts

- Population:** 6.2 million
- GDP (PPP):** \$29.3 billion
 - 5.8% growth in 2008
 - 4.9% 5-year compound annual growth
 - \$4,709 per capita
- Unemployment:** 5.4%
- Inflation (CPI):** 10.2%
- FDI Inflow:** \$320 million

*2008 data unless otherwise noted
Data compiled as of September 2009*

The most problematic factors for doing business



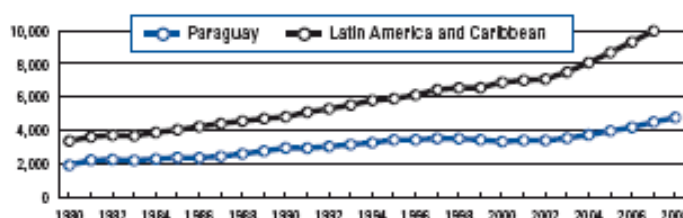
Note: From a list of 15 factors, respondents were asked to select the five most problematic for doing business in their country/economy and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

Paraguay

Key indicators

Population (millions), 2008.....	6.2
GDP (US\$ billions), 2008.....	16.0
GDP per capita (US\$), 2008.....	2,601.1
GDP (PPP) as share (%) of world total, 2008.....	0.04

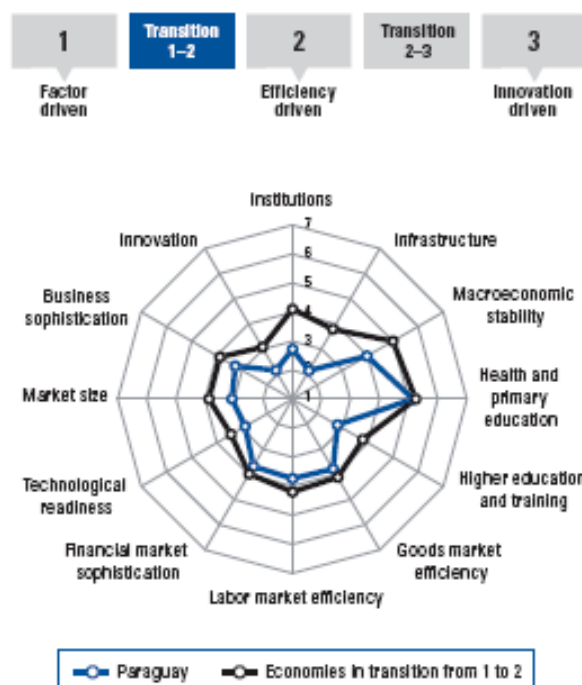
GDP (PPP int'l \$) per capita, 1980–2008



Global Competitiveness Index

	Rank (out of 133)	Score (1–7)
GCI 2009–2010	124	3.4
GCI 2008–2009 (out of 134).....	124	3.4
GCI 2007–2008 (out of 131).....	121	3.3
Basic requirements	122	3.5
1st pillar: Institutions.....	130	2.7
2nd pillar: Infrastructure.....	129	2.1
3rd pillar: Macroeconomic stability.....	107	3.9
4th pillar: Health and primary education.....	90	5.1
Efficiency enhancers	115	3.3
5th pillar: Higher education and training.....	121	2.8
6th pillar: Goods market efficiency.....	105	3.8
7th pillar: Labor market efficiency.....	118	3.7
8th pillar: Financial market sophistication.....	103	3.7
9th pillar: Technological readiness.....	103	2.9
10th pillar: Market size.....	93	3.1
Innovation and sophistication factors	131	2.7
11th pillar: Business sophistication.....	120	3.3
12th pillar: Innovation.....	133	2.1

Stage of development



3. Access to Sound Money	7.87	7.48	6.50	8.20	8.72	8.37	8.15	8.24
A. Money growth	6.93 15.33	8.12 9.39	4.67 26.66	7.09 14.57	8.66 6.72	7.09 14.53	6.48 17.62	6.48 17.60
B. Standard deviation of inflation	7.91 5.23	6.84 7.91	8.58 3.55	8.29 4.27	8.02 4.94	7.75 5.62	8.05 4.88	8.09 4.77
C. Inflation: most recent year	6.66 16.71	4.95 25.24	2.74 36.28	7.40 12.99	8.20 8.98	8.64 6.79	8.08 9.59	8.37 8.13
D. Freedom to own foreign currency bank accounts	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
4. Freedom to Trade Internationally	5.91	4.49	6.31	8.27	6.36	7.23	7.71	7.42
A. Taxes on international trade	3.00	4.27	6.51	7.99	7.63	7.94	7.86	7.91
(i) Revenue from trade taxes (% of trade sector)	6.00 6.00	8.53 2.20	7.80 3.30	8.60 2.10	7.76 3.37	8.90 1.65	8.95 1.57	9.13 1.30
(ii) Mean tariff rate	0.00 71.00	0.00 71.70	6.80 16.00	8.14 9.30	7.82 10.90	8.34 8.30	8.02 9.90	7.92 10.40
(iii) Standard deviation of tariff rates			4.92 12.70	7.24 6.90	7.32 6.70	6.59 8.51	6.59 8.51	6.67 8.32
B. Regulatory trade barriers					2.43	5.18	5.24	5.34
(i) Non-tariff trade barriers					2.43	4.98	5.32	5.51
(ii) Compliance cost of importing and exporting						5.38	5.17	5.17
C. Size of trade sector relative to expected	4.76	4.97	7.05	7.83	4.69	5.85	9.06	8.13
D. Black-market exchange rates	8.60	0.00	4.80	7.40	10.00	10.00	10.00	10.00
E. International capital market controls	5.00	5.00	5.00	10.00	7.06	7.15	6.37	5.70
(i) Foreign ownership/investment restrictions					5.67	5.07	5.24	5.25
(ii) Capital controls	5.00	5.00	5.00	10.00	8.46	9.23	7.50	6.15
5. Regulation of Credit, Labor and Business			4.48	5.46	4.95	5.15	5.30	5.41
A. Credit market regulations			5.97	8.88	6.93	7.13	7.33	7.33
(i) Ownership of banks					8.00	8.00	8.00	8.00
(ii) Foreign bank competition					4.08	4.08	4.08	4.08
(iii) Private sector credit			9.95	9.76	9.47	9.44	9.22	9.25
(iv) Interest rate controls/negative real int. rates			2.00	8.00	9.00	7.00	8.00	8.00
B. Labor market regulations					3.33	3.13	2.95	3.23
(i) Minimum wage					4.67	3.00	2.33	2.63
(ii) Hiring and firing regulations					4.72	3.26	3.26	3.82
(iii) Centralized collective bargaining					3.95	5.74	6.26	7.09
(iv) Mandated cost of hiring						4.98	4.83	4.83
(v) Mandated cost of worker dismissal						0.82	0.00	0.00
(vi) Conscription	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00
C. Business regulations					4.57	5.18	5.62	5.66
(i) Price controls			4.00	6.00	6.00	6.00	6.00	6.00
(ii) Burden of regulations					4.87	2.94	3.31	3.89
(iii) Bureaucracy costs					4.95	5.13	6.67	6.81
(iv) Starting a business					3.98	6.08	8.06	8.17
(v) Extra payments/bribes					3.07	4.30	3.60	2.89
(vi) Licensing restrictions						5.48	5.38	5.55
(vii) Cost of tax compliance						6.32	6.32	6.32

Paraguay

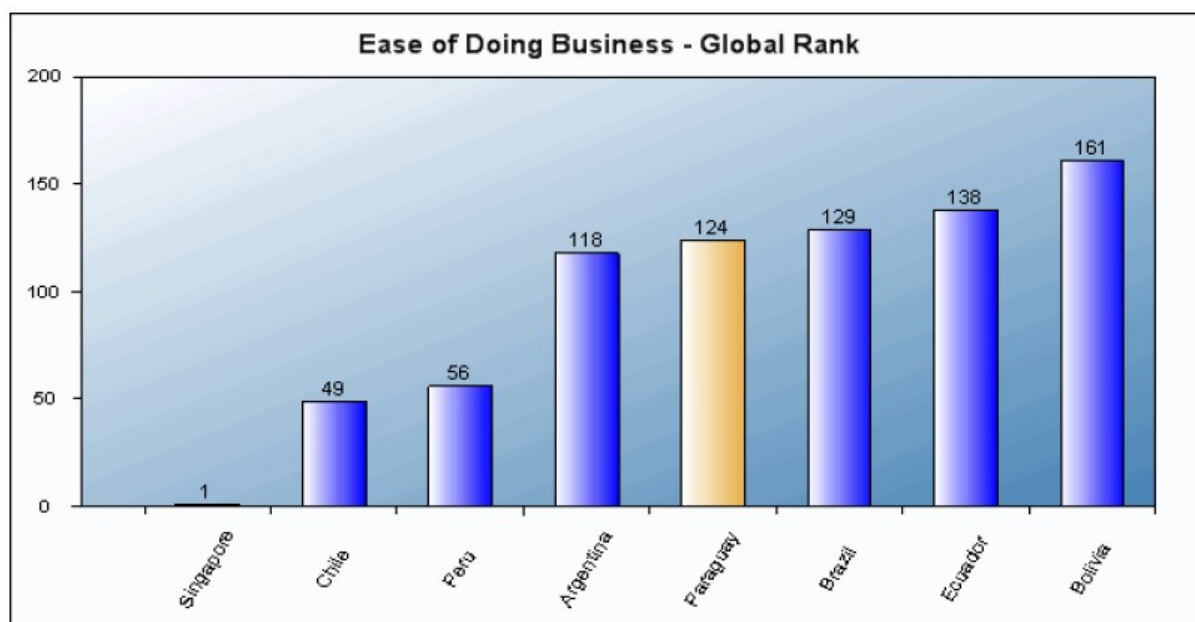
	1980	1985	1990	1995	2000	2005	2006	2007
Chain-Linked	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)	Rating (Rank)
Summary Rating (Rank) >	5.70 (41)	5.08 (75)	5.72 (51)	6.44 (48)	6.22 (75)	6.16 (90)	6.13 (93)	6.10 (98)
Area 1: Size of Government	9.16 (3)	7.75 (3)	9.31 (2)	8.69 (4)	7.58 (21)	7.62 (24)	7.50 (27)	7.44 (31)
Area 2: Legal Structure & Security of Property Rights	2.84 (70)	3.05 (92)	3.42 (83)	3.31 (113)	3.16 (114)	2.41 (123)	2.14 (125)	2.13 (124)
Area 3: Access to Sound Money	7.87 (21)	7.48 (32)	6.50 (66)	8.20 (38)	8.72 (42)	8.37 (61)	8.15 (73)	8.24 (68)
Area 4: Freedom to Trade Internationally	4.90 (58)	3.72 (76)	5.36 (64)	7.02 (46)	6.61 (76)	7.23 (39)	7.71 (22)	7.42 (45)
Area 5: Regulation of Credit, Labor, and Business			3.99 (96)	4.87 (93)	4.95 (105)	5.15 (116)	5.29 (114)	5.41 (115)
Unadjusted	Rating Data	Rating Data	Rating Data	Rating Data	Rating Data	Rating Data	Rating Data	Rating Data
Summary Rating (Rank) >	6.64 (14)	5.93 (37)	6.21 (38)	6.99 (30)	6.28 (70)	6.44 (82)	6.42 (86)	6.38 (91)
1. Size of Government	9.06	7.75	9.31	8.69	7.58	7.62	7.50	7.44
A. General government consumption spending	9.60 7.36	9.45 7.87	9.57 7.45	8.46 11.23	7.04 16.07	8.25 11.95	8.26 11.91	8.01 12.75
B. Transfers and subsidies	9.59 2.00	9.56 2.10	9.65 1.80	9.32 3.00	9.26 3.21	9.21 3.38	9.26 3.23	9.23 3.32
C. Government enterprises and investment	8.00 17.80	4.00 31.40	10.00 13.30	7.00 23.20	4.00 35.71	4.00	4.00	4.00
D. Top marginal tax rate		8.00	8.00	10.00	10.00	9.00	8.50	8.50
(i) Top marginal income tax rate		8.00 30	8.00 30	10.00 0	10.00 0	10.00 0	10.00 10	10.00 10
(ii) Top marginal income and payroll tax rates						8.00 27	7.00 34	7.00 34
2. Legal Structure and Security of Property Rights	3.71	3.99	4.48	4.32	3.79	3.85	3.43	3.40
A. Judicial independence						1.08	0.91	0.75
B. Impartial courts				4.33	4.08	1.76	1.65	1.59
C. Protection of property rights					2.27	3.35	3.43	3.49
D. Military interference				4.79	3.33	2.50	2.50	2.50
E. Integrity of the legal system				4.11	5.00	3.33	3.33	3.33
F. Legal enforcement of contracts						6.47	4.19	4.19
G. Regulatory restrictions of sale of real property						8.44	7.98	7.98

Paraguay's ranking in Doing Business 2010

Rank	Doing Business 2010
Ease of Doing Business	124
Starting a Business	100
Dealing with Construction Permits	106
Employing Workers	179
Registering Property	79
Getting Credit	71
Protecting Investors	57
Paying Taxes	110
Trading Across Borders	152
Enforcing Contracts	104
Closing a Business	119

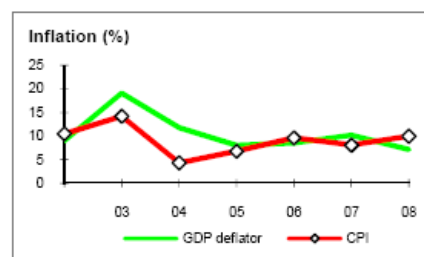
Paraguay is ranked 124 out of 183 economies. Singapore is the top ranked economy in the Ease of Doing Business.

