

3. Dynamics of Rural Area

3.1 Macro-economic Conditions

3.1.1 Production²⁵

The service sector consists of a large part of Gross Domestic Product (GDP) in Paraguay (Figure 3.1-1). The service sector accounted for the average 56.5% of GDP during the period 2005-2010 (within which commercial services comprise 18.3%).²⁶ On the other hand, the agriculture and industry sectors accounted for the average 26.3% and 17.2% of GDP, respectively, during the same period.^{27,28} The GDP in 2010 was 20,342 billion Guaraní which is equivalent to 17,628 million USD.

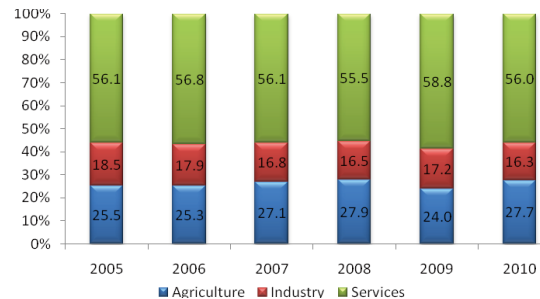


Figure 3.1-1 Structure of Gross Domestic Product (2005-2010)

Regarding the agricultural sector, its value added relative to GDP in 2009 fell by 3.9% compared to that in 2008 (Figure 3.1-2). This resulted from a drought in the Eastern Region during November 2008 to April 2009, which adversely affected the production of spring and summer crops such as soybean, corn, sesame, cotton, sugarcane and cassava. Also, a frost negatively impacted the yield of corn and wheat.²⁹ All these have led to a contraction of value added in agriculture by 17.3% in 2009, compared with that in the previous year (Figure 3.1-2).

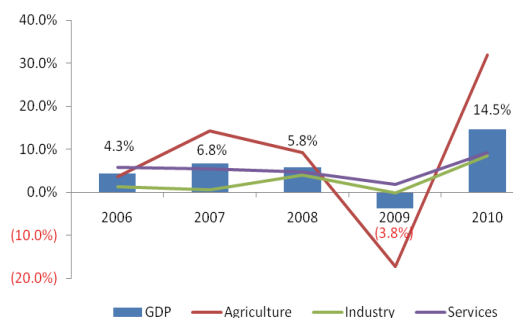


Figure 3.1-2 Annual change in GDP and the agriculture, industry and services (2006-2010)

²⁵ Sources of information in this section are as follows. Central Bank of Paraguay. 2011. *Central Bank of Paraguay Economic Report February 2011* (in Spanish). Ministry of Agriculture and Livestock. 2008. *National Agricultural Census 2008* (in Spanish).

²⁶ This includes taxation over products.

²⁷ This includes agriculture, livestock, forestry, hunting and fishery.

²⁸ This includes mining and construction.

²⁹ A harvest period starts in July and ends in June in the next year.

The fall in agricultural value added by 17.3% in 2009 resulted in the fall in total GDP by 3.8%. The negative growth in the agricultural sector (-4.8%) was large enough to offset a positive growth in the service sector, 1% (Figure 3.1-3). This indicates that total GDP was affected more by the drought than the international financial crisis in 2008, since the former started earlier than the latter.

As a result of the drought mentioned above, soybean production that represents the country's main export fell by 3.8 million tons during the harvest period 2008-2009, after reaching a production of 6.0 and 6.3 million tons in 2006-2007 and 2007-2008, respectively. Similarly, maize production fell by 29.4% between harvest period 2007-2008 and 2008-2009.

However, in 2010 the performance of agricultural production reversed and reached annual growth of 31.9%, primarily driven by a 47% increase in the activity of agriculture (Figure 3.1-2). The sectors of industry and services also grew in this year, with rates of 8.5% and 9.2% respectively. This situation contributed to the unprecedented GDP growth of 14.5% in 2010. The growth of the agriculture sector alone contributed the total increase of 7.4% in GDP, while the growth in the industrial and service sectors contributed to 5.4% and 1.5%, respectively, of total GDP growth in 2010 (Figure 3.1-3).

The contribution of the agriculture sector to GDP is extremely important in Paraguay. This is because other sectors -- services (transportation, commerce, finance), industry (agrobusiness industries), and construction (cyro, fence, tank, livestock farms) are closely linked with the

agricultural sector. If those agriculture-related sectors in the primary, secondary and tertiary sectors are combined, their total value added amounts to 60% of GDP.³⁰

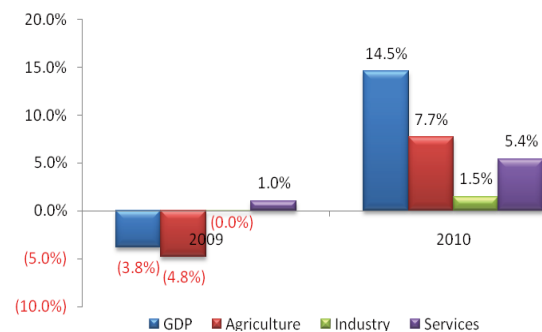


Figure 3.1-3 Contribution of agriculture, industry and services to annual variation of GDP in 2009 and 2010 (%)

The outlook for economic growth for 2011 and 2012 are centered around 5% for both years.

³⁰ IICA. 2011. *Rurality and Farming Areas in Paraguay* (in Spanish).

3.1.2 Prices³¹

Inflation measured by GDP deflator, Consumer Price Index (CPI) and Producer Price Index (PPI) showed an acceleration of inflation in 2010 over the previous year. It reached 4.5% by GDP deflator, 7.2% by CPI, and 12.9% by PPI (Figure 3.1-4). The inflation in 2010 measured by GDP deflator and CPI reached within the historic range of the period from 2005 to 2008, while inflation by PPI exceeded its own range.³² The cause of accelerating inflation in 2010 is due to the economic recovery after the recession with negative 3.8% of GDP growth in 2009.

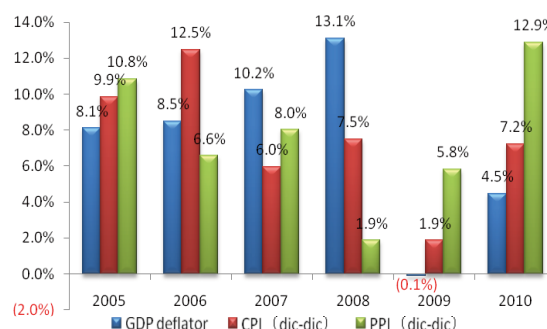


Figure 3.1-4 Inflation measured by GDP deflator, CPI and PPI (2005-2010)

Observing sub-sectors of GDP deflator, the deflator of value added of goods exhibited the greatest acceleration from 7.4% in 2005 to 17.5% in 2008, then declined sharply to -0.8% in 2009, as a result of economic recession (Figure 3.1-5). Among the sub-sectors of production of goods, agriculture and livestock exhibited a slowdown in inflation from 2008 to 2009, the former declined from 17% to -6.7% whereas the latter from 23.4% to 8.2%.

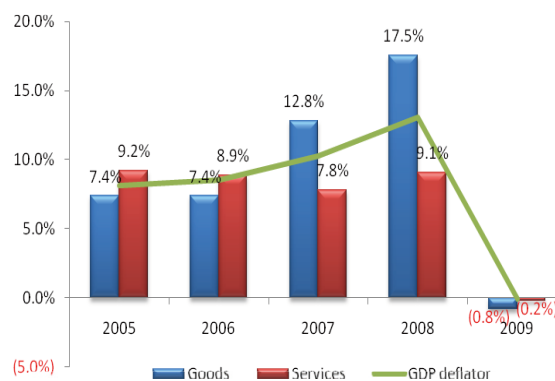


Figure 3.1-5 Inflation measured by value-added deflator of goods and services and GDP (2005-2009)

Inflation measured by CPI indicates that the food component is more highly correlated with the dynamics of this index (Figure 3.1-6). This is because the weight of this component in the CPI is about one third. In fact, during the period 2005-2010, except 2005, food inflation has been the main contributor to the annual CPI inflation to December. In all the years, food inflation was higher than, or at least equal to, (in 2008) the inflation measured

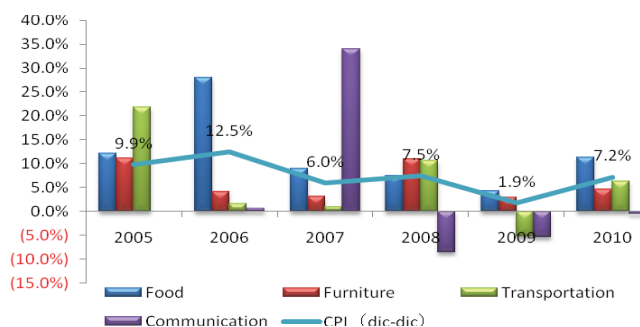


Figure 3.1-6 Inflation by components of CPI (2005-2010)

³¹ Central Bank of Paraguay. 2011. *Central Bank of Paraguay Economic Report February 2011*.

³² See references in footnote 18.

by CPI.

Also, the sub-components of food items in the CPI show that inflation in fresh and canned vegetables ranged as high as 92.7% in 2006 and 16.6% and 20.1% in 2008 and 2009, respectively (Figure 3.1-7). Inflation in cereals was 18.1 and 15.5% in 2006 and 2007, respectively, and the meat showed an inflation of 25.7% in 2010 and 25.8% in 2006. Finally, inflation in dairy products was 31.9% in 2007 and 12.8% in 2010. Except for the meat sub-components others had one or two years of deflation, although rates did not exceed 2% in the areas of cereals, milk and sugar, and 10% in the category of fresh and canned vegetables. Between 2006 and 2008 there were no deflation in any of the food sub-components.

