

# SDG 2



## Ending hunger, attaining food security, improve nutrition and promote sustainable agriculture

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The food sector and the agricultural sector offer key solutions for development and are vital for the elimination of hunger and poverty. Properly managed, agriculture, forestry and aquaculture can supply nutritious food for everyone. They can also generate decent income, support rural development and protect the environment.





## Introduction

DECIDAMOS, CADEP and OXFAM, three non-governmental organizations in Paraguay, made an alliance to create synergies between the civil society, the private sector and local governments to implement concerted and sustainable actions oriented to provide a positive impact on accomplishing SDGs 1, 2, 10 and 13 in Paraguay. This effort is supported by the international cooperation of the European Union.

In this project, CADEP elaborates reports that monitor the progress made by Paraguay in terms of complying with the mentioned SDGs. Indicators for each SDG is calculated with data of the National Household Survey, 2017. Also, these reports include policies, programs and actions implemented by the Paraguay government on each one of the SDGs: ending poverty (1), zero hunger (2), reducing inequalities (10) and action for climate (13).

# SDG 2



## Zero hunger

Ending hunger, achieving food security and improving nutrition, and promoting sustainable agriculture, is the second of the Sustainable Development Goals (SDGs) of the United Nations (UN). According to the United Nations Food Organization (FAO), in 2016 the number of undernourished people in the world reached 804 million, of which the vast majority lived in developing countries. In the same year, 21 million people were hungry in South America (FAO, International Fund for Agricultural Development [IFAD], United Nations Children's Fund [UNICEF], World Food Program [WFP] and World Organization of Health [WHO], 2018, p. 6).

This SDG presents a great challenge to countries of the world, that will have to guarantee quality food to meet basic nutritional needs to a growing world population - which is projected to reach 10,000 million people by 2055 (UN, 2017). In addition, they will have to do it on a planet with water shortages and greater degradation of soils and biodiversity. The impact of climate change on agriculture makes the situation even more difficult.

Achieving food security and good nutrition for the population is fundamental for the accomplishment of the 2030 Agenda on SDGs. They conform the base line to combat poverty, to attain a good quality education, to promote economic growth and to reduce inequities.

# 1 THE SITUATION IN PARAGUAY

The situation in Paraguay

For Zero Hunger, the goal (2.1) is: “To end hunger and guarantee the yearly access of people (...) to a healthy, nutritional and enough food...”. In order to measure the state of this goal in Paraguay, an alternative indicator to the UN proposed one is chosen: “proportion of households with poor caloric level” This is because of the absence of precise and continuous data to build this indicator.

For the years 2011-2012, 35% of total households in the country had poor caloric levels. There is practically no difference when this indicator is disaggregated by area of residence: 33% in rural zones and 32% in urban zones.

**Table 1.**

Proportion of Households with poor caloric levels (%), 2011-2012.

	2011-2012
Country Total	32.5
Area	
Urban	32.2
Rural	33.0
Principal Regions	
Asunción (Capital)	38.1
Central	31.9
Alto Parana	30.5
Caaguazu	37.5
Itapua	29.6
San Pedro	33.7
Rest of the country	29.8

Source: DGEEC. Microdata – Surveys of Income and Expenses and Life Conditions 2011-2012. Collected by DGEEC – SDG Indicators System.

Prevalence of growth retardation among children under 5 is calculated in Paraguay with continuous data produced by the National Institute of Food and Nutrition (INAN) and the Ministry of Public Health and Social Welfare (MSPyBS). Data are collected from records of patients that attend public health services in 18 regions.

By 2016, the prevalence of growth retardation among children under 5 in Paraguay was 5.9% In terms of geographical areas, 8.2% of children living in the countryside suffered growth retardation while this figure for urban areas was 4.4%.

It is important to notice that probabilities of prevalence of growth retardation for children under five are less when mothers have more years of education and children live in families located on the highest income quintiles.

**Table 2.**

Prevalence of Growth Retardation for Children Under 5 years old (%), 2016.

	2016
Country Total	5.9
<b>Area</b>	
Urban	4.4
Rural	8.2
<b>Sex</b>	
Boys	6.9
Girls	4.9
<b>Mother's education</b>	
None	22.4
Elementary School (6 years)	8.6
Basic Secondary School (9 years)	6.8
High School (12 years)	4
College	2
<b>Income Quintiles</b>	
Poorest	12.8
Less Poor	5.6
Middle	4
High Middle	3.2
Highest	0.8

Sources: MSPBS/DGEEC/UNICEF. MICS Paraguay 2016.  
Collected by DGEEC – SDG Indicators System.