Paraguay - Compared to global good practice economy as well as selected economies:



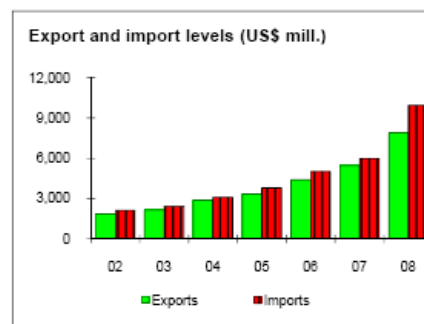
PRICES and GOVERNMENT FINANCE

	1988	1998	2007	2008
Domestic prices				
(% change)				
Consumer prices	22.6	11.6	8.1	10.0
Implicit GDP deflator	25.2	11.0	10.2	7.1
Government finance				
(% of GDP, includes current grants)				
Current revenue	..	17.4	17.6	18.2
Current budget balance	..	2.6	4.6	5.4
Overall surplus/deficit	..	-1.1	1.0	2.6



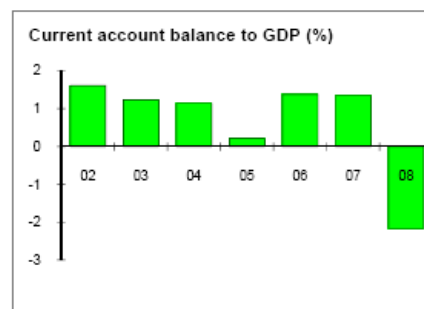
TRADE

	1988	1998	2007	2008
(US\$ millions)				
Total exports (fob)	1,137	3,549	5,463	7,901
Soy products	158	440	1,320	2,643
Cotton	210	75	47	66
Manufactures	627	2,627	2,678	3,143
Total imports (cif)	1,161	3,854	6,008	9,961
Food	..	1,344	431	622
Fuel and energy	92	236	715	1,036
Capital goods	..	640	2,577	3,954
Export price index (2000=100)	..	..	..	..
Import price index (2000=100)	..	..	..	..
Terms of trade (2000=100)	..	..	..	..



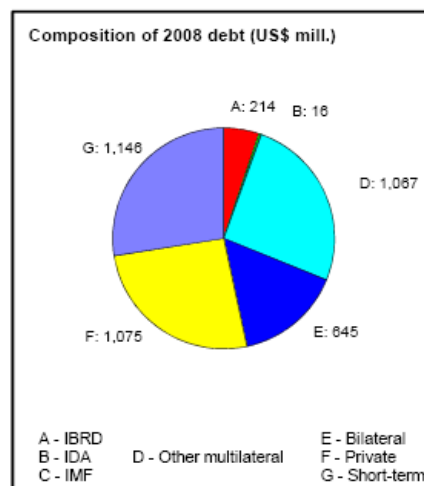
BALANCE of PAYMENTS

	1988	1998	2007	2008
(US\$ millions)				
Exports of goods and services	1,432	4,174	6,437	8,831
Imports of goods and services	1,461	4,517	6,487	9,393
Resource balance	-29	-343	-50	-562
Net income	-90	6	-158	-151
Net current transfers	35	177	373	369
Current account balance	-84	-160	165	-345
Financing items (net)	-46	131	562	723
Changes in net reserves	130	29	-727	-378
Memo:				
Reserves including gold (US\$ millions)	..	875	2,462	2,759
Conversion rate (DEC, local/US\$)	840.0	2,726.5	5,032.7	4,363.1



EXTERNAL DEBT and RESOURCE FLOWS

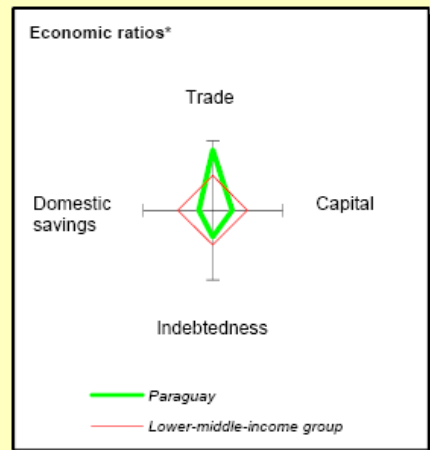
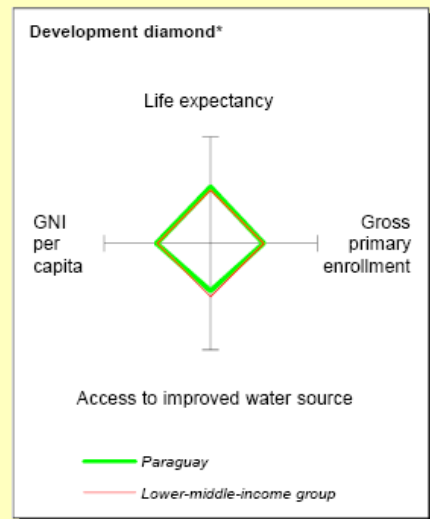
	1988	1998	2007	2008
(US\$ millions)				
Total debt outstanding and disbursed	2,351	2,793	3,570	4,163
IBRD	315	165	227	214
IDA	43	31	18	16
Total debt service	317	260	424	460
IBRD	73	33	41	43
IDA	1	2	2	2
Composition of net resource flows				
Official grants	15	22	81	86
Official creditors	-11	71	-67	-26
Private creditors	-33	70	14	91
Foreign direct investment (net inflows)	8	342	185	320
Portfolio equity (net inflows)	0	0	0	0
World Bank program				
Commitments	0	0	0	38
Disbursements	18	37	13	9
Principal repayments	44	24	29	31
Net flows	-26	13	-16	-22
Interest payments	31	11	14	14
Net transfers	-56	2	-29	-36



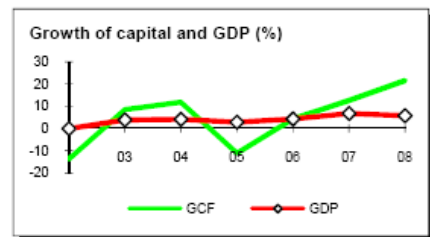
Note: This table was produced from the Development Economics LDB database.

12/14/09

POVERTY and SOCIAL	Paraguay	Latin America & Carib.	Lower-middle-income		
2008					
Population, mid-year (millions)	6.2	565	3,702		
GNI per capita (Atlas method, US\$)	2,110	6,781	2,078		
GNI (Atlas method, US\$ billions)	13.1	3,833	7,692		
Average annual growth, 2002-08					
Population (%)	1.9	1.2	1.2		
Labor force (%)	3.2	2.2	1.6		
Most recent estimate (latest year available, 2002-08)					
Poverty (% of population below national poverty line)	..	..	..
Urban population (% of total population)	59	79	41		
Life expectancy at birth (years)	72	73	68		
Infant mortality (per 1,000 live births)	24	22	46		
Child malnutrition (% of children under 5)	..	5	26		
Access to an improved water source (% of population)	77	91	86		
Literacy (% of population age 15+)	95	91	83		
Gross primary enrollment (% of school-age population)	108	117	109		
Male	110	119	112		
Female	107	115	106		
KEY ECONOMIC RATIOS and LONG-TERM TRENDS					
	1988	1998	2007	2008	
GDP (US\$ billions)	4.0	7.9	12.2	16.0	
Gross capital formation/GDP	24.4	22.7	18.0	20.4	
Exports of goods and services/GDP	34.4	50.2	50.9	53.1	
Gross domestic savings/GDP	21.9	13.3	15.0	14.6	
Gross national savings/GDP	22.5	15.6	20.0	16.0	
Current account balance/GDP	-2.1	-2.0	1.4	-2.2	
Interest payments/GDP	3.4	1.5	1.4	1.0	
Total debt/GDP	59.5	35.3	29.2	26.1	
Total debt service/exports	21.3	5.6	6.1	4.9	
Present value of debt/GDP	28.3	23.5	
Present value of debt/exports	49.7	40.0	
	1988-98	1998-08	2007	2008	2008-12
(average annual growth)					
GDP	3.3	2.6	6.8	5.8	1.3
GDP per capita	0.8	0.6	4.8	3.9	-2.2
Exports of goods and services	9.1	5.2	9.6	11.6	1.1



STRUCTURE of the ECONOMY	1988	1998	2007	2008
(% of GDP)				
Agriculture	29.6	17.6	22.0	20.2
Industry	22.2	22.7	20.0	18.3
Manufacturing	13.9	15.7	12.8	12.7
Services	48.2	59.7	58.0	61.5
Household final consumption expenditure	71.8	74.8	74.1	74.7
General gov't final consumption expenditure	6.3	12.0	10.8	10.7
Imports of goods and services	36.9	59.7	53.9	58.8
	1988-98	1998-08	2007	2008
(average annual growth)				
Agriculture	4.0	4.7	14.3	9.0
Industry	2.5	1.0	1.0	4.0
Manufacturing	-0.1	0.7	-1.2	2.2
Services	3.3	2.2	5.3	4.8
Household final consumption expenditure	3.9	1.7	6.2	6.2
General gov't final consumption expenditure	7.2	1.3	5.3	4.2
Gross capital formation	5.2	1.2	12.5	21.5
Imports of goods and services	11.9	2.9	10.8	18.0



Note: 2008 data are preliminary estimates.

This table was produced from the Development Economics LDB database.

* The diamonds show four key indicators in the country (in bold) compared with its income-group average. If data are missing, the diamond will be incomplete.



Map No. 3760 Rev. 3 UNITED NATIONS
June 2004

Department of Peacekeeping Operations
Cartographic Section

ANNEXES

Annex - Map of Paraguay.

Map 1: Geopolitical Division of Paraguay.

Annex - Paraguay's Rural Sector Background.

Country and Sector Background

PARAGUAY: Sustainable Agriculture and Rural Development Project

1. Economic and Sector Background

Paraguay has a total area of 406,752 km² and an estimated population of 5.9 million inhabitants. Some 43% of Paraguayans inhabit rural areas, making Paraguay the most rural of all South American countries. The Paraguay River divides the country into 2 sections, the Eastern (Region Oriental) and Western (Region Occidental or Chaco) regions. While the country's Eastern Region represents only 39% of the national territory, over 97% of all Paraguayans live there, including virtually all of Paraguay's small-scale farmers.

Economy. Paraguay's economy has been largely stagnant since the 1990s. This is due to a variety of factors including successive banking crises as well as the recent weaknesses in the economies of neighboring countries that have affected the country. Since 2003, however, economic performance has maintained general improvement: (i) the economy returned to positive growth rates in 2003, with real GDP growing at an estimated 3.5% in 2006¹; (ii) the exchange rate has remained stable with inflation being held to single digits since 2004; and (iii) the public sector has enjoyed both overall and primary surpluses. This recovery was prompted by a combination of developments, which included a pronounced expansion in agricultural output driven by the exceptionally high commodity prices, the institution of more rational spending policies and enhancements in tax administration. The economic turnaround has also led to a significant decline in external public debt, which stood at 30.5% of GDP in 2006, down from 50% just three years earlier. The outlook for 2007 is for a continuation of these trends.

On the external front there is the usual risk of a terms-of-trade shock either owing to further increases in world oil prices or to a downturn in commodity prices. While the regional economy appears strong, there could be macroeconomic shocks in the much larger neighboring economies that will depress external demand. There is also the possibility of deteriorating conditions for emerging capital markets which could worsen market sentiment and thus reverse recent capital inflows.

Macroeconomic prospects are positive given the government's commitment to follow prudent fiscal policies and the supportive external environment. The political stalemate - due to differences over constitutional reform to allow re-election of the President - with opposition parties, however, slowed the structural reform agenda. Casualties of the stalemate included bilateral and multilateral credits (which in Paraguay need to be approved by Congress) and draft laws presented to Congress.

The recent growth of the economy reverses the long-term steep decline in per capita incomes, where per capita GDP, measured in constant 2000 US dollars, fell at an average annual rate of 0.8% between 1981 and 2002. However, despite the recent economic improvement, per capita GDP in 2006 was about equal to its level over a quarter of a century ago, in 1979. As a result, the moderate rates of GDP growth projected for the medium term (3.5%) remain insufficient to compensate for the underperformance of the second half of the 1990s when poverty rates and income inequality increased considerably.

Agricultural Sector. While important inroads are being made in the country's service sector, especially in trade and finance, Paraguay's economy still ultimately rests on agricultural and livestock production, which account for close to 25% of GDP, generate the bulk (over 85%) of total exports and employ about 45% of the country's labor force. Nearly 80% of all export goods fit into five categories: cotton, soy bean, vegetable oils, meat and wood; a significant part of the national industry is based on the processing of these commodities. Sixty-five percent of total exports correspond to just two categories: soy and cotton (either unprocessed or with some degree of processing). However, in recent years there has been a marked shift away from cotton and towards soy.

The principal crops grown in the Eastern Region are soy (cultivated primarily by medium and large enterprises), corn (cultivated both by larger enterprises and small-scale farmers), manioc, cotton and wheat, with tobacco, oranges, pineapple and tomato all important for small-scale farmers. However, cotton, which forms the basis of small-scale farmers' livelihoods, has experienced a sustained drop in returns (including a 64% drop in the area

¹ All figures used in this section are derived from the International Monetary Fund.

planted with cotton from 1996 to 1999) which has had a severe impact on the domestic economies of these producers.

The most important livestock production is beef based on a stock of 10.5 million head of cattle. There are 230 thousand livestock units in Paraguay of which almost 80 % are small-scale farmers with 3 to 5 heads per unit accounting for almost 15 % of total cattle population. There is a substantial gap in animal productivity between medium and large livestock farms and small-scale farmers with a few head of cattle.

2. Sector Issues

Poverty. Poverty is one of the most pressing social issues in Paraguay today, especially in the Eastern Region where most Paraguayan live. In 2005, 32% of the total population lived below the poverty line, a percentage that increased to 40% in rural areas. In the same year, 17% of the population lived in extreme poverty, a figure that increased to 22% in the rural population. This means that in rural areas approximately one million people lived in poverty, including virtually all of Paraguay's 85,674 indigenous people, with one in every 3.5 rural inhabitants living in conditions of extreme poverty.