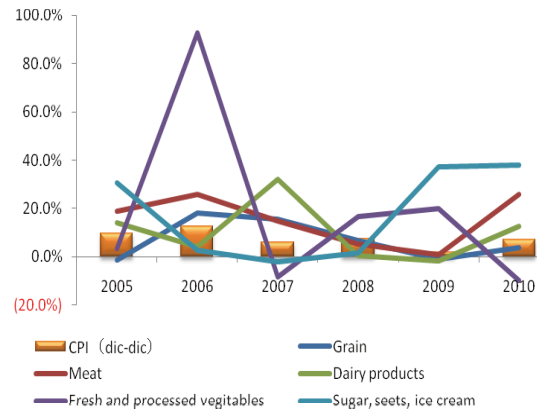


Figure 3.1-7 Inflation by sub-component of food items (2005-2010)

Inflation measured by the Producer Price Index (PPI) can also be broken down into components of domestic and imported products. The inflation of domestic products slowed between 2006 and 2008, and accelerated between 2009 and 2010. The inflation in imported products, however, had a different behavior, which decreased in 2005 (3.2%) and 2006, rose in 2007, declined again in 2008 (3.0%), and accelerated between 2009 and 2010. In 2010 both domestic and imported products exhibited double-digit inflation, indicating that high GDP growth rate of 14.5% in 2010 put inflationary pressures on different wholesale markets.

On the component of domestic products of the PPI, prices of agriculture were the only ones that had a spell of deflation in 2005 and 2008, while showed 23.6% of inflation during the economic recession in 2009. The inflation of minerals was the highest among all components in 2005 and 2008, while inflation of livestock was the largest in 2010 (27.5%), and agriculture in 2006 (21.3%) and 2009 (23.6%). Inflation in food and beverages rose from 6.4% in 2009 to 21.2% in 2011.

3.1.3 Labor Market³³

Real wages, measured by the rate of nominal minimum wages for different activities adjusted by the Consumer Price Index (CPI), showed positive increases in 7 years in 2000-2010, except

³³ Based on sources in footnote 18 and annual household surveys by DGEEC.

in 2002, 2004, 2007 and 2008 (Figure 3.1-8). During the period 2000-2010, real wages increased by 7% in total.

The indexes of wages and salaries experienced the highest annual increases in 2003 (11.4%) and 2006 (11.1%), and the smallest increase in 2010 (4.2%) (Table 3.1-1). The manufacturing sector showed the largest increase in 2003 (10.6%), the electricity and water in 2006 (14%), the construction in 2005 (11.7%), and transport in 2008 (20.5%), among other sectors.

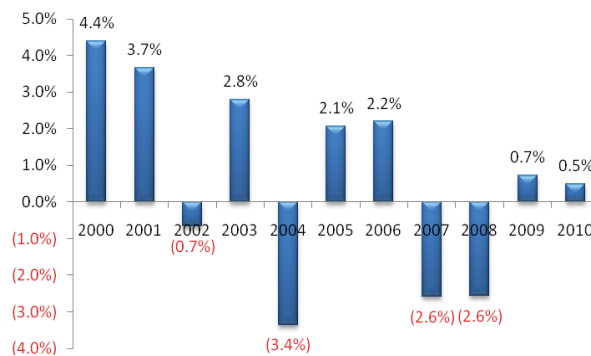


Figure 3.1-8. Annual changes in real minimum salaries (2000-2010)

Table 3.1-1 Index of wages and salaries (Base year 2001=100) (annual % change)

Year	Manufacturing	Electricity and water	Construction	Commerce	Transportation	Communication	Financial intermediary	Services	Hotels and restaurants	Overall index
2002	6.7	0.8	8.3	4.8	4.5	8.6	6.5	11.2	8.1	6.3
2003	10.6	10.0	6.7	22.5	6.7	4.9	8.1	8.9	12.3	11.4
2004	2.3	7.3	2.1	12.5	3.9	9.9	4.5	4.1	3.7	6.0
2005	9.8	1.9	11.7	8.4	8.9	6.4	13.5	8.8	12.5	9.1
2006	9.7	14.0	6.9	10.5	15.8	8.9	14.1	12.0	8.5	11.1
2007	8.0	1.2	4.0	10.1	14.4	4.9	13.2	9.7	7.9	9.0
2008	6.6	8.9	3.6	8.6	20.5	13.8	10.6	7.7	5.4	9.4
2009	5.3	2.0	4.9	6.3	8.8	8.3	10.0	5.6	7.6	6.6
2010	2.0	1.0	3.4	5.2	2.9	7.2	6.3	5.4	7.8	4.2

Source: Calculation based on the data in Central Bank of Paraguay. 2011. *Economic Report February 2011*.

The open unemployment rate indicates that the country's total unemployment in 2009 remained near the average of 6.2% during the period 2004-2009, reaching the highest rate 7.3% in 2004 (Figure 3.1-9; Table 3.1-2). The open unemployment rate is much higher for women than for men in the period 2004-2009, reaching a maximum differential of 3.8% in 2004 and a minimum of 2.3% in 2009. The unemployment rate in the urban area is much higher than that in rural area throughout the period 2004-2009, with an average of 8.2% in the urban area compared to 3.5% in the rural area. The lowest unemployment rate on average is observed among men in the rural area (2.3%).

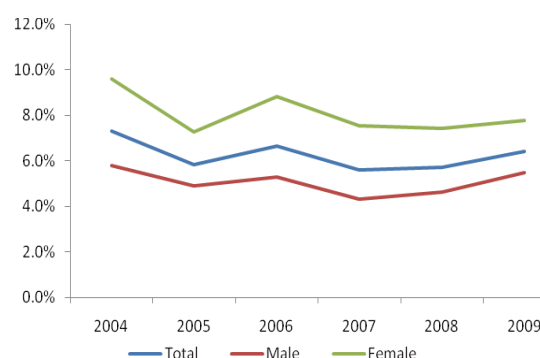


Figure 3.1-9 Unemployment rate by sex (2004-2009) (%)

In regard to the total underemployment rate in the country, it stood at 25.5% on average with a minimum of 24% in 2006 and the maximum of 26.5% in 2007 and 2008 (Figure 3.1-10; Table 3.1-3). That is, during the years 2004 and 2009, one in four Paraguayan workers work less than 30 hours a week, but either want to work longer hours or work those hours without earning the legal minimum wage. In fact, on average 18.6% of workers earned the minimum wage during the period of analysis. The underemployment rate for women is above that of men throughout the period by average 3%. Taking into account the geographical area, the underemployment rate in urban areas is much higher than that in the rural areas, the average being 28.7% and 20.5% in the urban and rural areas, respectively, in the period 2004-2009.

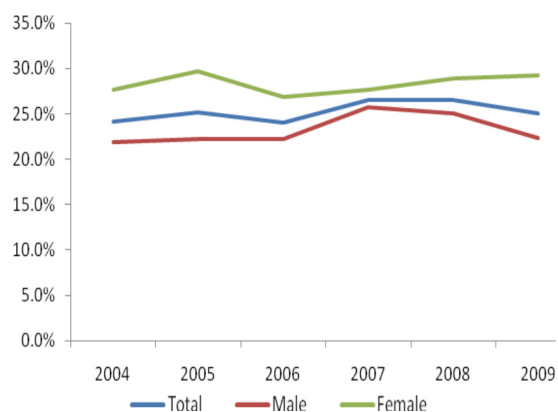


Figure 3.1-10 Underemployment rate by sex (2004-2009) (%)

In Paraguay, underemployment is the more serious challenge than unemployment. This is a characteristic common in many developing countries where workers are often paid less than legal minimum wages, and work longer hours than legally determined levels. The primary causes of underemployment are the prevalence of informal jobs, low level of education, limited capacity of middle management, lack of labor law, and low productivity as a result. Low productivity is observed in many small-scale producers. It is essential to recognize the current situations and reality of labor markets in formulating the strategy for DSTR.

Table 3.1-2 Unemployment rate by area and sex (2004-2009)

Area	Sex	2004	2005	2006	2007	2008	2009
Total	Total	7.3%	5.8%	6.7%	5.6%	5.7%	6.4%
Total	Male	5.8%	4.9%	5.3%	4.3%	4.6%	5.5%
Total	Female	9.6%	7.3%	8.8%	7.5%	7.4%	7.8%
Urban total	Total	10.0%	7.6%	8.9%	7.2%	7.4%	8.2%
Urban total	Male	8.7%	7.1%	7.7%	6.2%	6.6%	7.9%
Urban total	Female	11.6%	8.3%	10.4%	8.4%	8.5%	8.7%
Rural total	Total	3.7%	3.3%	3.6%	3.4%	3.2%	3.7%
Rural total	Male	2.5%	2.4%	2.5%	2.0%	2.1%	2.4%
Rural total	Female	6.2%	5.3%	6.0%	6.0%	5.5%	6.2%

Source: DGEEC, Integrated Household Surveys, various years.

Table 3.1-3 Underemployment rate by area and sex (2004-2009)

Area	Sex	2004	2005	2006	2007	2008	2009
Total	Total	24.2%	25.1%	24.0%	26.5%	26.5%	25.1%
Total	Male	21.8%	22.2%	22.3%	25.7%	25.0%	22.4%
Total	Female	27.7%	29.6%	26.9%	27.7%	28.9%	29.3%
Urban total	Total	26.8%	29.4%	28.1%	31.4%	28.8%	27.4%
Urban total	Male	24.6%	26.5%	25.9%	29.8%	27.3%	24.5%
Urban total	Female	29.6%	32.9%	31.1%	33.5%	31.0%	31.3%
Rural total	Total	20.6%	19.3%	18.5%	19.5%	23.1%	21.7%
Rural total	Male	18.7%	17.3%	18.0%	20.7%	22.0%	19.6%
Rural total	Female	24.4%	23.5%	19.3%	17.4%	25.2%	25.8%

Fuente: DGEEC, Integrated Household Surveys, various years.