On the other hand, prevalence of underweight and overweight among children under five years old signals a public health system not capable of ensuring a healthy, nutritious and sufficient food diet throughout the year.

By 2016, underweight for children under 5 affected only 1% of that population. Disaggregation by area and sex did not show a significative difference. However, the

proportion of children under five with overweight was 12.5% in the same year. The data showed that children under five in urban areas were more likely to be overweight (13%) than in rural areas (11.9%).

Analyzing this problem by sex, higher prevalence of overweight is observed in men rather than women. By 2016, 13.5% of boys and 10.8% of girls suffered overweight.

**Table 3.**

Prevalence of underweight and overweight in children under 5 years old (%), 2016.

	Underweight	Overweight
Country Total	1.0	12.5
<b>Area</b>		
Urban	1.0	13.0
Rural	0.9	11.9
<b>Sex</b>		
Male	1.0	13.5
Female	0.9	10.8
<b>Mother's Education</b>		
None	2.6	12.1
Elementary School (6 years)	0.7	9.1
Basic Secondary School (9 years)	1.0	11.8
High School (12 years)	1.1	14.5
College	0.9	15.3
<b>Income Quintiles</b>		
Poorest	0.7	8.8
Less Poor	1	12.4
Middle	1.4	11.1
High Middle	1	15.8
Highest	0.6	16.8

Sources: MSPBS/DGEEC/UNICEF. MICS Paraguay 2016.  
Collected by DGEEC – SDG Indicators System.

There are other items included in SDG 2: aspects related to productivity and sustainability of food production systems, income generated from these activities, genetic diversity of seeds, cultivated plants, farm animals and domesticated animals. However, most indicators for these items are not calculated because of absence of data in some cases and of absence of methods of calculation in other cases.

## 2 POLICIES AND PROGRAMS

One of the programs carried out by the government to comply with SDG 2 is the **Comprehensive Nutritional Food Program (PANI)**, implemented by INAN. This program comprises a set of preventive activities and nutritional recovery, through the prevention, assistance and control of malnutrition, for both children under 5 years of age and pregnant women under the poverty line, as well as for any other group that presents nutritional vulnerabilities.

Services offered to the beneficiaries of the program consists of monthly delivery of a nutritional supplement of 2 kilograms of whole milk enriched with iron, zinc, copper and vitamin C, a nutritional assessment and advice, health checks and parenting orientations (Social Cabinet of Paraguay, 2015, p. 28).

Holders of this program must accept compliances with certain co-responsibilities related to basic health prevention training courses, attending prenatal and post birth controls, educational orientations on breastfeeding and nutrition, proceedings to obtain identity cards for children and vaccinations, etc.

Coverage of PANI, by 2013, reached 48,000 children under five years old and near 11,000 pregnant women. By 2017, 78,000 children under five years old and around 24,000 pregnant women became beneficiaries of this program (UTGS, 2017, p. 29).

**Table 4.**  
Annual Coverage of PANI.

	2013	2014	2015	2016	2017
<b>Total</b>	<b>59,714</b>	<b>71,302</b>	<b>74,741</b>	<b>113,709</b>	<b>102,851</b>
Children under 5 years old	48,269	55,236	55,789	87,158	78,571
Pregnant Women	10,935	15,321	17,940	24,661	23,587
Exceptional Cases	510	745	1,012	1,890	693

Source: UTGS (2017, p. 29).

Since 1992 INAN has also been implementing a program for the **Prevention and Control of Iodine Deficiency Disorders (DDY)**. The objective of this program is the universal iodization of salt for human, animal and food industry consumption, as well as controlling and monitoring the salt entering the country. Iodine deficiency is the most common cause of mental deterioration and goiter, among other problems. (INAN, s.f.).

INAN is also in charge of the **Wheat Flour Enrichment Program**. The purpose of this program is to control and monitor wheat flour imported or made in the country, in terms of its content of iron and vitamins of the B complex (Social Cabinet of Paraguay, 2015, p. 28).

**The School Food Program of Paraguay (PAEP)** is one of the most important in this area, due to its potential effect on the health and education of children and adolescents. This program is implemented at public schools (elementary and basic secondary), located in areas of extreme poverty, schools of indigenous communities, schools of peasant communities, located in districts, companies or slums, schools with a high percentage of absenteeism (greater than 25%), and those that offer double schooling (UTGS, 2016, p. 18).

PAEP is implemented by the Ministry of Education and Science in Asuncion and the metropolitan area, while local governments are in charge of this program in the rest of the country. By 2016, some 3,286 institutions had provided school meals, reaching a total of 317,502 students (UTGS, 2016, p. 102).