Small-scale Agriculture Issues. Poverty and natural resource degradation are closely related to the situation and current trends of the country's agricultural sector. Paraguay's agricultural sector can be divided into two sub-sectors: an emerging sub-sector of capitalized entrepreneurial agriculture which has been able to respond to market signals and is primarily responsible for the growth within the broader sector in recent years; and a small-scale farming sub-sector characterized by low-productivity, family agriculture whose main products are subsistence crops, with a connection to the market economy primarily through cotton, and livestock products obtained from a few number of animals per unit which are badly cared of in terms of animal health and husbandry.. Poverty is widespread in this population and is linked to a very limited access to land, capital and technology as well as to social and human capital resources. Substandard housing, overcrowding, lack of sanitation services, polluted water supplies and food insecurity are widespread among small-scale farmer and indigenous community households.

Due to Paraguay's economic dependence on agriculture and livestock and the reliance of many Paraguayans on those sectors for their livelihoods, the way that land is managed heavily impacts production, livelihoods and the management of natural resources. In particular, the question of land in Paraguay today has two primary elements: (i) extreme inequality in land tenancy; and (ii) extensive irregularities in land titling.

The existing distribution of land in Paraguay is grossly unequal and is one of the most inequitable in Latin America. In the Eastern Region, where most poor farmers live, 16% of rural landholdings account for 86% of the land. Further complicating the situation, land tenancy among small-scale farmer households is plagued by lack of titles, a situation that affects about 60% of Paraguay's population, and numerous cadastral problems. This land situation not only makes it extremely difficult for small-scale farmers to diversify their production, thereby improving food security and increasing income, it is also a major disincentive to invest resources in environmentally friendly productive practices on the land.

Livestock Sector. This sector is one of the main contributors of foreign exchange. In years 2006 and 2007 livestock products exports will amount almost 500 million US\$ per year which has been increasing along the last decade. Paraguay needs to be a part of the regional initiative focused on animal health (foot and mouth and other trans-boundary diseases) and diminish as much as possible the risks of having animal health limitations in export markets. This is constrained mainly by the inadequate infrastructure in the regulatory agency network of clinics and laboratories, the existence of a large number of cattle without registration and poor animal health and husbandry management by small-scale farmers and indigenous communities. Another significant constraint is the lack of adequate extension services in the MAG relating to appropriate animal husbandry practices, and the provision of improved genetic material and sound forage seeds in small-scale farming communities.

Environmental Degradation, Paraguay is home to part of the Atlantic Forest, which is regarded as one of the most threatened ecosystems in the world with only 7% of its original area still extant. Paraguay's Eastern Region represents a unique bio-geographical transitional zone where the Upper Parana Atlantic Forest merges with the Cerrado and the Humid Chaco eco- regions. Paraguay's Atlantic Forest is a subtropical forest that originally covered eastern Paraguay, northeastern Argentina and southwestern Brazil. The Humid Chaco is a complex of savannahs which are characterized by periodic flooding, while the Cerrado is characterized by a low-lying undulating topography primarily composed of sandy soils.

Despite its ecological importance, the Eastern Region suffers from severe environmental degradation. This includes deforestation, accelerated erosion, loss of soil fertility, loss of biological diversity, and decreased quantity and quality of water resources. In terms of Forest resources, deforestation has been particularly severe, with current estimates indicating that nearly 5 million hectares of forest cover have been lost in the Eastern Region since 1945 (this represents 60% of the existing forest cover in the Region in that year). Presently, there are approximately 3.5 million hectares of forest in the Eastern Region, covering 22% of the Region's area, of which 765,500 hectares correspond to productive forests (defined as being of sufficient quality and quantity to warrant their sustainable management through forest management plans). At present, the annual loss in total forest cover is an estimated 90,000 hectares. More recently, devastating wildfires have degraded natural resources in the Eastern Region, especially remnant forests, and have also impacted rural communities' crops and fuelwood sources.

One of the principal causes of environmental degradation in Paraguay is the country's model of agricultural development which has promoted short-term profits over long-term environmental sustainability. Some of the major practices which contribute to this degradation include: (i) expansion of the agriculture frontier through the colonization of new lands; (ii) the slash-and-burn agriculture; (iii) extensive grazing; and (iv) the practice of mono-cultivation of cotton and, more recently, soy. Failure to employ appropriate soil conservation and management measures as part of a sound land use planning framework have further aggravated deforestation, erosion and loss of soil fertility in the Eastern Region. In turn, non-sustainable land use practices are contributing to decreased productivity and falling incomes which most heavily impact small-scale farmers who have the least ability to adjust to these trends. Reduced farming income and increasing demand for wood and charcoal within Paraguay and neighboring Brazil have also put pressure on remaining forest fragments.

3. Policy, Institutional and Related Constraints

Various rural development projects in Paraguay, including the recently-completed Bank-financed PARN project, have clearly demonstrated that agriculture continues to remain a viable proposition for small-scale farmers with landholdings of less than 20 hectares. However there are some aspects which need to be strengthened to better realize this potential. In addition, there exist critical inter-dependent issues relating to agriculture, environmental degradation, and rural poverty, some of which have been provided below. It is also important to recognize that there could be some geographical areas and some very small land-holdings which may not be viable, and population groups which are landless. These initiatives could be covered through a project:

- a) Lack of Sound Land-use Planning and Enforcement. The degradation of soil and forest resources caused by unsustainable land use has been exacerbated by inadequate planning of productive endeavors at the national and local levels as well as by weak enforcement of environmental laws;
- b) Weak Generation or Adaptation and Transfer of Applied Technology. The government's agricultural and livestock research and extension services are weak. In addition to financial and budgetary constraints, this can be attributed to a constant drain of technicians who move to the private sector due to inadequate remuneration. Another problem stems from the huge extension staff being close to retirement. The little research carried out (mostly adaptive in nature) rarely takes into account the needs of small-scale farmers or their production systems and rationale. Coverage of official technical assistance services is very limited and it is estimated that it reaches only 11% of small-scale farmers (those with fewer than 20 hectares);
- c) Access to Credit. It is exceedingly difficult for small-scale farmers to gain Access to credit. Seventy percent of farmers with fewer than 20 hectares of land are unable to obtain credit. Of those who are able to access credit, 16% receive it from the formal public sector, 8% from cooperatives and producers' organizations, and 72% from the informal sector of middlemen, wholesalers, factories and truckers;
- d) Lack of Social Organization and Participation. Despite the relatively large number of community and producer organizations in Paraguay's rural areas, these groups generally lack the degree of social organization and knowledge of participatory methods necessary to play a successful role in sustainable rural development, especially since they are faced with a government that has yet to implement any sort of consistent set of policies aimed at them;

- e) Weak Institutional Framework. MAG, and the other sectoral institutions, have historically had deficiencies in policy management, but they are making improvements in focalizing poverty-oriented strategies; and
- f) Livestock Sector. There is a need to improve the field level infrastructure relating to clinics and laboratories to contain foot and mouth and other transboundary diseases, and strengthen the nodal agency, the National Service for Animal Health and Quality (SENACSA) and the Vice Ministry of Animal Husbandry (VMG) to be able to manage this effort vigorously and effectively specially in border areas and small-scale farmers and indigenous communities.

(The World Bank, 2007)

In the agricultural sector, the frontier has basically vanished in the eastern region as the push to expand soy production has resulted in nearly total deforestation of the native forests (less than five percent remain). Yet the expansion of modern agriculture has left the 300,000 small (and mostly poor) farmers behind, who continue with subsistence farming based principally on cotton. The challenge here is to increase their productivity as well. Also, as a result of deforestation, Paraguay has reached the unthinkable point of becoming a net importer of wood, creating an unneeded drain on the balance of payments, not to mention the loss of employment in the previously strong forestry sector.

Paraguay's capacity for domestic savings mobilization is severely limited by low confidence in the financial system following eight years of successive bank failures that, to date, have cost about 11 percent of GDP. Banking regulations and supervision are weak and, as a result, financial intermediation is low and interest costs and spreads are very high. The lack of sound long-term savings mechanisms also limits the population's ability to save for old age and provide some self-insurance against old age poverty. The major remaining public bank (BNF) is unviable in its current structure and insolvent with bad loans accounting for about 50 percent of its portfolio.

Within the public sector, the most entrenched feature of public finances is the structural deficit of the Government pension system (*Caja Fiscal*), which is currently generating a deficit of 2 percent of GDP. Although the tax reforms that are being proposed will likely close the overall fiscal gap, the deficit on government pensions will take time to balance the government pension accounts.

Another structural constraint on public finances is the growing burden of external public debt, which has risen considerably to 45 percent of GDP due to large borrowings in 1999 and to the large devaluations of the past few years. The cost of servicing this debt now consumes about 20 percent of government revenues and limits the Government's ability to increase public investment via borrowing. Also, various public utilities have problems of solvency or over-indebtedness and cannot mobilize the required investments to expand the coverage and quality of service.

A large informal economy, partly contraband trade but also a significant share of normal business activity continues to operate outside the registered framework, mainly to avoid taxes and high contributions to the inefficient social security system, but also to avoid a complex and bureaucratic string of administrative regulations.

On the plus side, it should be noted that Paraguay possesses a number of development assets which can be used in its favor, including a relatively young population which provides a possible solution to grow out of the bind on the social security system if new entrants can be enticed to join the formal economy. Second, Paraguay's membership in Mercosur provides access to a large regional market. Third, vibrant commercial farming and livestock sectors are oriented to export and remain viable through all the turmoil of recent years. And, fourth, abundant electricity supply is available, although transmission and distribution costs are high due to a monopolistic state energy system.

Country Assistance Strategy for the Republic of Paraguay 2004/2007 Based on World Bank, 2004

Growth Prospects in Paraguay

Agriculture and Natural Resources. The agriculture sector is the mainstay of Paraguay's economy, representing approximately 21% of GDP and 55% of exports. It also employs about 32% of the national labor force. During 1991-2005 the agriculture sector's share of GDP grew at a rate of 3.7% annually and experienced a shift in production, away from cotton and increasingly concentrated in soy and beef, which together represent about 90% of total exports. Although overall productivity in the sector has increased, that of small farmers has deteriorated, thus contributing to an increase in extreme poverty in the rural areas. The uneven distribution of agricultural land, a high concentration of both production and exports in a few products, and the lack of off-farm employment and processing of agricultural crops in rural areas, are among the most pressing challenges. Paraguay's land ownership GINI coefficient is the highest in the world. The sector is also faced with limited access to neighboring markets. Important priorities in a reform agenda for the short term include (i) development of a coherent national policy for land administration and land access combined with financing to promote land acquisition and productive investments by small (or landless) farmers; (ii) efficient agricultural extension services specifically targeted to small farmers ideally through cooperation with agricultural enterprises and cooperatives which could transfer know-how; and (iii) the creation of rural off-farm employment. In the

medium-term, it will be important to develop a strategy of agricultural diversification and to attract additional investment to rural areas in order to encourage local processing of agricultural products. Perhaps the single greatest weakness in terms of natural resource management in Paraguay lies in the forestry sector. Paraguay has lost at least 80 percent of its forests over the last 50 years and losses of 500 ha/day occurred between 1966 and 1991. Of the remaining 2 million ha in the Upper Parana Atlantic Forest (UPAF, i.e. forests east of the Paraguay River), only an estimated 800,000 are still considered productive. This is due to destructive logging practices that have degraded the forests, and a result of deforestation that has fragmented much of the UPAF into unmanageably small remnant patches. While deforestation appears to have slowed recently in the east -- due both to resource depletion and some success with a “Zero Deforestation” law -- it seems to have now moved west into the Arid Chaco, which is home to 78 percent of Paraguay’s remaining native forests.

World Bank, 2009 (Country Partnership strategy)

Annex - Paraguay at a Glance

Source: World Bank 2009.

Annex - Background Note: Paraguay

Source: US State Department 2010 3 26
March 26, 2010 Bureau of Western Hemisphere Affairs

Official Name: Republic of Paraguay

PROFILE

Geography

Area: 406,752 sq. km. (157,047 sq. mi.); about the size of California.

Cities: *Capital*--Asuncion (pop. 518,945). *Other cities*--Ciudad del Este, Concepcion, Encarnacion, Pedro Juan Caballero, Coronel Oviedo.

Terrain: East of the Paraguay River there are grassy plains, wooded hills, tropical forests; west of the Paraguay River (Chaco region) is low, flat, marshy plain.

Climate: Temperate east of the Paraguay River, semiarid to the west.

People

Nationality: *Noun and adjective*--Paraguayan(s).

Population (2008): 6,163,913.

Annual population growth rate (2008): 2.2%. (Paraguayan Directorate of Statistics, Surveys, and Censuses)

Ethnic groups: Mixed Spanish and Indian descent (mestizo) 95%.

Religions: Roman Catholic 89.6%; Mennonite and other Protestant denominations.

Languages: Spanish (language of business and government), Guaraní (spoken and understood by 90% of the population).

Education: *Years compulsory*--9. *Attendance*--89%. *Literacy*--94.7%. (Paraguayan Directorate of Statistics, Surveys, and Censuses)

Health: *Infant mortality rate*--32.00/1,000. *Life expectancy*--73 years male; 78.26 years female. (Paraguayan Directorate of Statistics, Surveys, and Censuses)

Work force (2009, 2.98 million): *Agriculture*--26.5%; *manufacturing and construction*--18.5%; *services and commerce*--54.9%. (Paraguayan Directorate of Statistics, Surveys, and Censuses)

Government

Type: Constitutional Republic.

Independence: May 1811.

Constitution: June 1992.

Branches: *Executive*--President. *Legislative*--Senate and Chamber of Deputies. *Judicial*--Supreme Court of Justice.

Administrative subdivisions: 17 departments, 1 capital city.

Political parties: National Republican Association/Colorado Party (ANR), Authentic Radical Liberal Party (PLRA), Beloved Fatherland (PPQ), National Union of Ethical Citizens (UNACE), National Encounter Party (PEN), The Country in Solidarity Party (PPS), Progressive Democratic Party (PDP), Tekojoja Movement, and numerous small parties not represented in Congress.