The index of active labor force indicates that, on average for the period 2004-2009, six in ten people of working age were active in the labor market, with the high difference between men (75.2%) and women (48.3%) (Table 3.1-4). By geographic area, however, the difference is minimal, reaching 63.1% in the rural area while the urban area 60.7%. The lowest level of active labor force index is observed among women in the rural area with only 45%.

Table 3.1-4 Index of active labor force by area and sex (2004-2009)

Area	Sex	2004	2005	2006	2007	2008	2009
Total	Total	63.4%	61.8%	59.4%	60.8%	61.7%	62.9%
Total	Male	76.6%	75.1%	73.7%	73.9%	75.8%	75.9%
Total	Female	50.4%	48.6%	45.3%	48.0%	47.9%	49.7%
Urban total	Total	62.4%	60.4%	57.9%	59.6%	61.5%	62.3%
Urban total	Male	73.1%	70.5%	70.0%	70.5%	73.7%	73.4%
Urban total	Female	52.6%	51.5%	47.0%	49.6%	50.2%	51.6%
Rural total	Total	64.9%	63.7%	61.5%	62.5%	62.0%	63.8%
Rural total	Male	81.1%	81.1%	78.5%	78.6%	78.8%	79.4%
Rural total	Female	47.1%	43.9%	42.6%	45.3%	44.3%	46.8%

Source: DGEEC, Integrated Household Surveys, various years.

3.1.4 Fiscal Management³⁴

Total revenues of national government administration recorded around 19% of GDP, totaling 16.2 billion Guarani in 2010 (Figure 3.1-11). Similarly, total expenditure accounted for 17.8% of GDP in 2010 (15 billion Guarani) after reaching 19.6% in 2009. In 2008, however, total expenditure constituted only 14.9% of GDP.

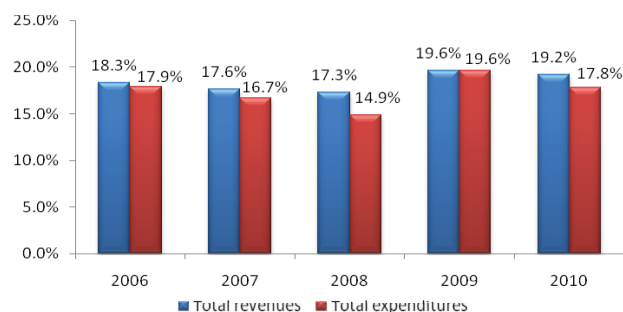


Figure 3.1-11 Current and capital revenues of national government

³⁴ Sources of information are those shown in footnote 18, and Ministry of Finance. 2011. *Ministry of Finance Report March 2011*. Central Bank of Paragay 2010. *External Debt Report December 2010*.

The fiscal balance of national government was maintained during the period 2006-2010, with increasing overall fiscal surplus from 0.5% of GDP in 2006 to 2.5% in 2008 (Figure 3.1-12). In 2009, overall fiscal balance surplus declined to 0.1% as a result of increased spending to counter the economic downturn. In 2010 fiscal balance surplus started improving again, reaching 1.4% of GDP. The primary balance presents the same behavior as the overall one above, reaching its peak in 2008 (3.1% of GDP), and the lowest in 2009 (0.7%).

Current revenue, including tax revenue and non-tax revenue, accounted for 17.3 and 19.3% of GDP, respectively, in the period 2006-2010 (Figure 3.1-13). On the other hand, capital income did not exceed 0.4% of GDP, with small increases only in 2009 and 2010, due mainly to capital grants received to fund counter-cyclical policy toward economic recovery.

On the expenditure side, recurrent expenditures hovered between 12.2% of GDP in 2008 and 15% of GDP in 2009 (Figure 3.1-14). The same pattern can be observed in capital expenditure that fluctuated between 2.7% of GDP in 2008 and 4.6 % of GDP in 2009.

Among the current revenues, tax revenues as proportion of GDP has been growing steadily from 11.4% in 2007 to 13.5% in 2010 (Figure 3.1-15). The tax burden is, however, one of the lowest in the region. The increase in tax revenues is mainly attributable to the Value Added Tax (VAT), whose collection has steadily increased from 5.4% of GDP in 2006 to 7% of GDP in 2010 (Figure 3.1-16).

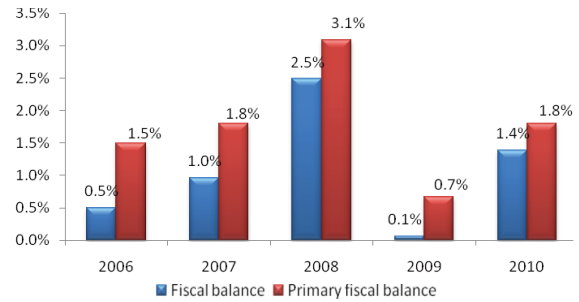


Figure 3.1-12 Fiscal and primary fiscal balances of national government (2006-2010) (% of GDP)

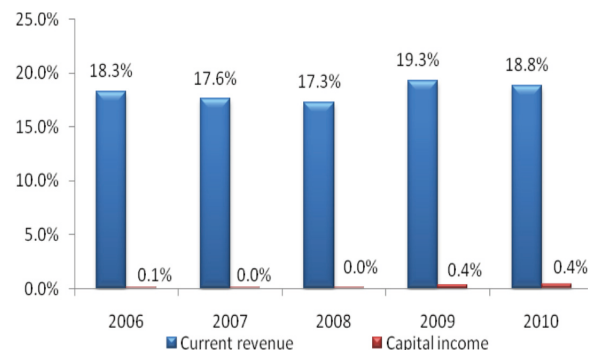


Figure 3.1-13 Current revenue and capital income of national government (2006-2010) (% of GDP)

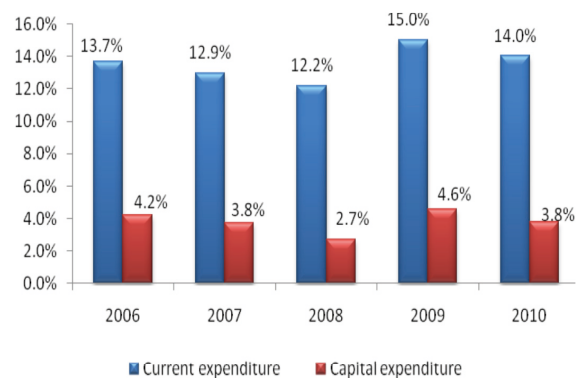


Figure 3.1-14 Current and capital expenditures of national government (2006-2010) (% of GDP)

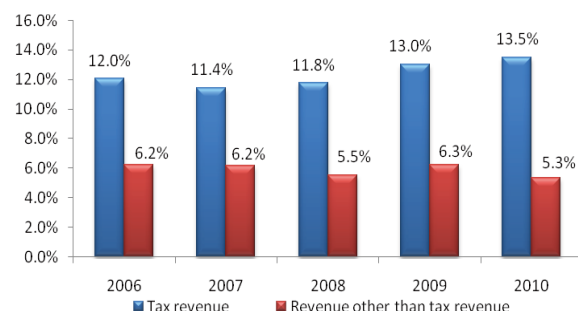


Figure 3.1-15 Tax and non-tax revenues of national government (2006-2010) (% of GDP)

The national government of Paraguay has a variety of revenue sources other than tax revenues, for example, royalties and compensation from bi-national water electricity generation of Itaipu and Yacyretá dams, real estate taxes collected by districts, and user fees of public services (electricity, water, serwage, environmental impact study, transformation of electricity, electric posts, road, cooperation of schools, private public security services, private health insurance).

Non-tax revenues relative to GDP have fallen from 6.2% in 2006 to 5.5% in 2008, re-bumped up to 6.3% in 2009, then fell again to 5.3% in 2010. Among non-tax revenues, important contributors were pension fund that remained virtually constant at around 1.3% of GDP, and compensation and royalties from the bi-national dams in Itaipu and Yacyretá whose ratio to GDP declined from 3.6% in 2006 to 2.5% in 2008, then rose up to 3.2% in 2009, and fell again down to 2.3% in 2010 (Figure 3.1-16).

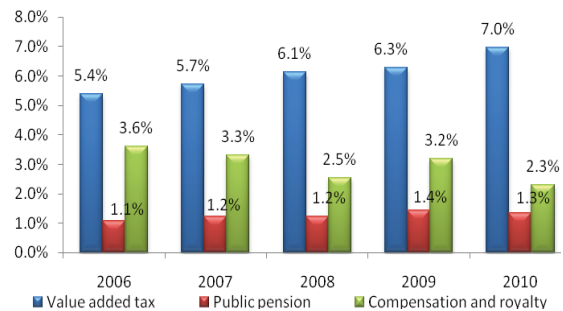


Figure 3.1-16 Non-tax revenues of national government by sources (2006-2010) (% of GDP)

The overall fiscal surplus for the period 2006-2010 was used to reduce external debt of central administration between 2006 and 2008, falling about 0.7% of GDP throughout the period 2006-2010. External disbursements relative to GDP fell from 1.6% in 2006 to 0.7% in 2008, and rose again to 1.6% in 2009, as a result of counter-cyclical fiscal policy that employed some credit lines from multilateral development banks.

Total external debt has increased from 3,065 million US dollars in 2006 to 4,476 million in 2010 (Figure 3.1-17). The public sector experienced an increase in financial debt and trade credit from 2,567 million dollars in 2006 to 3,085 million in 2010. The private sector also experienced an increase in financial debt and trade credit from 502 million US dollars to 1,391 million in the same period.