One of the goals of the **Tekoporã** Program (conditional cash transfer), is intended to ensure adequate food and nutrition for children of the beneficiary families. “Community Facilitators” of this program are responsible for visiting homes to verify compliance with co-responsibilities, including improving the quality of food and cooking at home (Ministry of Finance -Under Secretary of State for the Economy, 2016).

A series of direct services and benefits are provided within the **Abrazo Program**, including food services (breakfast, lunch, snack, complementary feeding). The Abrazo Program has 43 centers in 27 locations nationwide. There are three types of centers: i) protection centers for children from 0 to 8 years old; ii) community centers where they serve a population between 2 and 14 years old and; iii) open centers that take care of children from 9 to 14 years old. (Technical Unit of the Social Cabinet [UTGS], 2017, p. 7).

The government also manages projects related to the promotion and increase of productivity of small farmers or peasant agriculture. These projects are run by different institutions.

**Paraguay Rural** is a project that promotes integration and credit access to small farmers and small rural cooperatives that are associated with larger cooperatives. The project reaches around 17,000 rural families and 280 rural organizations in places (departments) like Concepción, San Pedro, Caaguazú, Guairá and Caazapá. **Paraguay Rural** is supported by two loans from the International Fund for Agricultural Development (IFAD) (FIDA, 2017, p. 6).

**Paraguay Inclusive Project (PPI)** was implemented by the Ministry of Agriculture (MAG) in 2013-2018 period. It aimed to “Support the sustainable insertion of poor rural families, ....., in value chains, through their representative social organizations, with a gender and environmental vision”. Funds from this project were provided by

IFAD and served nearly 14,000 families (FIDA, 2017, p. 8). *PPI II* is now in course with the same purpose of the first project (FIDA, 2017, p. 12).

**PRODERS** is a project started in 2009, funded by the World Bank and dependent on MAG. This project aims to improve the quality of life of small farmers and indigenous communities, supporting measures that strengthen their community organization, self-management, and insertion into the market and value chains. It offers both technical and financial assistance (CDE, 2017, p. 14).

This program managed to implement investment plans in 12 departments of the eastern region. As of 2016, the program has technically and financially assisted 21,554 small farmers (UTGS, 2017, p. 4).

**PRODERS** has potential impact on SDG1 since an improvement on small farmers production leads to income increases and to reduction of poverty levels. In terms of SDG2, this project contributes to improve nutrition through food production for self-consumption.

The main goal of MAG's Program for the **Promotion of Food Production for Family Farming** is to improve the quality of life of families of small farmers, increase both the quantity and quality of food, and the food security and food sovereignty of the nation (MAG, sf).

Target population of this program includes peasant families that live in rural settlements, communities of native people, families in rural areas in a situation of extreme poverty, and other families that belong to the small farming sector (MAG, sf). This program offers technical assistance in organization, production and marketing, rural education and transfer of incentives. The beneficiaries of the program reached a total of 88,741 persons by May 2016.

## 3 NATIONAL INDICATORS OF SDG 2

Since indicators for SDG2 in Paraguay lack continuous data sources, the official report provides only partial results.

Indicator	2011-2012	2015	2016	2017	2018
Proportion of households with poor caloric levels	32.5%				
Prevalence of growth retardation (low height for age, standard deviation <-2 of the median of the World Health Organization (WHO) child growth patterns) among children under 5 years old			5.9%		
Registered percentage of children under 5 with growth retardation or chronic malnutrition		12.1%	12.8%		
Prevalence of underweight (height weight, standard deviation <-2 of the median child growth patterns of the World Health Organization (WHO)) among children under 5 years old			1%		
Prevalence of overweight (height weight> +2 standard deviation from the median of the WHO Child Growth Standards) in children under 5 years old			12.5%		
Percentage of children under 5 years of age who are overweight and obese (height weight> +2 standard deviation from the median of the WHO Child Growth Standards)		9.4%	9%		
Number of local breeds classified according to their risk situation, absence of risk or level of risk of extinction unknown <sup>1</sup>					
<i>Total</i>		9	9	9	
<i>Risk</i>					
<i>Without Risk</i>				2	
<i>Unknown Risk</i>		9	9	7	

1 Related to goal 2.5 "By 2020, maintain the genetic diversity of seeds, cultivated plants and farm and domesticated animals and their corresponding wild species,..... through good management and diversification of seed banks and plants at national, regional and international level....."