Suffrage: 18 years of age; universal and compulsory by law up to age 75.

Economy (source: Central Bank of Paraguay and the IMF)

GDP (2009): \$14.95 billion.

Annual growth rate (2009) -3.8%.

Per capita GDP (2009): \$2,350. (Central Bank of Paraguay)

Natural resources: Hydropower, timber, iron ore, manganese, limestone.

Agriculture (16% of GDP): *Products*--soybeans, cotton, beef, pork, cereals, sugarcane, cassava, fruits, vegetables. *Arable land*--9 million hectares, of which 35% is in production.

Manufacturing and construction (17% of GDP): *Types*--sugar, cement, textiles, beverages, wood products.

Trade (2009): *Exports*--\$3.167 billion: soybeans and soy-related products, cereals, beef, wood, leather, cotton, sugar, apparel, edible oils, electricity, tobacco. *Major markets*--Brazil (21%), Uruguay (17%), Chile (12%), Argentina (11%), and the United States in 11th place with 2%. *Imports*--\$6.5 billion: machinery and mechanical appliances; electrical machinery, equipment, and materials; mineral fuels and lubricants; motor vehicles, tractors, parts and accessories; plastics and articles thereof; fertilizers; beverages and tobacco; toys, games, and sporting equipment; chemical products; rubber and articles thereof; paper, paperboard and articles thereof. *Major suppliers*--China (30%), Brazil (23%), Argentina (16%), Japan (5%), and U.S. (4.0%).

PEOPLE

Paraguay's population is distributed unevenly throughout the country. The vast majority of the people live in the eastern region, most within 160 kilometers (100 mi.) of Asuncion, the capital and largest city. The Chaco, which accounts for about 60% of the territory, is home to less than 2% of the population. Ethnically, culturally, and socially, Paraguay has one of the most homogeneous populations in South America. About 95% of the people are of mixed Spanish and Guaraní Indian descent. Little trace is left of the original Guaraní culture except the language, which is understood by 95% of the population. About 90% of all Paraguayans speak Spanish. Guaraní and Spanish are official languages. Brazilians, Argentines, Germans, Arabs, Koreans, Chinese, and Japanese are among those who have settled in Paraguay with Brazilians representing the largest number.

HISTORY

Pre-Columbian civilization in the fertile, wooded region that is now Paraguay consisted of numerous semi-nomadic, Guaraní-speaking tribes, who were recognized for their fierce warrior traditions. They practiced a mythical polytheistic religion, which later blended with Christianity. Spanish explorer Juan de Salazar founded Asuncion on the Feast Day of the Assumption, August 15, 1537. The city eventually became the center of a Spanish colonial province. Paraguay declared its independence by overthrowing the local Spanish authorities in May 1811.

The country's formative years saw three strong leaders who established the tradition of personal rule that lasted until 1989: Jose Gaspar Rodriguez de Francia, Carlos Antonio Lopez, and his son, Francisco Solano Lopez. The younger Lopez waged a war against Argentina, Uruguay, and Brazil (War of the Triple Alliance, 1864-70) in which Paraguay lost half its population; afterward, Brazilian troops occupied the country until 1874. A succession of presidents governed Paraguay under the banner of the Colorado Party from 1880 until 1904, when the Liberal party seized control, ruling with only a brief interruption until 1940.

In the 1930s and 1940s, Paraguayan politics were defined by the Chaco war against Bolivia, a

civil war, dictatorships, and periods of extreme political instability. Gen. Alfredo Stroessner took power in May 1954. Elected to complete the unexpired term of his predecessor, he was re-elected president seven times, ruling almost continuously under the state-of-siege provision of the constitution with support from the military and the Colorado Party. During Stroessner's 35-year reign, political freedoms were severely limited, and opponents of the regime were systematically harassed and persecuted in the name of national security and anticommunism. Though a 1967 constitution gave dubious legitimacy to Stroessner's control, Paraguay became progressively isolated from the world community.

On February 3, 1989, Stroessner was overthrown in a military coup headed by Gen. Andres Rodriguez. Rodriguez, as the Colorado Party candidate, easily won the presidency in elections held that May, and the Colorado Party dominated the Congress. In 1991 municipal elections, however, opposition candidates won several major urban centers, including Asuncion. As president, Rodriguez instituted political, legal, and economic reforms and initiated a rapprochement with the international community.

The June 1992 constitution established a democratic system of government and dramatically improved protection of fundamental rights. In May 1993, Colorado Party candidate Juan Carlos Wasmosy was elected as Paraguay's first civilian president in almost 40 years in what international observers deemed fair and free elections. The newly elected majority-opposition Congress quickly demonstrated its independence from the executive by rescinding legislation passed by the previous Colorado-dominated Congress. With support from the United States, the Organization of American States, and other countries in the region, the Paraguayan people rejected an April 1996 attempt by then-Army Chief Gen. Lino Oviedo to oust President Wasmosy, taking an important step to strengthen democracy.

Oviedo became the Colorado candidate for president in the 1998 election, but when the Supreme Court upheld in April his conviction on charges related to the 1996 coup attempt, he was not allowed to run and remained in confinement. His running mate, Raul Cubas Grau, became the Colorado Party's candidate and was elected in May. The assassination of Vice-President Luis Maria Argana and the killing of eight student anti-government demonstrators, allegedly carried out by Oviedo supporters, led to Cubas' resignation in March 1999. The President of the Senate, Luis Gonzalez Macchi, assumed the presidency and completed Cubas' term. Gonzalez Macchi offered cabinet positions in his government to senior representatives of all three political parties in an attempt to create a coalition government that proved short-lived. Gonzalez Macchi's government suffered many allegations of corruption, and Gonzalez himself was found not guilty in a Senate impeachment trial involving corruption and mismanagement charges in February 2003.

In April 2003, Colorado candidate Nicanor Duarte Frutos was elected president. Duarte's administration established a mixed record on attacking corruption and improving the quality of management. Duarte worked constructively with an opposition-controlled Congress, removing six Supreme Court justices suspected of corruption from office and enacting major tax reforms. Macroeconomic performance improved significantly under the Duarte administration, with inflation falling significantly, and the government clearing its arrears with international creditors. In June 2004, Oviedo returned to Paraguay from exile in Brazil and was imprisoned for his 1996 coup-plotting conviction. In November 2007, Oviedo's criminal charges were overturned by the Supreme Court, and he was allowed to participate in the April 2008 presidential elections.

On April 20, 2008, former Roman Catholic bishop Fernando Lugo (representing a coalition of opposition parties) was elected President. According to the National Election Tribunal (TSJE), Lugo won 40.8% of the vote. Colorado candidate Blanca Ovelar came in second with 30.6% of the vote, and UNACE's Lino Oviedo came in third with 21.9% of the vote. President Lugo assumed office on August 15, 2008. Lugo has identified reduction of corruption and economic inequality as two of his priorities.

GOVERNMENT AND POLITICAL CONDITIONS

Paraguay's highly centralized government was fundamentally changed by the 1992 constitution, which provides for a division of powers. The president, popularly elected for a 5-year term, appoints a cabinet. The bicameral Congress consists of an 80-member Chamber of Deputies and a 45-member Senate, elected concurrently with the president through a proportional representation system. Deputies are elected by department and senators are elected nationwide. Paraguay's highest judicial body is the Supreme Court. A popularly elected governor heads each of Paraguay's 17 departments.

ECONOMY

Paraguay has a predominantly agricultural economy, with a struggling commercial sector. There is a large subsistence sector, including sizable urban unemployment and underemployment, and a large underground re-export sector. The country has vast hydroelectric resources, including the world's second-largest hydroelectric generation facility built and operated jointly with Brazil (Itaipu Dam), but it lacks significant mineral or petroleum resources. The government welcomes foreign investment in principle and accords national treatment to foreign investors, but widespread corruption is a deterrent. The economy is dependent on exports of soybeans, cotton, grains, cattle, timber, and sugar; electricity generation, and to a decreasing degree on re-exporting to Brazil and Argentina products made elsewhere. It is, therefore, vulnerable to the vagaries of weather and to the fortunes of the Argentine and Brazilian economies.

Paraguay's real GDP in 2009 of \$14.95 billion (in 2009 dollars) represented a decrease of 7% from \$16.1 billion in 2008. The per capita GDP decreased to \$2,350 in current U.S. dollar terms in 2009, down from \$2,709 in 2008. Given the importance of the informal sector, accurate economic measures are difficult to obtain. In 2009, the current account deficit improved from -3.8% of GDP in 2008 to -0.8% of GDP and the official foreign exchange reserves rose to \$38 billion, up from \$2.8 billion in 2008, and over five times the figure for 2002 (\$582.8 million). Inflation in 2009 was 1.9%, down from 7.5% in 2008 and 6.0% in 2007.

Agriculture and Commerce

Agricultural activities, most of which are for export, represent about 16% of GDP and employ about one-quarter of the work force. More than 250,000 families depend on subsistence farming activities and maintain marginal ties to the larger productive sector of the economy. In addition to the commercial sector with retail, banking, and professional services, there is significant activity involving the import of goods from Asia and the United States for re-export to neighboring countries. The underground economy, which is not included in the national accounts, may be almost twice the size of the formal economy in size, although

greater enforcement efforts by the tax administration and customs are having an impact on the informal sector.

DEFENSE

The constitution designates the president as commander in chief of the armed forces. Military service is compulsory, and all 18-year-old males--and 17-year-olds in the year of their 18th birthday--are eligible to serve for one year on active duty. However, the 1992 constitution allows for conscientious objection. Of the three services, the army has the majority of personnel, resources, and influence. With about 7,000 personnel, it is organized into three corps, with six infantry divisions and three cavalry divisions. The military has two primary functions: national defense (including internal order) and engaging in civic action programs as directed by the president. The navy consists of approximately 2,000 personnel and in addition to its fleet, has an aviation section, a prefecture (river police), and a contingent of marines (naval infantry). The air force, the smallest of the services, has approximately 1,200 personnel.

Annex - 2010 Investment Climate Statement - Paraguay.

Source: US State Department, 2010 5
Bureau of Economic, Energy and Business Affairs
May 2010

Openness to Foreign Investment

The Government of Paraguay encourages foreign investment, and there many opportunities, in spite of certain challenges. Paraguay guarantees equal treatment of foreign investors, and most sectors are open for private investment. There are no formal restrictions on foreign investment in Paraguay. National treatment of foreign investors is guaranteed by law 117/91, as is full repatriation of capital and profits by law 60/90. The fiscal incentive package includes an exemption from certain taxes on the establishment of operations and an important reduction of customs duties on imports of capital goods. According to the Heritage Foundation Economic Freedom report, Paraguay's economic freedom ranks 79 out of 179 countries worldwide, and 16 out of 29 countries in Latin America. Paraguay has historically maintained the lowest tax burden in MERCOSUR. The basic corporate income tax rate is currently 10 percent, and there is a 10 percent value added tax on most goods and services.

Efforts to attract foreign investment through privatization have stalled because of political opposition. From 1994 to 1997 four state-owned companies were privatized: the airline in 1994; the state-owned liquor producer bought by its workers in 1995; the state merchant marine, split into five separate entities, three of which were sold in 1996; and the state steel company, sold in late 1997. The government reversed two of the four privatizations: the liquor producer is now owned by the state after a refinancing in 2000, and the GOP rescinded the contract with the owners of the privatized steel company in 2009 citing the need to rectify anomalies of a controversial privatization deal. The government plans to resell the steel company once the noted irregularities are addressed.

Political realities render further outright privatizations unlikely in the medium-term. The large state-run companies most attractive to foreign buyers (such as the telecom and electricity distribution companies) employ thousands and are outlets for political patronage. The GOP is exploring concessions to improve the road and rail network and upgrade the international airport, but the legal framework for these concessions is pending congressional approval. An opaque and contradictory legal framework for oil and gas concessions has generated contractual disputes with investors, including U.S. investors. In the case of a U.S. investor, a congressionally approved contract was rescinded by Presidential decree citing anomalies that occurred before the contract was approved by Congress. The dispute reached the courts and it is winding its way through the judicial system.

Paraguay has a legal framework for maquila operations – businesses that process goods or services for export. The value-added in the process is subject to a tax rate of one percent. In most cases, inputs are allowed to enter Paraguay tax free, and up to 10 percent of production is allowed for local consumption albeit after paying import taxes and duties. Maquila operations are not restricted geographically or by industry. Existing operations include software design and other services as well as manufacturing. The Ministry of Industry and Commerce has a special office for promoting maquila investments (<http://www.maquila.gov.py>).

Paraguay is the world's largest generator and exporter of hydroelectricity. With two of the largest hydroelectric dams in the Latin America, Brazil-Paraguay Itaipu and Argentina-Paraguay Yacyreta, Paraguay generates more than 106 million mega watts hour (MW/h) a year. Itaipu alone generates more than 90 million MW/h per year, and half of the electricity

produced is owned by Paraguay. Paraguay consumes roughly 9 percent of its total production and exports the rest. Paraguay's electricity distribution infrastructure is in need of investment and upgrades. Paraguay has limited air connectivity, though it is looking to improve its international airport. Only a handful of carriers service Asuncion, and there are no U.S. air carriers in Paraguay.

A 2005 law prohibits citizens of neighboring countries Brazil, Bolivia and Argentina from owning land within 50 kilometers of Paraguay's borders. Paraguay has no other restrictions for land ownership by foreigners.

A biased, corrupt, and inefficient judicial system hinders Paraguay's investment climate. Many investors find it difficult to adequately enforce contracts, and get frustrated by lengthy bureaucratic procedures. Regulations are enforced by a bureaucracy with limited transparency and accountability. Corruption and impunity are widespread. Politically connected business and individuals are seldom prosecuted. Paraguay ranks at the bottom tier of Transparency International Corruption Index with a 2009 rank of 154 out of 180 countries, a drop from position 138th in 2008.