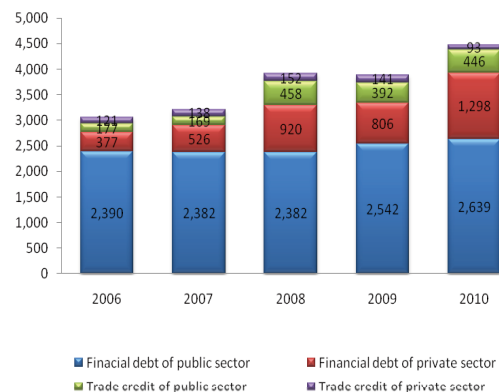


Figure 3.1-17 Public and private debt and trade credit (2006-2010) (million USD)

As a proportion of external public debt, however, the share of public sector has declined from 83.6% in 2006 to 68.9% in 2010 (Figure 3.1-18). In addition, the proportion of financial debt has been reduced from 90.2% of total debt in 2006 to 84.4% in 2008, then increased up to 88% in 2010.

Indicators of sustainability of total external debt shows that total external debt relative to GDP has fallen from 33% to 25.4% in 2010 (Figure 3.1-19). Public external debt relative to GDP also declined from 27.6% in 2006 to 17.5% in 2010, with a small increase 3% between 2008 and 2009, as a result of funding anti-crisis plan with external funds. Also, the ratios of total external debt to foreign investment and total external debt to international reserves also fell: from 194% in 2006 to 156.9% in 2010 in the former; and from 180.2% in 2006 to 107.4% in the latter. In summary, all indicators of debt sustainability indicate that the economy still has plenty of room for external debt, both public and private debt contracting of financial or commercial loans.

Macroeconomic stability is an essential pre-condition for long-term growth of a nation. The macroeconomic stability in Paraguay in a recent few years have been brought in large part by solid fiscal management of the government.

3.1.5 Monetary and Financial Policy³⁵

The monetary policy of Central Bank of Paraguay (BCP in Spanish) is committed to compliance with the CPI inflation target with a central target of 5.0% +/- 2.5%, at least within an unspecified period of time that could be 24 months, as it operates in other countries. Recently the BCP reiterated its commitment to gradually realize the inflation target in the future.

However, the transmission mechanism of monetary policy is not necessarily well understood. This is because it depends on the length of transmission lags of open-market operations with sterilization bills (*Instrumentos de Regulacion Monetaria*, or IRM in Spanish) and parameter values to estimate various market interest rates.

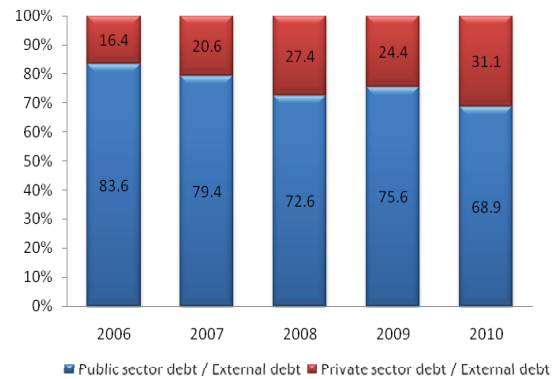


Figure 3.1-18 Public and private debts in external debt (2006-2010) (million USD)

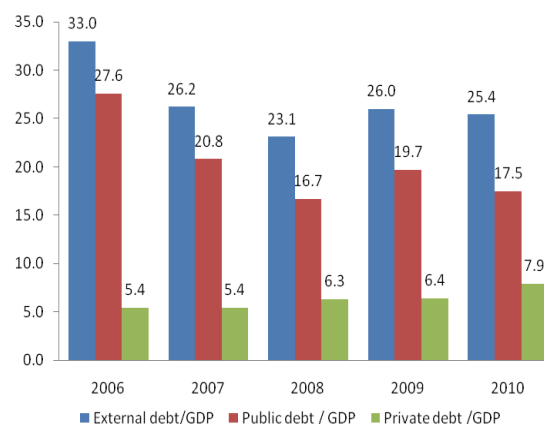


Figure 3.1-19 Debt sustainability of public and private sectors (2006-2010) (% of GDP)

³⁵ Source of information in this section comes from Central Bank of Paraguay. 2011. *Economic Report*, February.

Furthermore, despite the commitment of the monetary authority to build its credibility by keeping CPI inflation within the target range, it has been observed that the CPI target has only been maintained in 2007, 2008 and 2010, with several forecasts predicting double-digit inflation in 2011.

It should also be noted that the monetary authority has changed its operation in the period 2006-2010, because between 2005 and 2008 it accumulated IRM to sterilize a large influx of capital that demanded the larger amount of domestic currency in exchange for foreign currency. Thus, between 2005 and 2008, international reserves increased by 1.696 million dollars, equivalent to 145.2% of the accumulated amount of the reserves through 2004 (Figure 3.1-20). However, between 2009 and 2010, interest rates in the world declined due to the expansionary monetary policies in most developed countries to revive their economies. As a result, the average yield rates of IMR in Paraguay also went down, which resulted in a reduction in balances of IRM, at least in 2009, then climbed up in 2010, once the consequence of drought that had affected the domestic agricultural sector were more than offset by the best agricultural harvest in 2010 .

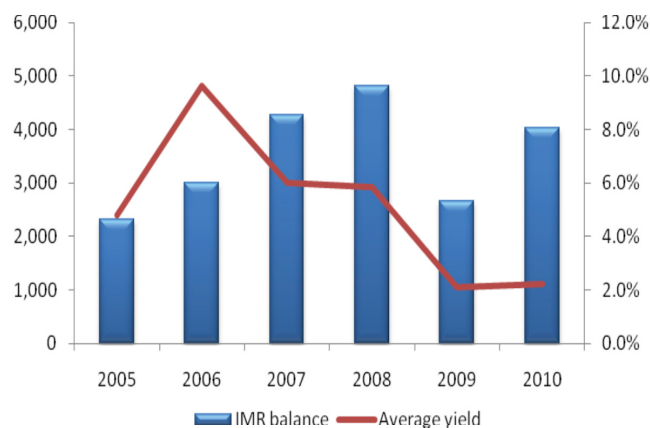
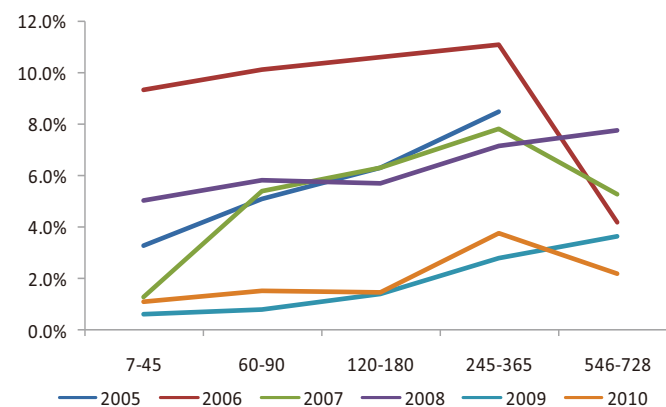


Figure 3.1-20 IMR balance and average yield (2005-2010)

In addition, the yield curves of IMR shifted upward between 2005 and 2006, and went down in 2007 before rose again in 2008. With the new authorities, there is a significant reduction in the yield curves for all terms in 2009 and 2010 (Figure 3.1-21).



Fuente: Cálculos propios, con datos del BCP, Informe Económico, Febrero 2011

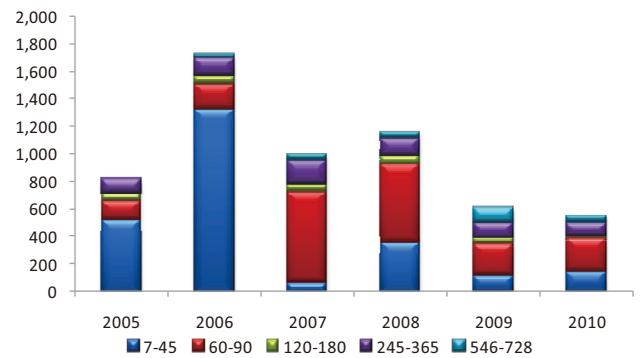
Figure 3.1-21 Yield curve of IMR (2005-2010) (%)

As regards the position of the IMR, they concentrated on instruments from 7 to 45 days during 2005 and 2006, but then focused on the terms between 60 and 90 days in 2007-2010, which provided a mechanism for sterilization of very short-term part of the monetary authority (Figure 3.1-22).

In the financial sector, lending rates of banks and financial organizations in local currency declined between 2005 and 2007, went up in 2008, and then went down again in 2010 (Figure 3.1-23). The intermediary margins in Guarani are high in both banks and financial organizations, due to structural problems such as inefficient financial system.

Lending rates of banks and financial organizations in US dollars are 9.4% and 11.9% in 2010, respectively. Like the intermediary margins in Guarani, the intermediary margins in US dollars are high due to low deposit rates in US dollars (Figure 3.1-24). However, the intermediary margins of financial organizations are substantially low in US dollars than in Guarani.

It should be noted that, in 2010, 45.9% of private sector deposits in the banking system was denominated in foreign currencies, especially US dollars, while 40.1% of bank credit to the private sector was denominated in foreign currencies. This high level of dollarization of deposits and loans in the banking system makes it difficult for the Central Bank of Paraguay to manage monetary policy, because many times the authority has to reconsider the weight that would give variations of the nominal exchange rate, and balance its consequences with respect to domestic inflation, and losses due to the effects on corporate balance sheets, especially in an agro-export country which also faced the collapse of supply.