Indicator	2011-2012	2015	2016	2017	2018
Number of animals of the main live-stock species of Paraguay (cattle, sheep, horses, suines, goats and birds) <sup>2</sup> .		19,105,458	17,912,301		
Agriculture Index for Public Expenditures. <sup>3</sup>		0.3%	0.4%		

Sources: DGEEC. Microdata - Surveys (EIG and CV) 2011-2012.  
MSPBS/DGEEC/UNICEF. MICS Survey Paraguay 2016.  
INAN – Food and Nutrition Surveillance System.  
MAG-VMG. Records of association of local breed producers  
SENACSA-SIGOR. Computerized Management System of Regional Offices, 2015.  
MH-SIGAF. Integrated Financial Information System 2015 – 2016.  
BCP. Statistical Annex-Economic Report – current prices (10-10-2017).  
Collected by DGEEC – SDG Indicators System.

<sup>2</sup> Ibid.

<sup>3</sup> Related to goal 2.a “Increase, even through greater international cooperation, investments in rural infrastructure, research and agricultural extension services, technological development and genebanks of plants and livestock in order to improve agricultural production capacity in developing countries, particularly in least developed countries ”

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This publication has been prepared with the financial support of the European Union.  
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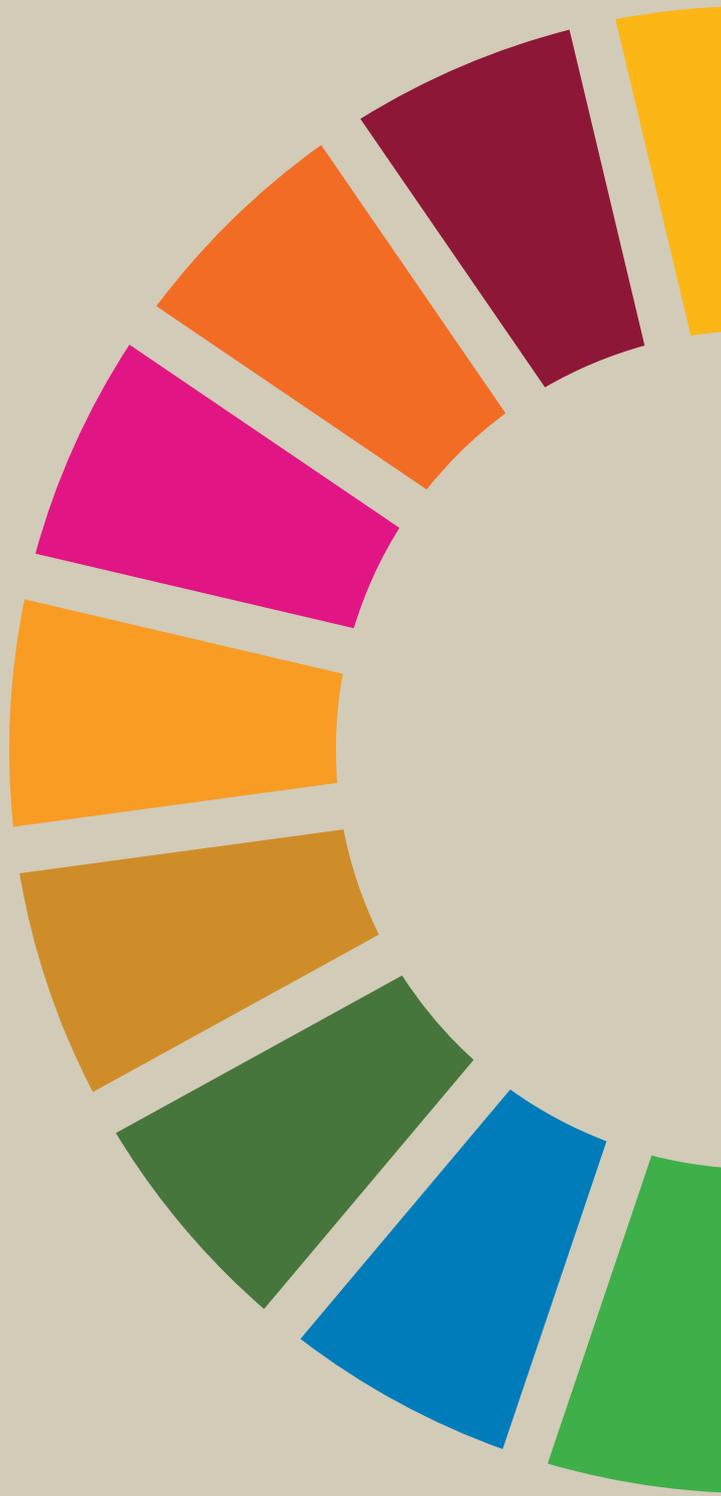


Thanks to Benjamin Boccia Galiano for his support and collaboration to the research team.

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Design and layout: Karina Palleros  
Print: QR Impresiones  
Asuncion, July 2019





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