Paraguay has a rigid labor market and property rights are poorly protected. Confidential data concerning regulatory approvals lack adequate protection. An underground economy is at least as large as the formal economy, and companies in the formal economy face direct competitive threats from illegal businesses. The World Bank's Doing Business 2009 ranks Paraguay 124 out of 183 countries for the ease of doing business.

Conversion and Transfer Policies

There are no restrictions on the conversion or transfer of foreign currency. In late 1994, the government permitted foreign currency contracts, legitimizing a long-standing practice. Law 60/90 permits the repatriation of capital and profits. There are no controls on foreign exchange transactions, apart from reporting requirements to banking authorities for transactions in excess of USD \$10,000.

Expropriation and Compensation

Private property has historically been respected in Paraguay as a fundamental right. However, there have been several cases of expropriations of land without prompt and fair compensation in recent years. In 2005, Paraguay's Congress approved the expropriation of a large chunk of foreign-owned land in Chaco region in the western half of Paraguay. The government compensated the landowners after lengthy negotiations. Over the last two years, groups of "landless" peasants, calling on the government to give them land for farming, occupied several large farms. Most of the occupied properties are owned by Brazilians or Paraguayans of Brazilian descent, and are in Eastern Paraguay. The new government announced its agrarian reform objectives in early 2009, and authorized the military to support the police in removing the peasants from some of the occupied properties. Land invasions declined, but organized public protests from civil society groups in rural areas making demands to the government increased, but are generally non-violent.

Dispute Settlement

Law 117/91 guarantees national treatment for foreign investors. This law allows international arbitration for the resolution of disputes between foreign investors and the government. Paraguay became a member of the International Center for the Settlement of Investment Disputes (ICSID), also known as the Washington Convention, (<http://icsid.worldbank.org/ICSID/Index.jsp>), in October 1982 (Law 944/82). The Inter-American Development Bank financed the creation of a center for alternative dispute resolution.

Improvements to the legal system have been incremental at best. There are two Supreme Court vacancies, and judicial reform, as well as the appointment of new Supreme Court judges is highly politicized. A Council of Magistrates appoints appellate and lower court justices as well as prosecutors and public defense attorneys.

A new Penal Code with tougher provisions on money laundering, trafficking in persons, and intellectual property rights became effective July 16, 2009. However, current criminal procedures such as time limits on investigations and disclosure requirements hinder the investigation and prosecution of complex crimes. Both the commercial and civil codes cover bankruptcy and give priority for claims first to employees, then to the state, and finally to private creditors.

While efforts are underway to strengthen the rule of law and make the judicial process more transparent, impunity, corruption, patronage, and bias are features of the current judicial system, from the police to the judges.

Performance Requirements and Incentives

A number of fiscal incentives (mainly tax breaks), contained in Law 60/90, are available to investors. However, voting board members of any company incorporated in Paraguay must have legal residence. This has posed some obstacles to potential foreign investors.

Another potential roadblock is Paraguay's law protecting agents and distributors (law 194/93). The law features strong penalties for severing relations with a local distributor or agent. This has on occasion led to expensive out-of-court settlements since just cause must be proven for severing the relationship and indemnification must be paid. However, courts have ruled against distributors in a few cases when just cause has been established.

Paraguay's import tariffs range from 0 percent to 20 percent, with an average applied tariff rate of 8.7 percent in 2009. Paraguay is a member of the MERCOSUR common market, formed in 1991 and comprised of Argentina, Brazil, Paraguay, and Uruguay. MERCOSUR's Common External Tariff (CET) averages 11.7 percent and ranges from 0 to 35 percent *ad valorem*, with a limited number of country-specific exceptions. Currently, Paraguay maintains over 2,600 exceptions to the CET. Tariffs may be imposed by each MERCOSUR member on products imported from outside the region which transit at least one MERCOSUR member before reaching their final destination. Full CET product coverage, which would result in duty free movement within MERCOSUR, was originally scheduled for implementation in 2006, but has been deferred until 2010. In addition, both Paraguay and Uruguay are permitted to maintain national lists of 100 country-specific exceptions until December 31, 2015.

Paraguay has a temporary entry system, which allows duty free admission of capital goods such as machinery, tools, equipment, and vehicles to carry out public and private construction work. The government also allows temporary entry of equipment for scientific research, exhibitions, training or testing, competitive sports, and traveler or tourist items. Merchandise introduced into the country under the temporary entry system may be nationalized in Paraguay by paying the requisite duties. The temporary admission system, to be phased out under MERCOSUR in 2010, allows entry of certain goods for subsequent re-export for a period of up to 12 months, which can be renewed once. Temporary entry for 10 days for merchandise in transit is also permitted.

A number of new procedures and requirements imposed by the Government of Paraguay in 2009 could make importing of U.S. products more difficult. Since March, the government of Paraguay has required non-automatic licenses on personal hygiene products, cosmetics, perfumes and toiletries, textiles and clothing, insecticides, agrochemicals and poultry. Obtaining a license requires review by the Ministry of Industry and Commerce and sometimes the Ministry of Public Health, and the process is slow. Once issued, the certificates are valid for only 30 days.

Paraguay requires specific documentation, such as the commercial receipt, certificate of origin, and cargo manifest, for exports to be certified by the Paraguayan consulate in the country of origin. Paraguayan regulations require that the country of origin be labeled on imported products. Expiration dates are required on medical products and some consumer goods. Health warnings on hazardous products, such as cigarettes, must be labeled in a visible place.

Paraguay frequently makes changes in its customs procedures. This makes it difficult for exporters to ensure they are following the most current procedures, which can delay shipments and lead to unexpected costs. The burden of compliance is most often borne by importers. In 2009, a customs resolution also restricted the ports-of-entry for numerous goods.

Paraguay is not a signatory to the WTO Agreement on Government Procurement. In March 2009, in an effort to encourage local production, the government of Paraguay changed its procurement rules. Government procurements must be awarded to Paraguayan producers, except for material and services not produced in Paraguay. The Paraguayan government will give preference to a locally produced good even if it is up to 70% more expensive than the imported good. Importers of foreign goods can participate in these procurements only when locally manufactured products and service providers are unavailable or when the Paraguayan government fails to award a contract to a domestic supplier. The government can also call for international bids.

Right to Private Ownership and Establishment

Foreign and domestic private entities may establish and own business enterprises. Foreign businesses do not need to be associated with Paraguayan nationals for investment purposes. There is no restriction on repatriation of capital and profits. Private entities may freely establish, acquire, and dispose of business interests.

Protection of Property Rights

The 1992 constitution guarantees the right of private property ownership. While it is common to use property as security for loans, the lack of consistent property surveys and registries often makes it impossible to foreclose. Acquiring title documents for land can take two years or more.

Paraguay is recognized as a regional distribution and manufacturing center for counterfeit merchandise. The re-export trade to Brazil, catering to consumer demand for electronics, CDs/DVDs, and designer clothing/footwear is rife with piracy. Based on the seriousness of industry concerns, Paraguay was designated as a Priority Foreign Country in January 1998 by the U.S. Trade Representative. Paraguay and the United States signed in 2009 the latest Memorandum of Understanding (MOU) detailing a plan to combat Intellectual Property Rights (IPR) violations, and placing Paraguay under Section 301 monitoring.

Under the new penal code, IPR offenders will face stiffer penalties (two to eight years jail time and/or fines) and, a fraudulent imitation of a product is separately recognized as an offense. Paraguay ratified all the Uruguay Round accords, including TRIPS, in late 1994 and has ratified two WIPO copyright treaties.

The government has worked with local and international industry groups to fight piracy, counterfeiting, and contraband. However, IPR violations remain a serious concern as it generates a large percentage of the illicit income for Paraguayan working in the underground economy. Paraguay does not have a framework for safeguarding confidential data associated with regulatory approvals. As a result, some companies have decided not to market certain products, such as the latest pharmaceuticals, in Paraguay.

Transparency of the Regulatory System

The Civil Code and Law 1.034/83 regulate business and industrial activities in the country. Under the existing framework, the Ministry of Industry and Commerce (<http://www.mic.gov.py>) is charged with overall industrial policy coordination; the Ministry of Finance (<http://www.hacienda.gov.py>) handles tax and fiscal policy; and the Central Bank (<http://www.bcp.gov.py>) is the principal coordinator of monetary policy.

The business registration process was modified in late 2006 with USG assistance. The government instituted a coordinated system among all the offices involved (<http://www.suae.gov.py>), reducing the number of steps and the time to 35 days, and lowering the cost to approximately USD \$ 250.00.

The Ministry of Health (<http://www.inan.gov.py>) and the Municipality of Asuncion (<http://www.mca.gov.py>) both regulate food safety issues, which can include processed food imports and imports for fast food franchises.

The rigidity of Paraguay's labor market hinders employment and productivity, severely distorting the investment climate. Paraguay's job security regulations make it very difficult to lay-off a full-time employee. Firms often opt for periodical renewals of "temporary" work contracts. The World Bank's Doing Business 2009 ranks Paraguay 179 out of 183 countries.

Regulatory agencies for sectors such as telecommunications, energy, potable water, and the environment are inefficient and opaque. Constant politically motivated changes in the leadership of regulating agencies negatively impacts firms and investors. Labor intensive, time consuming compliance processes generate "rent-seeking" opportunities for the public servants to "facilitate" the paperwork. According to the World Bank's Doing Business 2009, it can take on average up to 291 days to get a permit or a license, compared to the Latin America average of 225 days. Draft laws are often introduced into Congress by special interest groups with few limited opportunities for public comment. Public participation often requires direct lobbying and press campaigns in a system set up to benefit politically connected special interest groups.

Efficient Capital Markets and Portfolio Investment

Paraguay has a relatively small Asuncion capital market that began operating in 1993. As of 2009, the Asuncion capital market handled USD \$ 99.2 million in transactions, compared to a volume of USD \$79.6 million transactions in 2008. The number of companies traded is 87. The high cost of capital makes the market an attractive alternative, but the fear by family enterprises of losing control has tempered enthusiasm for public offerings. Most of the exchange's volume occurs in fixed income securities.

Credit is available through numerous sources. High collateral requirements are generally imposed. The banking system is generally sound, but remains overly liquid. Long term financing for capital investment projects is scarce. Most lending facilities are short term. The USG is supporting the mobilization of long term financing with credit guarantees.

As of 2009, Paraguay's banking system was comprised of 14 banks with USD \$7.9 billion in assets and USD \$6.3 billion in deposits. The largest seven banks accounted for almost 75 percent of total assets and deposits. Non-performing loans in the banking sector totaled just 1.6 percent of total loans in 2009. Eleven non-bank financial institutions held USD \$426 million in assets and USD \$312 million deposits in 2009, with a non-performing loan ratio of 4.74 percent. Independent audits of financial statements are not legally mandatory. Paraguay's institute of accountants has adopted the international audit guidelines issued by the International Federation of Accountants.

Competition from State Owned Enterprises

Paraguay's State Owned Enterprises (SOEs) are active in the oil (fuel distribution), cement, electricity (distribution and generation), water, and telecommunication sectors. In general, SOEs are monopolies with no private sector participation, but in some sectors, such as retail fuel distribution, electricity, and telecommunications the private sector indirectly competes with SOEs. Most of the SOEs operate independently but maintain an administrative link with line ministries, namely the Ministry of Public Works.

SOEs corporate governance is weak. With the exception of the bi-nationals hydroelectric dams (Brazil-Paraguay Itaipu, and Argentina-Paraguay Yacyreta) few SOEs have a working board of directors, and most operate with a council of "trusted" advisors appointed by the SOE chief executive. All SOEs top executives are political appointments by presidential decree. Excluding the bi-national dams, SOEs are not required to have an independent audit. The Controller General annually reviews the SOEs. The SOEs employ many people and are an outlet for patronage, and as a result, the provision of basic services is poor. The SOEs burden the country's fiscal position, running huge losses with limited capacity to recover. The SOE in the fuel distribution business alone has a deficit that exceeds USD \$300 million.

Corporate Social Responsibility

Corporate Social Responsibility (CSR) is growing with the support of Paraguay's largest firms. The private sector is taking measures to institutionalize CSR under initiatives such as the Paraguayan Good Governance Program. An initiative sponsored by the U.S. Department of Commerce, Paraguay's Good Governance Program has established a rigorous process to certify a firm's adherence and practice of governance principles, including CSR.

Political Violence

Paraguay has not traditionally been affected by political violence. While Paraguay has been spared the large number of kidnappings that occur in neighboring Latin American countries, there have a handful of high profiles cases in recent years – all the victims were Paraguayans nationals. The 2009 kidnapping of cattle rancher Fidel Zavala again heightened security concerns as a so called Paraguayan Popular Army (EPP) claimed responsibility for the abduction. The EPP made several demands to the Zavala family, including a ransom of about USD \$550,000 and a meat "donation" to poor communities. The Zavala family complied with

the demands, and Zavala was released unharmed in early 2010. The GOP has aggressively responded to the EPP threat with combined military and policy operations aimed at eliminating the EPP. The last two years have been characterized by civil protests in the form of land invasions, marches, and organized events in Asuncion from civil society organizations, namely peasants, rural and indigenous communities, making demands on the government. Though most of the demands are specific to the groups' interest, there has been a growing number of instances where organized civil society groups are making political demands, such as congressional and judicial sector reform.

Corruption

After decades of dictatorship, Paraguay has a legacy of weak institutions, endemic corruption, patronage, and cronyism. This legacy undermines the credibility and capacity of government institutions to formulate policy and provide services, and it perpetuates distortions in the business environment that inhibit trade and investment.

The government has taken several steps to combat corruption, including the creation of a transparent internet-based government procurement system; the appointment of respected apolitical officials to some key posts; and, increased civil society input and oversight. Some of the most important challenges Paraguay is facing include an entrenched political and economic elite, a compromised judicial system, a bloated and inefficient cadre of civil servants, and limited budget execution capacity. The slow pace of judicial reform and continued impunity are barriers to development and foreign investment.