Fuente: BCP, Informe Económico, Febrero 2011

Figure 3.1-22 Billions of Guarani position in IMR (2005-2010) (in days)

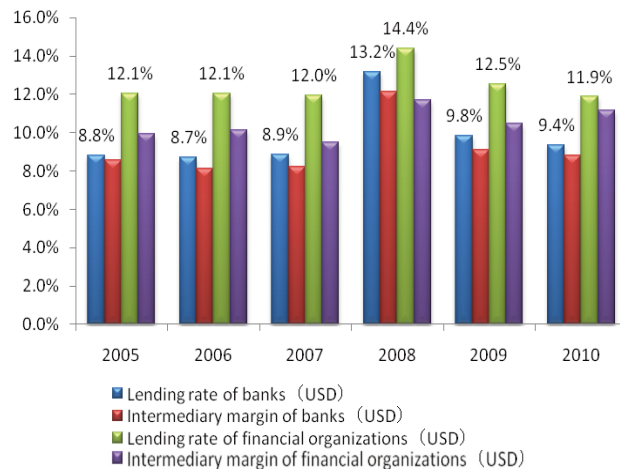


Figure 3.1-23 Lending rates and intermediary margins of banks and financial organizations in Guarani (2005-2010) (%)

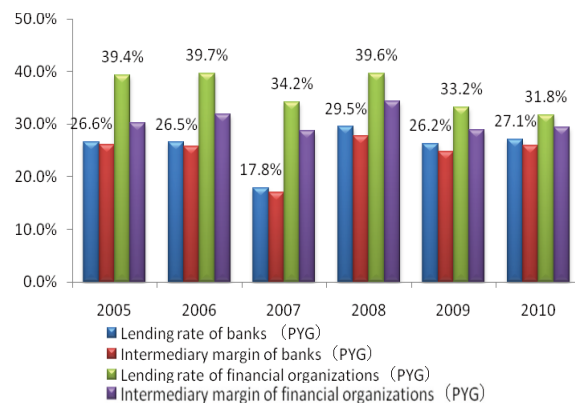


Figure 3.1-24 Lending rates and intermediary margins of Banks and financial organizations in US dollars (2005-2010) (%)

3.1.6 Balance of Payments³⁶

During the period 2006-2010, Paraguay experienced current account surplus, 1.4% relative to GDP in 2006 and 2007, and 0.3% in 2009, and 1.8% and 3.4% of deficits in 2008 and 2010, respectively (Table 3.1-5). On the other hand, Paraguay experienced a growing deficit in goods account, which has reached 8.7% of GDP in 2010. There is a possibility of serious risk to Paraguayan macro-economy if the expenditures on consumption goods have increased without revenues.

Capital and financial account continued a surplus in 2006-2010, which financed current account deficits in 2008 and 2010. It can be observed that the financial account surplus was 4.3% of GDP in 2009 and 2010, largely due to direct foreign investment (1.4% and 2.4% of GDP in 2009 and 2010, respectively) and net loans (1.1% of GDP in 2010 under other investments item) (Table 3.1-5). A continuous increase in international reserve assets can be observed throughout 2006-2010, reaching 6.4% of GDP in 2009, although they declined only to 1.8% of GDP in 2010.

Table 3.1-5 Balance of Payment in standard format 2006-2010 (% of GDP)

	2006	2007	2008	2009	2010
I. CURRENT ACCOUNT	1.4	1.4	(1.8)	0,3	(3,4)
A. Goods	(6.7)	(4.3)	(6.2)	(7.2)	(8.7)
1. Exports (credit)	47.4	46.1	46.2	40.7	47.2
2. Imports (debit)	(54.1)	(50.4)	(52.4)	(48.0)	(55.8)
B. Services	4.5	4.1	3.3	6.1	4.5
1. Transportation	(1.2)	(1.1)	(1.0)	(1.1)	(1.2)
2. Travel	(0.0)	(0.1)	(0.1)	0.5	0.4
3. Other services	5.7	5.3	4.4	6.6	5.4
C. Income	(1.0)	(1.3)	(1.3)	(2.2)	(2.2)
1. Remuneration for employees	1.4	1.2	1.3	1.6	1.5
2. Revenue from investment	(2.4)	(2.5)	(2.7)	(3.8)	(3.7)
2.1 Direct foreign investment	(2.6)	(2.8)	(2.8)	(3.7)	(3.5)
2.2 Portfolio investment	0.0	0.0	0.0	0.0	0.0
2.3 Other investment	0.3	0,3	0,1	(0,1)	(0,1)
D. Current transfer	4.6	3.0	2.5	3.6	3.0
II. CAPITAL AND FINANCIAL ACCOUNT	2.0	6.0	3.8	4.7	4.5
A. Capital account	0.3	0.2	0.2	0.3	0.2
1. Capital transfer	0.3	0.2	0.2	0.3	0.2
B. Financial account	1.6	5.8	3.6	4.3	4.3
1. Direct investment	1.8	1.4	1.6	1.4	2.4
2. Portfolio investment	0.0	0.0	0.0	0.0	0.0
3. Other investment	(0.2)	4.3	2.0	2.9	1.9
3.1 Assets	1.0	3.8	(0.6)	2.3	0.2
3.1.1 Trade credit	(0.1)	0.0	0.1	0.0	(0.1)
3.1.2 Loans	(0.4)	(0.4)	(0.6)	1.0	0.4
3.1.3 Money and deposits	1.7	4.7	0.1	0.1	0.0
3.1.4 Other assets	(0.3)	(0.5)	(0.2)	1.1	(0.2)
3.2 Liabilities	(1.1)	0.5	2.6	0.6	1.7

³⁶ Source in this section comes from Central Bank of Paraguay. 2011. *Economic Report*. February.

3.2.1 Trade credit	(0.6)	0.1	1.3	(0.3)	0.4
3.2.2 Loans	(0.6)	(0.7)	(0.0)	0.1	1.1
3.2.3 Money and deposits	0.0	1.0	0.4	0.4	0.3
3.2.4 Other liabilities	(0.0)	0.2	1.0	0.4	(0.0)
III. ERRORS AND OMISSIONS	0.8	(1.5)	0.3	1.5	0.7
IV. RRESERVE ASSETS	(4.2)	(5.9)	(2.3)	(6.4)	(1.8)

Source: Calculation based on Central Bank of Paraguay. 2011. *Economic Report*. February.

With respect to the imports of goods during 2006-2010, most imports are capital goods reaching 21.5% of GDP in 2010, followed by 17.4% for consumption goods, and 14.4% for intermediate goods (Table 3.1-6). However, as noted above, there remains a concern about sustainability of an increasing trade account deficit in 2007-2010. The share of imports of consumption goods has surpassed that of intermediate goods in 2009-2010, which would raise the risk of being able to cope with the increased borrowing by the country. This risk would increase much more if it is considered that only 13.7% of GDP are imports of non-durable goods, of which 2.1% represents food items.

Table 3.1-6 Imports by type of goods 2006-2010 (% of GDP)

	2006	2007	2008	2009	2010
Food	1.8	1.9	2.0	2.1	2.1
Beverages, tobaccos	1.3	1.1	1.2	1.5	1.8
Others	7.3	6.0	7.1	8.6	9.9
Total non-durable goods	10.4	9.1	10.3	12.2	13.7
Automobiles	1.4	1.6	2.1	1.6	1.8
Appliances	1.8	1.8	1.9	1.4	2.0
Total durable goods	3.2	3.4	3.9	3.1	3.7
Total consumption goods	13.6	12.4	14.3	15.2	17.4
Fuels and lubricants	7.4	5.8	7.7	6.4	6.1
Chemical products	3.2	4.3	5.0	3.7	3.9
Others	3.9	3.6	4.1	3.8	4.4
Total intermediate goods	14.6	13.8	16.8	13.8	14.4
Machinery, appliances, motors	16.8	15.0	14.2	12.9	16.2
Transport equipment and accessories	2.7	2.8	3.5	2.7	3.8
Others	0.7	1.2	1.7	0.9	1.5
Total capital goods	20.2	19.0	19.4	16.5	21.5
Total imports	48.5	45.2	50.4	45.6	53.3

Source: Calculation based on Central Bank of Paraguay. 2011. *Economic Report*, February.

As regards registered exports of products, agricultural exports accounted for 81.7% of total exports on average over the period 2006-2010 (Table 3.1-7). The most important export products are soybean and meat, which comprise 9% and 5.2% of GDP in 2010, respectively. It is worth highlighting the fall in exports of both items (soybean and meat) as a proportion of GDP in 2009 as a result of drought in this year, an evidence of solvency risk of the country that relies much on exports of agricultural products.

Table 3.1-7 Registered exports by products 2006-2010 (% of GDP)

	Cotton fiber	Soybean	Vegetable oil	Flour	Grain	Meet	Timber	Others	Total
2006	0.4	4.5	1.2	1.5	2.2	4.5	1.0	4.5	19.8
2007	0.4	7.0	2.1	2.4	2.9	3.0	0.9	4.3	23.0
2008	0.2	8.8	3.5	3.2	2.2	3.7	0.7	4.2	26.5
2009	0.1	5.5	1.8	2.7	3.2	4.1	0.7	4.1	22.2
2010	0.1	9.0	1.6	2.0	3.1	5.2	0.6	4.1	25.7

Source: Calculation based on Central Bank of Paraguay. 2011. *Economic Report*, February.

Nominal exchange rates of Guaraní against major foreign currencies have presented different dynamics during 2006-2010 (Table 3.1-8). For example, Guaraní appreciated steadily against Argentine Peso, from 1,841.1 PYG/ARS in 2006 to 1,214.1 PYG/ARS in 2010. Guaraní has appreciated between 2006 and 2008 against U.S. dollar and Euro, depreciated in 2009 and then returned to appreciate in 2010. With respect to Brazilian Real, Guaraní appreciated sharply in 2008, and then depreciated through 2010. Finally, against Yen, Guaraní appreciated slightly between 2006 and 2008, and then depreciated until 2010. In summary, between 2006 and 2010, Guaraní appreciated 34.1% against Argentine Peso, 15.9% against U.S. Dollar, and 11.8% against Euro, while it depreciated 4.8% against Real and 11.3% against Yen.