With a focus on implementing internal controls in key public offices, including the judiciary and the public ministry, the U.S. is assisting Paraguay's efforts in fighting corruption and promoting the rule of law. The cornerstone of U.S. anti-corruption assistance is the USD \$30.3 million two-year MCC Threshold Country Program (TCP) Stage II that began in October 2009. TCP Stage II seeks to strengthen measures to prevent corruption and hold corrupt individuals accountable. It seeks to strengthen prosecutors' investigative capacity, the judiciary's disciplinary and internal control systems, the public administration's internal control mechanisms (including in the health sector), control over contraband and smuggling, intellectual property rights protection, and anti-corruption controls in the Paraguayan National Police.

Bribery is a crime in Paraguay, but one that is rarely prosecuted. Paraguay has signed the UN Convention against Corruption, but is not a party to the OECD Convention on Combating Bribery.

Bilateral Investment Agreements

Paraguay has bilateral investment agreements or treaties with the following countries: Argentina, Brazil, Chile, France, South Africa, Taiwan, United Kingdom, and Uruguay.

Paraguay has signed other investment agreements with Austria, Benelux, Costa Rica, Ecuador, El Salvador, Germany, Hungary, Korea, Netherlands, Peru, Romania, Spain, Switzerland, and Venezuela.

Paraguay has signed the following agreements with the United States: Agreement relating to investment guaranties (OPIC), 1955; Agreement relating to investment guaranties (OPIC),

1992. A complete listing of bilateral agreements can be found via the following link: <http://www.state.gov/documents/treaties>.

Paraguay and the U.S. discuss investment and trade priorities in the annual Joint Commission on Trade and Investment (JCTI). JCTI is the bilateral mechanism to advance common investment and trade objectives.

OPIC and Other Investment Insurance Programs

The United States and Paraguay signed a 1992 investment guaranties agreement, allowing OPIC (<http://www.opic.gov>) to begin full operations in Paraguay. OPIC has financed telecommunications and forestry projects, and is now involved in several transactions with local banks to expand access to credit for SMEs. OPIC is also looking to support renewable energy projects in Paraguay.

Paraguay is a member of the World Bank's Multilateral Investment Guarantee Agency (MIGA), (<http://www.miga.org>), which offers foreign investment guarantees against non-commercial risks, such as inconvertibility of foreign currency, discriminatory expropriations, contract non-fulfillment, civil uprisings, and war. Paraguay also ratified the agreement creating the International Center for the Settlement of Investment Disputes (ICSID), (<http://icsid.worldbank.org/ICSID/Index.jsp>), between states and nationals, and nationals of other states, in order to access a mechanism of international arbitration and conciliation.

Labor

According to the latest 2008 employment statistics from the Paraguayan government, the labor force was estimated at 4.83 million workers. The Paraguayan labor force data includes persons 10 years of age and older. About 100,000 people enter the workforce each year. Total open unemployment for 2008 officially stood at 5.7 percent, and total underemployment at 26.5 percent.

With a population growth rate above 3 percent per annum, job creation to meet the increasing demand is one of the most pressing issues of the current administration. While the supply of workers is relatively large and growing, a weak education system limits the supply of well-educated workers. Local businesspeople cite the lack of a skilled work force as a major obstacle to growth.

Foreign Trade Zones/Free Ports

Paraguay is a landlocked country with no seaports. However, it has been granted free trade ports and warehouses in neighboring countries' seaports for the reception, storage, handling, and transshipment of merchandise transported to and from Paraguay.

About three-fourths of goods are transported by barge on the large river system that connects Paraguay with Buenos Aires (Argentina) and Montevideo (Uruguay). The Paraguayan port authority manages the free trade ports and warehouses. Paraguayan free trade ports are located in Argentina (Buenos Aires and Rosario), Brazil (Paranagua, Santos, and Rio Grande do Sul), Chile (Antofagasta and Mejillones), and Uruguay (Montevideo and Nueva Palmira). To date, six of the nine free ports are in full operation: the three Brazilian free trade ports, Nueva Palmira in Uruguay, and the two Chilean free trade ports.

Foreign Direct Investment Statistics

According to the latest figures from the Central Bank of Paraguay, the total stock of foreign direct investment stood at USD \$2.15 billion in 2008, up from USD \$2.0 billion in 2007. In 2008, services accounted for roughly 70 percent of foreign investment, and the remaining 30 percent was in manufacturing. The three largest service sectors recipients of foreign direct invest include financial sector (24 percent), commerce/retail (19 percent), and telecommunications (15 percent). The food and beverage sector accounted for 17 percent of investments in manufacturing in 2008.

The 2008 Central Bank data shows that the United States is the largest foreign investor in Paraguay with USD \$889.7 million, followed by Brazil's USD \$295.9 million, the Netherlands' USD \$151.2 million, and Argentina's USD \$150.6 million.

Large U.S. investments include USD \$37 million invested by Mastec to develop a wireless communication network (this network was later sold to Hutchison Communications Ltd. of Hong Kong, and resold in 2005 to America Movil of Mexico). Other investments include the USD \$25 million purchase of a grain crushing facility by Cargill; approximately USD \$60 million invested in a river transportation company; USD \$27 million invested by Exxon; and several million dollars worth of investments by fast food companies (Pizza Hut, Burger King, McDonald's). An expression of interest from Rio Tinto was signed with the Paraguayan government in late 2009 for a USD \$2 billion aluminum smelter plant.

Annex – Paraguay’s performance in several indexes

Doing Business in Paraguay 2010.

Source: World Bank, 2009.

Economic Freedom of the World, 2009

Source: Gwartney & Lawson, 2009

World Economic Forum's Global Competitiveness index

Source: World Economic Forum, 2009

Annex - UNCTAD's Country Fact Sheet for Paraguay

Source: UNCTAD, 2009.

Annex - Steeplands in selected Latin American and Caribbean countries (1,000 km²).

Country	Total area	Steep slopes 8 - 30 %		Very steep slopes > 30 %		Total steepland	
	Area	Area	%	Area	%	Area	%
El Salvador	21	11	53	6	28	17	81
Haiti	27	15	56	6	24	22	80
Honduras	112	59	53	28	25	88	78
Dominican Republic	47	25	53	9	19	34	71
Guatemala	108	52	48	23	22	76	70
Mexico	1,966	1,001	51	373	19	1,373	70
Peru	1,281	5	52	2	18	6	70
Jamaica	11	5	48	2	20	8	68
Panama	78	40	51	11	14	51	66
Trinidad and Tobago	5	2	44	1	22	3	66
Costa Rica	51	24	48	9	17	33	65
Chile	749	212	28	243	32	455	61
Venezuela	910	382	42	146	16	528	58
Nicaragua	144	59	41	19	13	78	54
Ecuador	283	89	31	60	21	149	53
Guyana	215	90	42	22	10	113	52
Belize	23	9	39	2	9	11	47
Colombia	1,136	412	36	119	10	531	47
Bolivia	1,096	253	23	175	16	428	39
Brazil	8,479	2,938	35	293	3	3,230	38
Argentina	2,772	481	17	283	10	763	28
Suriname	164	41	25	0	0	41	25
Paraguay	407	63	16	0	0	63	16
Uruguay	186	20	11	7	4	27	14

Source: Modified by the author from FAO (2000).

Annex - Potential Equivalent Arable Land and Forest Vocation Land estimations for Selected Latin America and the Caribbean Countries (1,000 ha).

COUNTRIES (i)		Total land (V _i)	Pot. eq. arable lands (V _{ii})	Desert areas (V _{iii})	Arid areas (V _{iv})	FVL Potential (I _i) (%) (I _{ii})	
1	Brazil	853,637	393,802	4,300	65,500	390,035	46
2	México (-)	196,062	36,471	65,700	94,100	11,163	58 (-)
3	Colombia	113,184	47,690	0	2,400	63,094	56
4	Peru	128,922	30,567	18,800	25,200	54,355	42
5	Venezuela	92,388	38,411	500	4,700	48,777	53
6	Argentina	277,685	71,161	55,000	117,500	34,024	12
7	Chile	75,202	2,003	23,100	17,800	32,299	43
8	Bolivia	108,903	46,067	10,800	24,900	27,136	25
9	Paraguay	39,905	1,257	0	6,100	20,548	51
10	Guyana	20,907	9,739	100	0	11,068	53
11	Ecuador	25,263	9,194	600	6,000	9,469	37
12	Honduras	11,490	2,162	0	0	9,328	81
13	Nicaragua	12,909	3,663	0	0	9,246	72
14	Bahamas (-)	13,940	nd	nd	nd	8,046	58 (-)
15	Surinam	14,429	6,736	0	0	7,693	53
16	Panama	7,569	1,584	0	0	5,985	79
17	Uruguay	17,907	12,522	0	0	5,385	30
18	Costa Rica	5,200	858	0	0	4,342	84
19	Dominican Rep.	4,879	1,418	0	0	3,461	71
20	El Salvador	2,015	573	0	0	1,442	72
21	Belize	2,063	709	0	0	1,354	66
22	Jamaica	1,132	108	0	0	1,024	90
23	Guatemala	11,045	2,821	0	0	8,224	74
24	Trinidad y Tobago	514	226	0	0	288	56
25	Barbados (-)	431	nd	nd	nd	249	58 (-)
26	Haiti	2,723	511	0	0	2,212	81

(-) Average data

(e) Estimated data;

$$I_i = V_i - V_{ii} - V_{iii} - V_{iv}$$

$$I_{ii} = I_i * 100 / V_i$$

Source: FAO (2000); as prepared by
modified by the author.

STCP (2005) and

Annex - Forest Investment Attractiveness Index (IAIF) Results and Methodology

Sources: Adapted from Getulio Vargas Foundation and INCAE Business School. (2008) and Nascimento, J. R., & Tomaselli, J. (2007).

What are and how can one measure the business climate factors that affect sustainable investments in the forest sector? What are the Latin American and Caribbean countries with the best and worse conditions for the success of such businesses? How to design strategies and action plans to improve this climate? These were the questions that guided the preparation by the Inter-American Development Bank of two instruments: the Forest Investment Attractiveness Index (IAIF) and the Process to Improve the Business Climate for Investment in the Forestry Sector (PROMECIF).

IAIF's purpose was to clarify governments and investors which are the factors that affect, lead to success, and attract private direct investment, domestic or foreign, to the forestry sector. The PROMECIF, in turn, helps adjust such factors to make a given country more attractive from the point of view of investors. The basic hypothesis underlining these instruments is that more direct investment in sustainable forest production chain activities contributes to increase production, productivity and competitiveness of the sector, generate employment and income, earn foreign exchange, fight poverty, and improve environmental conditions.

The IAIF seeks to measure countries' attraction for direct investment in sustainable forestry business. The IAIF allows: (i) to compare the performance of countries in the same year and the trend over time, (ii) to assist investors to pre-identify the countries where sustainable forest business will most likely be successful, and (iii) to clarify for countries which SUPRA, INTER and INTRA factors most affect their business climate for sustainable forestry investments.

The IAIF methodology considers 80 variables that make up a total of 20 indicators (several of them exclusive) that are integrated into a model that seeks to explain and predict levels of direct investment in the sector. The IAIF was applied to the IDB borrowing countries based on data from 2004 and 2006. The results achieved for 2006 and further details of IAIF's methodology are presented below in Table 3. In the case of countries with substantial subnational differences in socio-economic, institutional, or environmental features, a modified IAIF has been developed to measure the attractiveness of states or provinces.

The PROMECIF aims at helping countries design strategies and actions to improve their attractiveness to direct investment in sustainable forest businesses. The PROMECIF uses the IAIF model and results in a cyclical planning process with 3 phases. The PROMECIF methodology was applied to Nicaragua, Panama, Paraguay, and Ecuador.

Detailed results of IAIF for Paraguay

In terms of domestic market potential, Paraguay does not hold a significant position in the Southern Cone, with a population of just 6 million inhabitants (the second smallest in the group), and the lowest GDP per capita (US\$4,800) of all countries in the group.

As to forest potential, Paraguay has the second smallest forest vocation land area (206,000 Km²) in the Southern Cone.

Tables 1 and 2 present the results for the IAIF in 2006, compared to the IAIF results for Paraguay in 2004.

Table 1: Paraguay's IAIF scores and ranks in 2004 and 2006, and variation.

	IAIF 2006	IAIF 2004	Difference
IAIF scores in 2004 and 2006	33	31	+2
IAIF ranks in 2004 and 2006	20 st	18 th	-2

Table 2: IAIF Results in Paraguay

	Rating in 2004	Rating in 2006	Max. rating possible	Potential growth in %
GDP Growth Rate	70	70	100	43
Passive Real Interest Rate	60	86	100	16
Exchange Rate Stability	40	100	100	0
Trade Openness	64	69	100	46
Political Risk	53	57	100	75
Tax Share of GDP	80	69	100	45
SUPRA Sectorial Sub index	61	75	100	33
Economic infrastructure	35	34	100	192
Social Infrastructure	75	76	100	32
Licenses and Permits	25	25	100	300
Labor	31	37	100	172
Capital Market	33	29	100	240
Property Rights	25	25	100	300
Capital Flow and Foreign Investment	50	50	100	100
Agricultural Policies	69	33	100	200
Planting and Harvesting Restrictions	85	47	100	112
INTER Sectorial Sub index	48	40	100	152
Forest Resources	20	15	30	106
Favorable Support	8	26	100	279
Domestic Market	5	5	10	100
FVL	5	5	10	100
Adverse Actions	42	44	100	129
INTRA Sectorial Sub index	16	19	50	165
IAIF	31	33	71	116

IAIF in Paraguay moved up from 31 to 33 points, a reflection of the improvement in the investment attractiveness conditions. Nonetheless, the country is in the 20st position in the 2006 ranking, i.e., two positions lower as compared to 2004.

This result is linked both to SUPRA sub index-related factors, notably greater exchange rate stability, and to INTRA sub index-related factors, notably the perception, by the forest sector players, of the support to forest businesses. On the other hand, the INTER sub index showed a reduction, notably the perception, by the forest sectors players, of agricultural policies and planting and harvesting restrictions.