Finally, real effective exchange rate appreciated 8.9% between 2006 and 2010 (Table 3.1-8). This is due to the depreciation rate observed between 2009 and 2010 that could not compensate for an appreciation between 2006 and 2008. In fact, the appreciation of real effective exchange rate started in 2005. As for the real effective exchange rates against major trading partners between 2006 and 2010, there were real appreciations against Argentina (25.6%), United States (27.8%), Euro Zone (29.8%) and Japan (12.2%). The only depreciation was observed against Brazil (only 1.6%).

Table 3.1-8 Nominal exchange rate of Guaraní against major foreign currencies, and indices of real effective exchange rate against bilateral trading partners 2006-2010 (yearly average)

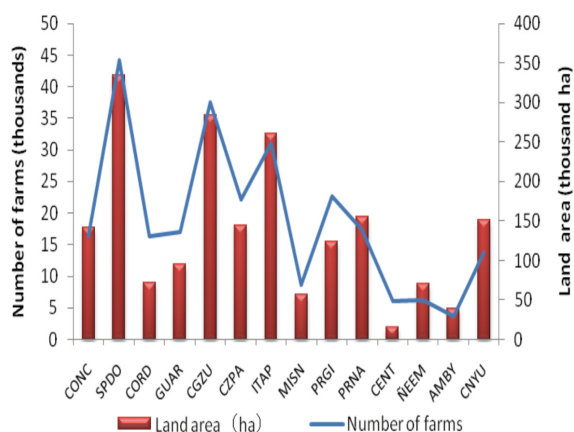
	Nominal exchange rates (PYG)					Indices of real effective exchange rates (1995=100)					
	ARS	BRL	USD	EUR	JAY	TCER	TCEB-AR	TCEB-BR	TCEB-US	TCEB-EU	TCRB-JA
2006	1,841.1	2,574.0	5,635.4	7,053.0	48.6	127.3	98.2	155.8	131.2	132.2	89.8
2007	1,616.7	2,589.6	5,032.7	6,887.2	42.7	117.8	86.9	152.2	112.3	122.9	74.6
2008	1,379.1	2,405.9	4,363.1	6,471.0	42.4	105.3	74.8	142.5	91.4	110.8	70.0
2009	1,335.0	2,506.9	4,966.6	6,907.0	53.1	111.8	74.7	145.9	99.4	104.7	81.0
2010	1,214.1	2,696.4	4,739.5	6,223.3	54.1	116.0	73.0	158.4	94.7	92.9	78.8

Source: Central Bank of Paraguay. 2011. *Economic Report*, February.

3.1.7 Brief analysis of National Agricultural Census 2008

According to the latest National Agricultural Census 2008, total number of farms in the Eastern Region accounted for 281,462 covering 13.4 million hectares (ha), which represent 97% of farms and 43% of land area in total Paraguay (Figure 3.1-25). The Departments with the largest number of farms are San Pedro, Caaguazú and Itapúa, while at the other extreme are the Departments of Ñeembucú, Central and Amambay.

In addition, the Departments of Concepción, San Pedro and Canindeyú records the highest concentration of agricultural land, with the smaller departments of the Central, Cordillera and Guaira. Finally, the average farm in Amambay is the highest (253.8 ha), followed by Ñeembucú (129.6 ha) and Concepcion (93.2 ha), which contrasts with the low average in Guairá (13.2 ha), Central (17.5 ha), and Cordillera (22.9 ha).



Fuente: MAG, Censo Agropecuario Nacional, 2008

Figure 3.1-25 Number and land areas of farms by Department in Eastern Region 2008

Another feature of the agricultural sector in the Eastern Region is the concentration of those farms with land areas between 1 and 5 ha that totals only 2,301km² (Figure 3.1-26). Total 263,224 farms or 93.5% of all farms in the Eastern Region are under 50 ha, and 240,749 farms or 85.5% under 20 ha. These numbers can be corrected if you consider the average area occupied by farms of different extensions, as well, 93.5% of the farms are actually under 27 hectares, while 85.5% are younger than 11.9 hectares.

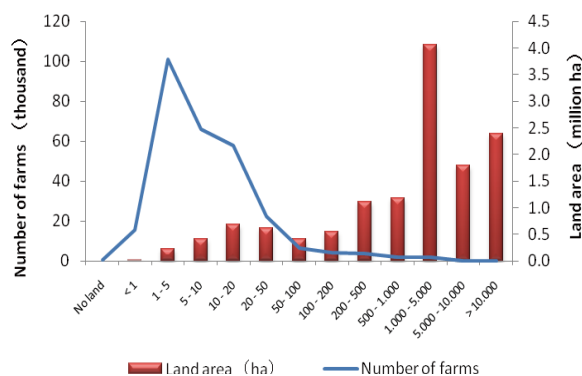


Figure 3.1-26 Number and land area of farms in Eastern Region by land size (2008)

The age group of agricultural and livestock producers is concentrated in the group between 35 and 54 years of age (46.5% of 200,301 employees under this group), while the agricultural work and non-agricultural work are concentrated in the group between 25 and 54 years of age, 70.8% of 12,753 workers for the former, and 70.9% of the 12,657 workers for the latter.

In regard to paid work, farms have 79,229 employees, while 14,998 farms have 29,525 permanent employees. Of these 86.7% are men.

On the production of seasonal crops, small farmers in the Eastern Region were devoted primarily to the cultivation of cassava (218,820 farms), shell beans (208,234 farms), corn for chipa (131,908 farms) and normal-harvest corn (119,442 farms) (Figure 3.1-27). Other crops produced by more than 10,000 farms were (in

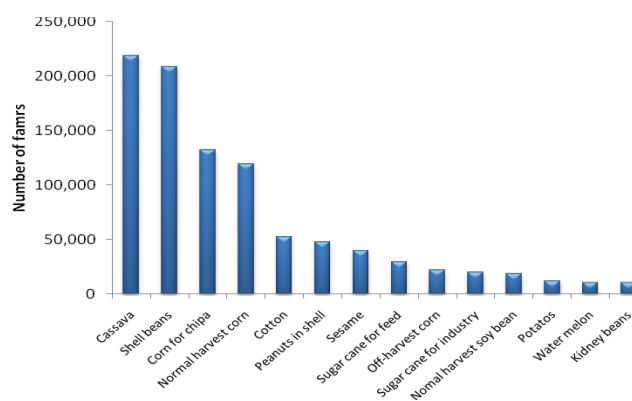


Figure 3.1-27 Number of farms in Eastern Region by type of crops 2008

number of farms): cotton, peanuts in shell, sesame, sugarcane for feed, off-harvest corn, sugarcane for industry, normal-harvest soybean, sweet potatoes, watermelon and kidney beans. However, if we analyze the type of crops by cultivated area, the main agricultural areas for the small producer are: cassava (161,173 ha), and normal-harvest soybean (145,795 ha), which is followed by normal-harvest corn, corn for chipa, cotton and sesame (Figure 3.1-28).

The size of land areas for cultivation of temporary crops varied among farms. For example, cassava is concentrated (42.4%) in the area between 0.5 and 1 hectare, while the soybean harvest between 2 and 5 hectares.

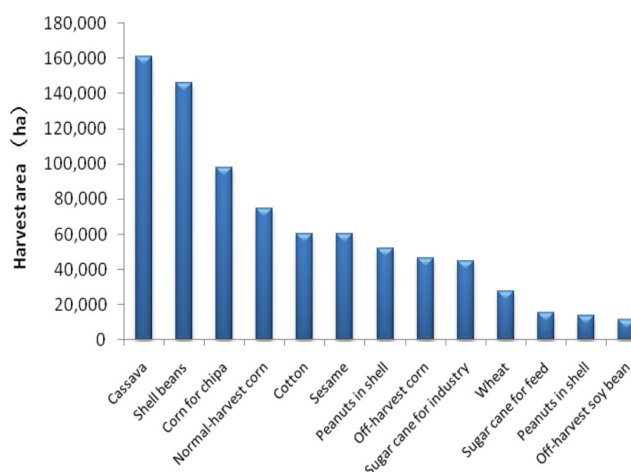


Figure 3.1-28 Harvest area in Eastern Region by type of crops 2008

As for technical assistance, loans and investments of small farmers can be analyzed using the results of the CAN 2008 in order to capture the most important features on the ability of producers to obtain financing and evaluate their ability to service their debts. The number of farms that received technical assistance amounted to 34,820 units, of which 42.2% from DEAg of MAG, 18% from CAH, and 17% from cooperatives, and the remaining from other sources of technical assistance.

In addition, 41,924 farms received credit in 2008, and the main source of credit was from CAH with 35.5% of total credits, followed by cooperatives (26.8%), and banks or financial institutions (15.3%). The farms associated with organizations totaled 73,618 units. Of these, 38.8% belong to farmers committees, 29.1% to cooperatives, and only 0.4% to the Rural Association of Paraguay.

Among 203,342 farms that employ technicians, 64.9% of them had veterinary products, 55.1% pesticides, 38.3% hybrid seeds, and 12% genetically modified seeds. In addition, 51,371 farms were engaged in the production of processed goods in the Eastern Region, among which 42.5% were engaged in the production of starch, and 44.8% in the production of cheese. Furthermore, 52.7% and 63.1% of farms are involved in the production of charcoal in Amambay and Canindeyú, respectively.

Finally, 68.8% of farm production is intended for merchants or gatherers, 25.7% for direct sale to consumers, 10.6% for companies, and only 4.4% for cooperatives.

3.1.8 Poverty and Inequality³⁷

In 2000-2009 there were important economic and political events that are part of the country's history and are closely linked to welfare conditions of the population. First, the economic crisis that had begun in 1995 was reversed and started to move toward economic recovery from 2003; and a new government was elected and established in 2008, which altered the ruling of the National Republican Association (Colorado Party) for the first time in five decades.

The poverty rate reached 49.7% in 2002, the last year of a long spell of economic crisis since 1995 (Figure 3.1-29). This high level of poverty was mainly due to increased poverty in the rural area where the rate reached 62.7% in 2002.

Since 2003 the poverty rates of the country experienced a downward trend toward 35.1% in 2009, equivalent to about 2.2 million poor people. While urban poverty continued to fall to 24.7% in 2009 (about 906,000 poor people), rural poverty fell only until 2005 (up 44.2%), and then increased again (Figure 3.1-29). In 2006, 55.3% of the



Figure 3.1-29 Evolution of poverty by geographic area 2000–2009 (%)

³⁷ The information in this section was drawn from DEGEEC. 2009. *Permanent Household Survey*.

rural population lived below the poverty line and in 2009, this rate dropped to just 49.8% (about 1,286,000 poor people). Between 1997-1998 and 2009, extreme poverty was greater than non-extreme poverty in the rural area.

Paraguay is still a country with large rural areas, with 41% of total population living in rural areas. Among 15 departments, 12 have rural population higher than 50% in total population. There are departments with more than 80% of rural population, as in Caazapá, Canindeyú and San Pedro. As total poverty is concentrated in the rural area, so are extreme poverty and inequality. In 2005-2009, rural extreme poverty exhibited a growing trend, increasing from 24.3% in 2005 to 32.4% in 2009. Among the extreme poor who can not afford basic food expenses, 71% of them or 835,000 people live in the rural area.

Income distribution in the rural area is more unequal than that in the urban area. In the rural area, the average income of the richest decile is 36 times higher than that of the poorest decile, whereas in the urban area, the average income of the richest decile is only 17 times higher than that of the poorest decile. The same point can be observed by using Gini coefficient, whose value in the rural area is 0.554, which is higher than 0.423 in the urban area.

In 2009, poverty in the urban area is observed among men and women at equal rates around 24% (Table 3.1-9). However, in the rural area, the poverty rate of women (50.8%) is much higher than that of men (48.8%). Children under 10 years old, adolescents and the youth under 20 years old have the highest rates of poverty among all age cohorts. There is a significant difference of poverty rates between the urban and rural areas, but a minor one between men and women. The rates of poverty in the urban area are 37.2% of boys and 35.6% of girls, whereas those in the rural area are 59% of boys and 60.3% of girls. Also, more than 50% of adolescents and the youth (10 to 19 years of age) in the rural area are poor, whereas less than 30% of this population are poor in the urban area. Among old adults above 60 years old, men in the rural area have high poverty rate, 43.8%.

Table 3.1-9 Poverty rates by geographic area, sex and age in 2009 (%)

Age cohort	Urban area		Rural area		Total	
	Male	Female	Male	Female	Male	Female
< 10	37.2	35.6	59.0	60.3	47.1	46.7
10 – 19	29.1	27.4	56.3	59.1	41.2	41.6
20 – 29	16.5	19.5	41.3	40.9	25.9	26.6
30 – 39	22.0	25.0	42.6	46.9	29.9	32.8
40 – 49	19.3	21.7	41.0	46.3	28.6	31.1
50 – 59	17.7	15.8	36.0	43.6	25.0	27.2
≥ 60	18.9	17.9	43.8	37.9	30.2	25.2
Total	24.6	24.5	48.8	50.8	34.9	35.0

Source: DGEEC. 2009. *Permanent Household Survey*.

At the departmental level, Permanent Household Survey 2009 revealed that Caaguazú is the department with the highest poverty rate (65.8%), followed by San Pedro (60.4%) and Itapúa (41.4%). By contrast, departments of Central (26.5%), Alto Paraná (20.8%) and Asunción (20.5%) have the rates below the national poverty rate (35%). However, in absolute numbers of the poor, more than 520,000 people in Central department live under the poverty line, whereas the poor in San Pedro, Itapúa and Caaguazú accounted for between 215,000 and 260,000. Finally, approximately 106,000 and 153,000 people in Alto Parana and Asunción, respectively, live under the poverty line.

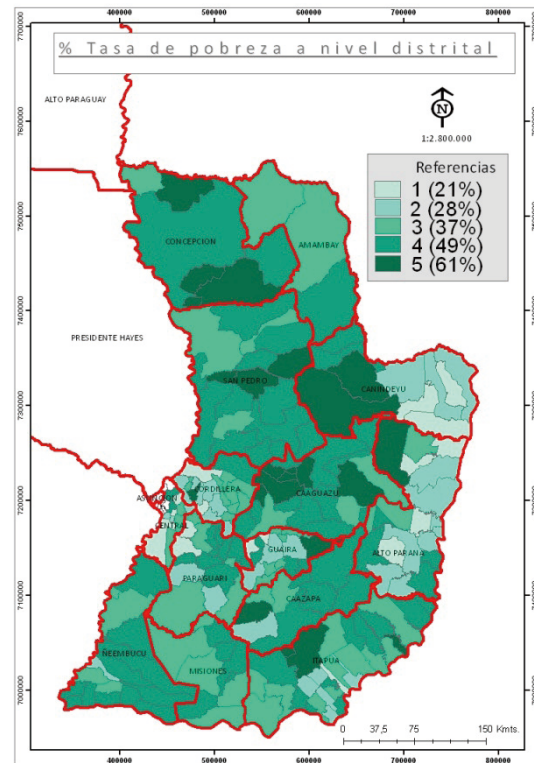


Figure 3.1-30 Cluster analysis of poverty (2002)

Finally, Figure 3.1-30 presents the poverty map at the district level in 2002, which is based on the data from the National Census 2002.³⁸

3.1.9 Dynamics of Rural-urban Migration

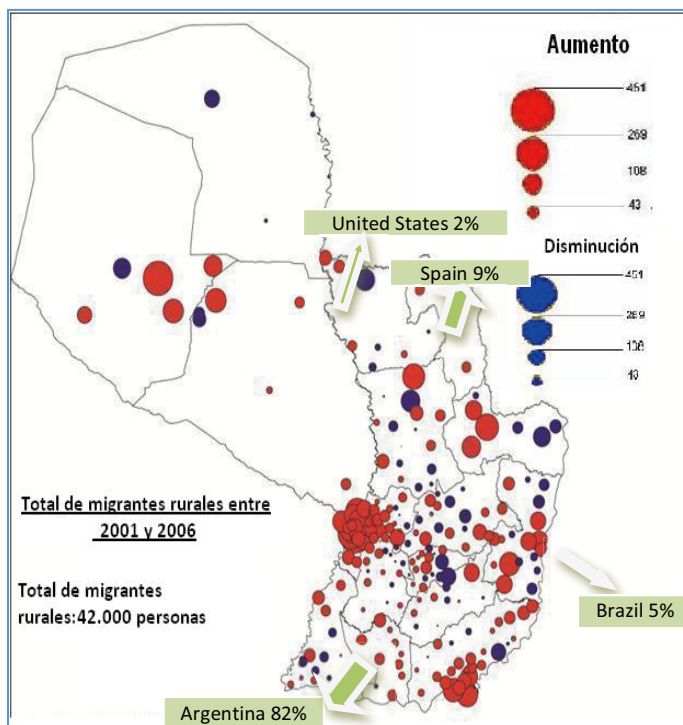
Rural-urban migration in recent decades

The problem of rural-urban migration and its relation to poverty belts of cities has been frequently mentioned in Paraguay. However, the flow of internal migrants between rural and urban areas has declined in recent decades, according to the National Census of Population and Housing 2002 (DGEEC, 2005). During the period 1977-1982, rural-urban migration accounted for 25% of internal migration, and, the rate decreased markedly to 14.4% in the period 1987-1992, and further down to 7.8% in the period 1997-2002.

³⁸ Based on the data from National Census 2002, a cluster analysis was conducted to classify districts with similar poverty rates into five groups. Figure 3.1-30 shows the results of this analysis. The legend in this Figure indicates the five groups and the number in parenthesis in each group shows average poverty rate of districts in each group. The five groups are numbered and colored from the lowest poverty group 1 (light color) to the highest poverty group 5 (dark color).

Major divisions of sending and receiving migrants

According to the National Census of Population and Housing 2002, the major departments of emigration (=move-out) are, in order of importance, Asunción and Caazapá with a net emigration rate of 12% and 10%, respectively. They are followed by Alto Paraguay, San Pedro, Paraguari, Caaguazú and Concepción, with emigration rates between 7% and 6%. Meanwhile, Amambay, Cordillera, Misiones, Itapúa, Guaira, Alto Paraná, and Ñeembucú have lower rates of migration, which is less than 4% and reaches a minimum of 0.7% in Alto Parana. Net recipients of migration are Central, with a net migration rate of almost 14%, followed by Boqueron (7%),



Canindeyú (6.5%), and President Hayes (3.2%) (Figure 3.1-31).

Figure 3.1-31 Migration 2001-2006

Border migration between Paraguay and Brazil

Attracted by the highly competitive real estate market for its low prices against the cost of agricultural land in their country of origin, the inflow of Brazilians in Paraguay began in the mid 1960s, and extends from the construction of Itaipú hydroelectric dam by Brazil and Paraguay. The inflow of Brazilians increased with the labor that was incorporated into civil works during the construction of the dam between 1975 and 1985. Since 1972, immigration of Brazilians has a clear predominance over other immigrant groups. They consolidated first along the border with Brazil, east of the country, engaged in crop agriculture, especially soybean, wheat and maize with plots of medium size. Later, they expanded into inner areas of Paraguay such as Caaguazú.

The boom in agriculture in the fertile Eastern Region also attracted companies engaged in mechanized, extensive production of those items. Both family-managed and multinational companies have expanded rapidly, and contributed to GDP growth. Although they have not had a significant impact on job creation in farms, they have expanded employment in those

companies and related service industries, e.g., finance, materials and equipment, transportation of products and materials, construction of silo and storage, and maintenance factories of agricultural machines, which helped vitalize the national economy.