As to the SUPRA sub index-related factors, Passive Real Interest Rate, Exchange Rate Stability, Trade Openness, and Political Risk improved. GDP Growth Rate remained unchanged and Tax Share of GDP was the only factor that showed a deterioration as compared to 2004.

As to the INTER sub index-related factors, Social Infrastructure and Labor improved. Licenses and Permits, Property Rights e Capital Flow and Foreign Investment remained unchanged. Four factors showed a decline. They were: Economic Infrastructure, Capital Market, Agricultural Policies, and Planting and Harvesting Restrictions.

In terms of the INTRA sub index-related factors, Favorable Support and Adverse Actions improved. Domestic Market and FVL remained unchanged; Forest Resources decreased in the 2004-2006 period.

Growth potential for the Paraguayan IAIF is 113%, pointing to the existence of great potential for implementing policies aimed at improving the attractiveness of forest investment.

Finally, it is worth noting that the estimated IAIF potential for Paraguay is 71,28 points below that of Brazil, the country with the highest IAIF potential in Latin America and, as a result, in the Southern Cone.

IAIF Results for LAC Countries.

Table 3 - Overview of the IAIF scores results for 2006 and 2004 and evolution by country.

Country	IAIF 2006	IAIF 2004	Difference
Brazil	60	60	0
Chile	53	53	0
Argentina	47	44	+3
Uruguay	47	44	+3
México	44	40	+4
Panamá	44	37	+7
Colombia	44	40	+4
El Salvador	43	33	+10
Bolivia	41	34	+7
Peru	39	33	+6
Costa Rica	39	41	-2
Guatemala	38	30	+8
Haiti	36	23	+13
Nicaragua	36	34	+2
Trinidad y Tobago	36	33	+3
Suriname	36	34	+2
Venezuela	35	35	0
Belize	34	31	+3
Honduras	34	31	+3
Paraguay	33	31	+2
Ecuador	32	25	+7
Dominican Republic	32	32	0
Guyana	32	32	0
Average	40	36	+4
MIN	32	23	+9
MAX	60	60	0

Methodology

The IAIF was implemented for 23 borrowing member of the Inter-American Development Bank in Latin America and the Caribbean (Argentina, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Guyana, Haiti, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Dominican Republic, Suriname, Trinidad y Tobago, Uruguay, and Venezuela). Figure 1 presents the IAIF geographic scope.

Figure 1: IAIF Geographic Scope

Most existing indexes are based on four different models of data aggregation listed below.

- Secondary data aggregation: consists in applying mathematical operations to secondary data from external sources (government, companies, research institutions, international agencies, etc.) in order to consolidate them into one index. It is probably the simplest and less expensive methodology;
- Aggregation of data collected by means of questionnaires (primary): used when it is necessary to measure concepts that are difficult or impossible to measure through secondary data;

c. Combination of secondary data and data collected by questionnaires: in some cases, the methodology based exclusively on secondary data or on questionnaires does not render satisfactory results. A combination of the two methodologies can then be used.

d. Aggregation of indexes: The aggregation of indexes is used to measure abstract concepts, for instance, governability or corruption. This methodology has the power to combine several aggregate measurements in one index.

The IAIF design is based on a model that aggregates existing indexes, specific indicators and data revealed by the questionnaires (primary). The combination of existing indexes, developed by accredited institutions, and specific indicators based on primary and secondary information, to information collected by means of questionnaires allowed a significant cost reduction in the IAIF design, while maintaining its credibility.

The model is based on the hypothesis that the level of direct investment in sustainable forest businesses is directly and proportionally affected by the attractiveness level of investment to such businesses. Thus, the investment attractiveness level depends on the sustainable forest business profitability. That is, the more profitable a business is, the highest is its level of attractiveness.

On the other hand, the profitability of forest-industrial businesses is affected by a series of factors that can either limit or maximize its levels of revenue or costs. Knowing such factors and their importance to the forest-industrial businesses is crucial for potential investors.

Therefore, the IAIF index, through a mathematical model, incorporates the most relevant factors affecting forest-industrial enterprises, measures them and calculates a final score representing the business climate for investments sustainable forest businesses in any country of the world.

The IAIF Index is composed of three sub-indexes, all of which analyze the forest sector investment attractiveness conditions in a specific country:

a. SUPRA Sectorial Sub index: Refers to the macroeconomic factors and to other factors that affect the profitability of businesses in all productive sectors of a country;

b. INTER Sectorial Sub index: Refers to the factors, generated in other economic sectors, that affect the profitability of forest-industrial businesses; and

c. INTRA Sectorial Sub index: Refers to factors that are inherent to the forest sectors and that affect the profitability of forest-industrial businesses.

Besides facilitating the analysis of the level of attractiveness to direct investments in a specific country, this rating is highly useful for organizing factors according to the kind of players involved, and responsible for activities that might turn the business climate more favorable. At first, this approach will be oriented to the INTER sub index-related factors, in order to supply their demand, and to the INTRA sub index-related factors, over which the players have more action mechanisms. The SUPRA sub index-related factors cannot be easily changed by actions on the part of the forest sector players.

Based on the definition of the factors that make up the IAIF, we were able to identify indicators that were used for measurement. In general, specially for the SUPRA and INTER-related factors, we relied on indicators that have been used in existing indexes, once they adequately express the IAIF components. On the other hand, the factors that could not be measured by means of the existing indexes or indicators were obtained in the questionnaires.

Table 4 presents the list of the factors included in the IAIF index, as well as their corresponding indicators.

Table 4: Factors included in the IAIF index and corresponding indicators

Factor	Sub index	Indicator	Concept	Source
GDP	SUPRA	GDP Growth Rate	Level of economic growth	World Bank

Factor	Sub index	Indicator	Concept	Source
Interest Rate	SUPRA	Passive Real Interest Rate	Capital costs	CEPAL
Exchange Rate	SUPRA	Exchange Rate Stability	Exchange rate stability	PRS Group
Foreign Trade	SUPRA	Trade Openness	Level of openness to international trade	Fraser Institute
Political Stability and Government Transparency	SUPRA	Political Risk	Level of political and social stability	PRS Group
Tax Burden	SUPRA	Tax Share of GDP	Impact of taxes on economic activity	World Bank
Economic Infrastructure	INTER	Economic Infrastructure	Level of development and quality of road, sea and air transportation infrastructure, as well as Forest-industry transportation costs	FEM and STCP
Social Infrastructure	INTER	Social Infrastructure	Level of human development	UNDP
Licenses & Permits	INTER	Licenses & permits	Legal and bureaucratic obstacles to start a business	Heritage Foundation
Labor	INTER	Labor	Labor regulations, productivity, training and wage level of workers	World Bank and UNDP
Access to Credit	INTER	Capital Market	Sophistication of financial market, access to loans and credit, and local securities market	FEM and STCP
Legal Safety and Law Enforcement	INTER	Property Rights	Legal abandonment of property rights and lack of law enforcement actions by the government	Heritage Foundation
Capital Market	INTER	Capital Flow & Foreign Investment	Barriers and restrictions to foreign investment	Heritage Foundation
Agricultural Policies	INTER	Agricultural Policies	Impact of cattle raising and harvesting policies on the profitability of forest/industrial enterprises	Interviews
Planting & Harvesting Restrictions	INTER	Planting & Harvesting Restrictions	Perception of costs and risks associates to specific environmental regulations	Interviews
Forest Resource	INTRA	Forest Resource	Surplus and stock of wood for commercial purposes	FAO
Favorable Support	INTRA	Favorable Support	Support activities that reduce the forest/industrial business costs, while increasing their benefits.	Interviews
Domestic Market	INTRA	Domestic Market	Domestic consumption of forest input and products (includes export)	FAO
FVL	INTRA	FVL	Legalized FVL available for business	FAO
Adverse Actions	INTRA	Adverse Actions	Degree of adversity of actions that increase costs and reduce the benefits of forest/industry enterprises.	Interviews

Based on the concept that the indicator intends to measure, Chart A12 presents the causal relationship between the factors and the IAIF. The arrows (+) and (-) represent, respectively, a directly and inversely proportional relationship among the connected elements. Thus, a change in one of the elements will cause a chain reaction, and will have impacts in the direction pointed by the arrows.

Chart AI.2: The factors and IAIF – a causal relationship

In order to simplify comparison process for the IAIF components, data were normalized and converted into a scale from 0 to 100, in which the higher the normalized value, the greater its contribution to the IAIF.

Besides, the normalization used preset maximum values (upper value) and minimum values (lower value) based on a global comparison scale that was built upon historical data. This allows the comparison of the normalized results, as well as the sub-indexes results and the IAIF itself, over the years.

Where the factors for which there was a negative relationship between the indicator and the corresponding factor or the sub index affected, that is, when a high value associated to the indicator hinders the attractiveness level of the investment, results had to be inverted.

The results for the SUPRA, INTER and INTRA sectorial sub-indexes were obtained through the arithmetic mean of data corresponding to the sub index-related indicators.

Finally, in order to assign greater importance to the INTRA sub index indicators, which are intrinsic to forest activity, and to the INTER sub-index indicators, which are particularly related to the profitability of direct investments in the forest sector, the IAIF sub indexes were weighted.

The weighting was used only on the sub-indexes, assuming that all indicators had the same weight. Thus, weight “1” was used for the SUPRA sub index, weight “2” for the INTER sub index, and weight “4” for the INTRA sub index.

IAIF-derived calculations

a) Potential

The calculation of the potential value is based on the estimated maximum score each country could have for each one of the IAIF indicator, given its limitations in terms of land, forest area, economic, etc. Considering such maximum values and using the same calculation methodologies that were used for the IAIF, one can calculate the potential value of this sub-indexes and of the IAIF itself. The potential value reflects the maximum achievable score for that country in the indicators, sub-indexes and IAIF itself, on the process of improving the business climate for forest investment

b) Differential

The differential value is the absolute difference between the potential values and the actual values assigned to indicators, sub-indexes and to the IAIF for a specific year.

Here is the formula for calculating the differential value:

$$V_{\text{differential}} = V_{\text{potential}} - V_{\text{actual}}$$

Where $V_{\text{potential}}$ is the potential value of the indicator, sub index or IAIF, and V_{actual} is the actual value of the indicator, sub index or IAIF for a specific country in a given year.

C) Growth potential

The growth potential represents the maximum growth percentage of the actual value of the indicator, sub index or IAIF for a specific country in a given year. It is the relative difference between the potential and actual value of indicators, sub index and IAIF for a given year.

$$PC = (V_{\text{potential}}/V_{\text{actual}} - 1) \times 100$$

Where $V_{\text{Potential}}$ is the potential value of the indicator, sub index or IAIF, and V_{Actual} is the actual value of the indicator, sub index or IAIF for a specific country in a given year.

d) Contribution to IAIF

(i) Actual contribution

Once the IAIF is the weighted average of the sub-indexes, which, in turn, are a weighted average of the indicators, the differential values of indicators and sub-index do not represent their contribution for IAIF composition.

In order to calculate such contributions, the corresponding weights must be considered.

Here is the formula used to calculate the actual contribution:

$$CE = [(V_{\text{actual}} \times W) / n] / S$$

In the calculation of the actual contribution of an indicator, V_{actual} is its actual value, W is the respective weight in the sub index calculation value formula, n is the number of indicators that have been considered for the calculation of each sub index, and S is the sum of all such weights.

In the calculation of the actual contribution of a sub-index, V_{actual} is its actual value, W is the respective weight in the IAIF calculation formula, n is the number of sub-indexes that have been considered for the IAIF calculation (3), and S is the sum of all such weights (7).

The differential contribution represents the contribution of an indicator for the corresponding potential sub index or of the sub index for the potential IAIF.

For the calculation the differential contribution, the same formula used for the actual value calculation is used, replacing the actual value for the differential value (of the indicator or sub index).

Here is the formula used to calculate the differential contribution:

$$CE = [(V_{\text{differential}} \times W) / n] / S$$

In the calculation of the actual contribution of an indicator, $V_{\text{differential}}$ is its actual value, W is the respective weight in the sub index calculation value formula, n is the number of indicators that have been considered for the calculation of each subindex, and S is the sum of all such weights.

In the calculation of the actual contribution of a sub-index, $V_{\text{differential}}$ is its differential value, W is the respective weight in the IAIF calculation formula, n is the number of sub-indexes that have been considered for the IAIF calculation (3), and S is the sum of all such weights (7).

Non-available data

The following procedures have been adopted for data from secondary sources:

- a) Adopting reliable alternative sources, making sure the calculations involved in the indicator are consistent.
- b) Considering as the indicator the average of indicators for the other countries in the continent.

Where no data from primary sources, collected through questionnaires, were available, the IAIF results from previous years have been used.

In all cases, the procedure was submitted to detailed analysis.

Annex – Logframe of the Action Plan to improve Paraguay’s business climate for forest investments.

Program’s end: Direct investments in sustainable forest businesses increased					
Program’s Objective: Sustainable forest businesses strategy implemented	Projects’ end: Forest business investment climate critical factors performance Improve				
Projects	Projects’ Objectives				
1. Support to FVL sustainable use; natural forests more competitive; and ecosystems effectively protected.	1.FVL sustainable use supported; natural forests more competitive; and ecosystems protected	2. Increase forest plantation area and strengthen their competitiveness	3. Undertake extra sectorial measures that support forest businesses.	4. Support the development of public and private institutions to contribute to improve forest investment business climate.	5. Forest business development business services (SDEF) delivered effectively
	Components				
	1- FVL sustainable use supported.	1-High productivity technologies for plantation management identified and promoted.	1-Agriculture policies revised to eliminate distortions to or support forest investments	1-Adjust legal framework to favor sustainable forest businesses	1- Technology development Subsystems mobilizing the country’s R&D installed capacity implemented (buying of results and not of processes)
2. Forest plantations more competitive and increased.	2. Natural forests more competitive.	2-Support to the adoption of plantation management technologies implemented	2- Land ownership titled and protected. Assure that property use limitations imposed by the State be treated as partial expropriations and be properly compensated to the landowner	2-State Forest Authority dedicated to the development of sustainable forest businesses implemented	2- Forest entrepreneur development support implemented
3. Extra sectorial actions supporting forest businesses.	3- Natural Protected Areas defined and implemented.	3- Plantation financing mechanisms developed and implemented	3- Transport infrastructure that facilitates forest products export identified and promoted	3- SDEF System implemented through the private sector and existing organizations	3-Information system to support sectorial and business planning implemented
4. Forest sector governance improved	4- Legal framework that regulates forest plantations revised to favor forest businesses	4-forest financing mechanisms implemented (including those to be used by commercial banks and capital markets).	4-Lobby to favor Sustainable Forest businesses undertaken	4-Measures to promote the marketing, the input and output markets functioning, and the realization of businesses deals implemented	
5. Forest business development services delivered	5-Prototypical business plans for forest plantations developed and disseminated	5-Regulations that affect forest businesses identified and adjustments proposed	5-Forest vocation land policy implemented	5- Accreditation and training System for forest professional and labor implemented	

Translated and adapted by the author from (Fundação Getulio Vargas / Banco Interamericano de Desarrollo, 2008)

Annex - FDI Net inflows in Paraguay and other indicators

Source: Adapted from World Bank's data bank (<http://data.worldbank.org/indicator/BX.KLT.DINV.CD.WD>)

Paraguay's GDP % Growth Rate, 1970-2009

Source: WDI 2010

Paraguay's Rural Population as a percentage of total population

Source WDI 2010

Revealed Comparative Advantage Products of Paraguay

Code	Description	RCA
22	Oil-seeds and oleaginous fruits	136.55
8	Feeding stuff for animals (not including unmilled cereals)	36.75
42	Fixed vegetable fats and oils, crude, refined or fractionated	26.74
1	Meat and meat preparations	20.05
4	Cereals and cereal preparations	16.3
61	Leather, leather manufactures, n.e.s., and dressed furskins	8.87
26	Textile fibres (other than wool tops and other combed wool) and their wastes (not manufactured into yarn or fabric)	6.95
24	Cork and wood	6.59
6	Sugars, sugar preparations and honey	5.88
12	Tobacco and tobacco manufactures	3.64
29	Crude animal and vegetable materials, n.e.s.	2.24
63	Cork and wood manufactures (excluding furniture)	1.59
9	Miscellaneous edible products and preparations	1.0

(Interamerican Development Bank 2007)

Land related data for Paraguay:

Source: Prepared by the author based on data from World Development Indicators of the World Bank (28/sept/2010).

Annex - Glossary.

Agricultural land	Agricultural land refers to the share of land area that is arable, under permanent crops, and under permanent pastures. Arable land includes land defined by the FAO as land under temporary crops (double-cropped areas are counted once), temporary meadows for mowing or for pasture, land under market or kitchen gardens, and land temporarily fallow. Land abandoned as a result of shifting cultivation is excluded. Land under permanent crops is land cultivated with crops that occupy the land for long periods and need not be replanted after each harvest, such as cocoa, coffee, and rubber. This category includes land under flowering shrubs, fruit trees, nut trees, and vines, but excludes land under trees grown for wood or timber. Permanent pasture is land used for five or more years for forage, including natural and cultivated crops. Source: FAO.
Agriculture based businesses	Include business related to the supply of inputs, farming, harvesting, distribution, shipping, storage, processing, advertising and selling of agricultural products such as cultivation of crops and livestock production.
Agriculture-based countries	Agriculture is a major source of growth, accounting for 32 percent of GDP growth on average—mainly because agriculture is a large share of GDP—and most of the poor are in rural areas (70 percent). This group of countries has 417 million rural inhabitants, mainly in Sub-Saharan countries. Eighty-two percent of the rural Sub-Saharan population lives in agriculture-based countries. See also Transforming countries; and Urbanized countries. (World Bank, 2007)
Agriculture sector	That sector of the economy that involve agriculture based businesses and activities. It includes inputs, processing and wholesale distribution of forest, food, livestock, fiber, wood, animal feed, and fishery products. For FDI statistical purposes it includes agriculture, livestock, and related services; silviculture, forest exploitation and related services, and related services; fishery, aquiculture and related services; tobacco products, textile products, food and beverage products, leather, related products and shoes, wood products and pulp, paper, and paper products.
Agriculture use	Any use of land that involve the production of non arbustive plants, cattle and other animal production.
Agriculture vocation land (AVL)	Agriculture Vocation Lands are those that, due to their physical site features such as soil, topography, and the rainfall it receives, do not require exceptional protective measures to avoid soil and water related negative externalities. AVL classification does not depend on the type of cover the land actually has, nor does it depend on the requirements it may have for agriculture crop or forest production. Therefore, lands with forest cover or use can still be classified as AVL if their physical features so indicate; while lands not covered with forest may not be AVL.
Agriculture, value added	Agriculture corresponds to ISIC divisions 1-5 and includes forestry, hunting, and fishing, as well as cultivation of crops and livestock production. Value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs. It is calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources. The origin of value added is determined by the International Standard Industrial Classification (ISIC), revision 3. Source: http://data.worldbank.org/indicator/NV.AGR.TOTL.ZS .
Agro-Ecological Zoning (AEZ),	A complex methodology that seeks to enable rational land-use planning, management and monitoring on the basis of an inventory of land resources, and an evaluation of biophysical limitations and potentials for specific crop production and crop production requirements. It tries to divide land into units with similar crop suitability, productivity potential and environmental impact.
Arable land	Arable land area includes land defined by the FAO as land under temporary crops (double-cropped areas are counted once), temporary meadows for mowing or for pasture, land under market or kitchen gardens, and land temporarily fallow. Land abandoned as a result of shifting cultivation is excluded.
Biological diversity	<i>means the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.*</i>
Biological resources	<i>Includes genetic resources, organisms or parts thereof, populations, or any other biotic component of ecosystems with actual or potential use or value for humanity. *</i>
Externalities	Changes in a third party's welfare that result from decisions taken by someone who does not take in consideration such changes. When these decisions result in increase of the third party's welfare, it is said that a positive externality or external benefit have been generated. When these decisions result in decrease of the third party's welfare, it is said that a negative externality or external cost have been generated
FDI	Foreign Direct Investment is net inflows of investment to acquire a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment

	of earnings, other long-term capital, and short-term capital as shown in the balance of payments. This series shows net inflows in the reporting economy. World Bank.
Food security	A situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.
Forest area	Forest area is land under natural or planted stands of trees of at least 5 meters in situ, whether productive or not, and excludes tree stands in agricultural production systems (for example, in fruit plantations and agroforestry systems) and trees in urban parks and gardens. Source: FAO.
Forest Based activities	Include activities related to the supply of inputs, forestry, harvesting, distribution, shipping, storage, processing, advertising and selling of outputs produced in forests, natural or otherwise.
Forest based businesses	Include business involved in the supply of inputs, forestry, harvesting, distribution, shipping, storage, processing, advertising and selling of wood and non-wood outputs produced in forests, natural or otherwise.
Forest cover	An area ... <i>more than 0.5 hectares with trees higher than 5 meters and a canopy cover of more than 10 percent, or trees able to reach these thresholds in situ. (FAO, 2004)</i>
Forest land	The set of FVL with and without forest cover plus AVL with forest cover.
Forest policies	Policies that seek to increase the contribution of forest lands to social welfare.
Forest sector	That sector of the economy that involves forest based businesses and activities.
Forest use	Any land use that involves a forest cover. It includes, for example, exotic or native species plantation forests, natural primary or secondary forests under management; agroforestry uses, arbustive fruit plantations, forest roads, firebreaks, recently harvested forests temporarily without forest cover and that will return to forest use, etc.
Forest vocation land (FVL)	Forest Vocation Lands are those that, due to their physical site features such as soil, topography, and the rainfall it receives, <i>should</i> be kept under forest cover or other sustainable land use if soil or water related negative externalities are to be avoided. FVL classification does not depend on the type of cover the land actually has, nor does it depend on the requirements it may have for agriculture crop or forest production. Therefore, lands with no forest cover or use can still be classified as FVL if their physical features so indicate; while lands covered with forest may not be FVL.
GDP	Gross Domestic Product at purchaser's prices is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. Data are in current U.S. dollars. Dollar figures for GDP are converted from domestic currencies using single year official exchange rates. For a few countries where the official exchange rate does not reflect the rate effectively applied to actual foreign exchange transactions, an alternative conversion factor is used. Source: http://data.worldbank.org/indicator/NY.GDP.MKTP.CD
Genetic resources	<i>... means genetic material of actual or potential value.*</i>
Gross capital formation	Gross capital formation (formerly gross domestic investment) consists of outlays on additions to the fixed assets of the economy plus net changes in the level of inventories. Fixed assets include land improvements (fences, ditches, drains, and so on); plant, machinery, and equipment purchases; and the construction of roads, railways, and the like, including schools, offices, hospitals, private residential dwellings, and commercial and industrial buildings. Inventories are stocks of goods held by firms to meet temporary or unexpected fluctuations in production or sales, and "work in progress." According to the 1993 SNA, net acquisitions of valuables are also considered capital formation. Source: http://data.worldbank.org/indicator/NE.GDI.TOTL.ZS
Gross fixed capita formation	<i>Gross fixed capital formation is measured by the total value of a producer's acquisitions, less disposals, of fixed assets during the accounting period plus certain additions to the value of non-produced assets (such as subsoil assets or major improvements in the quantity, quality or productivity of land) realised by the productive activity of institutional units. Source: http://stats.oecd.org/glossary/detail.asp?ID=1171</i>
In-situ conservation	<i>... means the conservation of ecosystems and natural habitats and the maintenance and recovery of viable populations of species in their natural surroundings and, in the case of domesticated or cultivated species, in the surroundings where they have developed their distinctive properties.</i>
INTER sectorial factors	Those factors of the business climate that affect agriculture and forest based investments which have origin in other sectors of the economy such as economic infrastructure (energy, transport, communications), social infrastructure (water, sanitation, health, education), financial sector, environmental rules, land tenure, etc.
INTRA Sectorial factors	Those factors of the business climate that affect agriculture and forest based investments which have origin with these same sectors and whose policy interentions instruments are under the control of agriculture and forest governmental institutions, businennes, and related stakeholders.

Land area	Land area is a country's total area, excluding area under inland water bodies, national claims to continental shelf, and exclusive economic zones. In most cases the definition of inland water bodies includes major rivers and lakes. Source: FAO.
Land cover	The observed (bio) physical cover on the earth's surface, regardless of its use by people.
Land under cereal production	Land under cereal production refers to harvested area, although some countries report only sown or cultivated area. Cereals include wheat, rice, maize, barley, oats, rye, millet, sorghum, buckwheat, and mixed grains. Production data on cereals relate to crops harvested for dry grain only. Cereal crops harvested for hay or harvested green for food, feed, or silage and those used for grazing are excluded.
Land use	Refers to arrangements, activities and inputs people undertake in a certain land cover type to produce, change or maintain it.
Non-forest vocation lands (nFVL)	Agriculture vocation lands plus all other land surfaces such as urban areas, water bodies. Excludes forest vocation lands.
Revealed Comparative Advantage (RCA)	is a measure of the relative advantage of a given country in the production of a given good. This index can vary from 0 to infinity, with values greater than one reflecting a comparative advantage, and values less than one reflecting a comparative disadvantage. The Quick View indicators are based on the 2-digit SITC industries.
Rural development	Is that type of development that takes places in rural áreas. Encompasses agriculture, forestry education, infrastructure, health, capacity-building both for off- and on-farm employment, and rural institutions the needs of vulnerable groups. Rural development aims at improving rural people's livelihoods in an equitable and sustainable manner, both socially and environmentally, through better access to assets (natural, physical, human, technological, and social capital), and services, and control over productive capital (in its financial or economic and political forms), that enable them to improve their livelihoods on a sustainable and equitable basis.
Rural sector	That sector of the economy that takes places in rural areas and includes agriculture, forest, fisheries, livestock based economic activities as well as non-farm related economic activities taking place in rural areas.
Soil or water related externalities	Externalities associated with the use of the soil and which are the result of erosive and water runoff processes. These externalities affect on-site soil plant nutrition and water availability for plant consumption, generate loss of soil particles that will be deposited as siltation elsewhere in the landscape, affect water percolation into the soil, the quality, quantity, and time availability of water on water bodies, and affect water availability in ground water and springs. The phrase excludes pollution resulting from agrochemical use.
Stakeholders	Individuals and groups who have an interest in the issues in hand. They normally represent their own interests as stakeholders.
SUPRA sectorial factors	Those factors of the business climate that affect all sectors of a country's economy such macro economic factors, exchange rate, fiscal policy, etc.
Sustainable agriculture	Agricultural production activities that do not generate soil or water related negative externalities.
Sustainable land use	Land use of any type that does not generate soil or water related negative externalities. It can be a sustainable agriculture use, a road, a building, forest cover, forest use.
Transforming countries	Agriculture is no longer a major source of economic growth, contributing on average only 7 percent to GDP growth, but poverty remains overwhelmingly rural (82 percent of all poor). This group, typified by China, India, Indonesia, Morocco and Romania, has more than 2.2 billion rural inhabitants. Ninety-eight percent of the rural population in South Asia, 96 percent in East Asia and the Pacific, and 92 percent in the Middle East and North Africa are in transforming countries. See also Agriculture-based countries, and Urbanized countries. (World Bank, 2007).
Urbanized countries	Agriculture contributes directly even less to economic growth, 5 percent on average, and poverty is mostly urban. Even so, rural areas still have 45 percent of the poor, and agribusiness and the food industry and services account for as much as one third of GDP. Included in this group of 255 million rural inhabitants are most countries in Latin America and the Caribbean and many in Europe and Central Asia. Eighty eight percent of the rural populations in both regions are in urbanized countries. See also Agriculture-based countries, and Transforming countries. (World Bank, 2007).