The dynamic segments of the current Paraguayan economy are observed particularly in production and exports of agricultural crops and products such as soybean and beef. Although they have been contributing significantly to socio-economic growth in Paraguay, they have been also imposing environmental costs such as deforestation, and social costs such as sales of small-scale farm lands.

The integration between Paraguayans and Brazilians finished from the descendants of the first settlements of the 1960 and 1970. The mixing occurs culturally and commercially, and with the spatial aspects, production practices and procedures that led to the creation of new towns such as La Paloma, Caballero Alvarez, and Katuete in Department of Canindeyú; San Alberto and Santa Rita in Alto Parana; and María Auxiliadora in Itapúa, among others.

3.1.10 Immigration

Background and immigration trends

After the War of Triple Alliance against Argentina, Brazil and Uruguay (1864-1870), Paraguay was devastated demographically, and promoted immigration as a strategic policy to re-populate the country and revive the economy. However, this policy did not yield expected results, in that it failed to attract a large flow of immigrants as so happened in neighboring countries. During the post-war period until 1930, immigrants to Paraguay constituted less than 1% of immigrants to Argentina and Brazil (just over 4 million in each of those countries) and about 4% of those who migrated to Uruguay.³⁹ A key focus of immigration policy was the occupation of peripheral, mostly rural areas. For this reason, immigrant groups were to be agricultural settlers to modernize rural production, according to the thinking of the time. Due to poor infrastructure in the country until 1960, most of colonial experiences were very difficult initially, but managed to survive with farms aimed at subsistence first, then production for income through market-oriented items.

In a historical account presented in Table 3.1-10, it can be noted that, during the period 1870-1959, Paraguay admitted more than 50,000 people of various nationalities, including some returnees. Just over half (54.6%) of those immigrants were from Europe (about 29,000 people), 22% from Argentina, Brazil and Uruguay (equivalent to 11,900 people), 9% from Japan (about

³⁹ Oddone, Hugo. 2010.

4,800 people), and just over 12% of Mennonite religious group (corresponding to about 6,500 people).

Table 3.1-10 Number of registered immigrants by nationality and group in 1870-1959

Period	Repatriation to home country	America ⁽¹⁾	Europe	Japan	Mennonites	Other groups ⁽²⁾	Total
1870-1879	0	0	800	0	0	0	800
1880-1889	0	5,623	2,078	0	0	73	7,774
1890-1899	0	24	313	0	0	78	415
1900-1909	51	495	2,834	25	0	15	3,420
1910-1919	193	1,241	4,135	0	0	131	5,700
1920-1929	105	176	1,368	0	1,876	4	3,529
1930-1939	111	187	11,363	533	381	54	12,629
1940-1949	0	761	2,132	161	4,258	38	7,350
1950-1959	0	3,393	4,063	4,085	7	147	11,695
Total	460	11,900	29,086	4,804	6,522	540	53,312

Source: Kleinpenning, Juan M.G.2009. *Rural Paraguay 1870-1963: A geography of progress, plunder and poverty. Vol 2.* Madrid, Iberoamericana.

(1) This includes immigrants of other Latin American countries, in particular Argentina, Brazil, Uruguay. Those immigrants are the second generation from Europe. Recently there are a number of immigrants from Bolivia.

(2) This figure includes immigrants from Middle East (particularly Syria and Lebanon) and Asia (excluding Japan).

According to the official data, during the period 1881-1919, Paraguay had received only 17,309 immigrants, which was only 7% of total immigrants of Uruguay in the same period. Between 1880 and 1889, main immigrants came from neighboring countries, i.e., Argentina, Brazil and Uruguay. In following years, the entry of people from European countries dominated, mainly Germans, Ukrainians and Slavs who were located in the south and central east of the Eastern Region. This was relatively significant for the time, because technology made significant contributions, particularly to agriculture and small industries. These years of continuous European entry coincided with the years of the First and Second World Wars and the period of the Great Depression. In the decade of 1950, immigration from the neighboring Latin American countries increased again, however, which was then outweighed by a growing number of Japanese (4,085 people). Also, since 1920 the Mennonite religious group ventured into the lands of Central Chaco, with a special status for settlement. After admission of the Mennonites in 1921, the official number of Mennonites has increased until 1948.

Between 1930 and 1950, there was a new group of immigrants from Arab countries like Syria and Lebanon. Then, in the 1960s and 1970s, a large group of immigrants came from the Far East, especially Japan and Korea. The Syrian-Lebanese settled mainly in the east of the country, while the Japanese were directed to the field for activities of agriculture and agribusiness, and Koreans in urban areas dedicated to commercial service activities⁴⁰.

⁴⁰ Oddone, Hugo. 2010.

Between 1960-1980 a critical mass of Brazilian farmers entered the east of the country, attracted by highly competitive real estate market with low prices relative to their homeland. In the early 1970 massive immigration began from Brazil to the eastern border in Paraguay, is now becoming the largest group of foreign population in the country. This immigration policy responds to the Brazilian "go west", where they became responsible for the production of soybeans, the main export crop of Paraguay. Brazilian immigrants in the eastern border increased with the construction of the Itaipú hydroelectric (1975-1985). Following the Brazilian movement westward, Paraguay began its migration towards the east, creating new business opportunities. In addition, groups of Italians and Spanish immigrated and have been smoothly integrated into Paraguayan society through internal and external trade.

Paraguay was not the most desired destination for immigrants, due to competition against Argentina, Uruguay and southern Brazil. The incentives of these countries were most attractive to the permanence of foreigners in the land. In addition, immigrants to those countries could easily return to their countries of origin if they choose to do. By contrast, Paraguay faced the challenge in shipping products abroad since it is a land-locked country, and were not equipped with infrastructure.

Location of immigrant groups

The first immigrants were not farmers, but manual workers, proletarians, artisans. Apparently, farmers and ranchers arrived in the period 1890-1930 (44% of the immigrants were farmers by profession)⁴¹.

The first attempts at settlement were unsuccessful after the War of the Triple Alliance. In 1871 about 100 Germans entered from Brazil, Argentina and Uruguay, which was initially installed in the vicinity of Asunción between Paraguari and partly Yaguarón then moved to the area of Cordillera de los Altos, near the Cerro Santo Tomás (northeast Itauguá). Today there are no more traces of these colonies, because the characteristics of Germans agreed with the purpose of immigration. Many of them were farmers without opportunity, laborers, artisans from different classes who wanted to achieve success in Paraguayan lands attracted by government incentives at this time⁴².

In 1872, a second group of immigrants came from Europe, formed mainly by the British, Irish and Scottish and a little German and other nationalities. As in the previous occasion, these

⁴¹ Kleinpenning, Juan M.G. 2009. *Rural Paraguay 1870-1963. A geography of progress, plunder and poverty. Vol 2.* Madrid: Iberoamericana.

⁴² Kleinpenning, Juan M.G. 2009.

immigrants were not farmers, but part of industrial proletariats (tailors, masons, shoemakers) with weak cohesion as groups who were located in Itapé (near Villarrica) and Itá. Like the previous group, this settlement attempt to revive the country's economy was a failure. They were impoverished and with outside help, the majority went to Buenos Aires in 1873, some went to Corrientes, Rosario, others somewhere in Argentina, others found the way back to their homelands.

While immigrants had formed over 300 settlements in Argentina, they had formed only 50 in Paraguay between 1870 and 1962, and then created more settlements after 1900. Thus we have: Nueva Burdeos (Villa Hayes), Yegros (National Cologne) and Villa Ana with immigrants from France and Italy; Itapé with immigrants from Britain and Germany; Yaguarón, San Bernardino, Altos Nueva Germania, San Lorenzo, Chingui Loma/Rosario Lomas, Zona Grande, Teutonia u Horqueta, Independencia, Cañadita, San Miguel de Curuzú, Danubia and Barranquerita with immigrants from Germany. Then, we have settlements in Hohenau, Captain Mesa and Obligado with immigrants from Germany and Brazil; Cambyreta from Germany and Austria; Primavera from Germany and England; La Colmena, Federico Chavez, Pedro Juan Caballero, Fram, Yguazú and others from Japan; Menno, Sommerfeld and Bergthal from Canada; Colonia Elisa from Scandinavia; Nueva Australia and Cosme from Australia; Trinacria/General Aquino from Italy; Zona Grande and Bella Vista from Brazil; Cabot from Argentina; Fram from Poland and Russia; Carlos Pfannel from Austria; Union Germánica and Neuhoffnung of Mennonites; Sudetia from Czechoslovakia; Fernheim, Friesland, Volendam and Neuland from Russia.

Economic impact of the former settlements of immigrants

The different agricultural settlements formed from international migration experienced stages in development. The arrival and installation was a difficult and slow period, and then the preparation to launch production was also slow and characterized by meeting domestic and local demand first, which was followed by the capture of regional and national markets. Once the agricultural and agro-industrial production systems began to consolidate, there was a quantum leap in its impact on not only the national economy, but particularly the regions.

These processes have been little observed in Asunción until 1990 when industrialized production in the old settlement areas consolidated and converted into administrative districts and towns came to the capital and started winning. In the early 2000, the agro-industrial production from the former settlement areas has been increasingly making a systematic impact not only on Asuncion but also on the national economy.

The former settlements in Department of Itapúa (Ukrainians, Germans, Poles, Japanese) became highly competitive areas based on agricultural modernization and industrialization of production,

through dairy supply chains, pork products, grain, mate and citrus and others.

Boqueron (Chaco), the descendants of Canadians and Russians was able to put together successful chains in dairy, meat and leather. At some points in the Departments of San Pedro and Caaguazú, former settlements of Mexicans and Canadians, and ethno-religious identity Mennonite, became agro-industrial poles of dairy and grains (wheat).

In large areas of Departments of Alto Paraná, Canindeyú and Itapúa, colonies of Brazilian descendants achieved rapid and spectacular economic growth with cultivation of soybean-corn-wheat complex.