Investment opportunities

AGRIBUSINESS



March 2018





Content

1.	Why inv	est in Agribusiness in Uruguay?	2
2.	Economi	ic importance of the Agro-industrial Sector in Uruguay	3
	2.1. Sec	tor Description	3
	2.1.1.	GDP Share	3
	2.1.2.	Foreign Investment	5
	2.1.2.1 \$	Some foreign investments in the sector	5
	2.1.3.	Land valorization	8
	2.1.4.	Employment	10
	2.1.5.	Exports	11
	2.2. Agr	icultural Sector	13
	2.2.1.	Soy	14
	2.2.2.	Rice	17
	2.2.3 Whea	at	19
	2.2.3.	Other grains	20
	2.3.Animal	Production	22
	2.3.1. Bo	ovine cattle	22
	2.3.2. Sh	eep farming	26
	2.3.3. Da	airy Sector	28
	2.4. Fruit S	ector	32
	2.4.1. Citru	s Fruits	32
	2.4.2. De	eciduous Fruit	34
	2.5. For	estry Sector	36
3.	Projects	approved by COMAP	37
	3.1.3. Se	ctor Indicators for the Agriculture Sector	37
4.	Institutio	ons and relevant stakeholders	38
5.	Outlook		42
6.	Annex		45
	6.1 Investn	nent promotion regime	45
	6.2. VA	Fexemptions for certain agricultural products	45
	6.3 Soil and	d Water Legislation	46
Ur	uguay at a	glance (2018) *	47
	Main Econ	omic Indicators 2012-2018*	47



1. Why invest in Agribusiness in Uruguay?

- >>> The Uruguayan economy has gone through 14 continuous years of growth, being also the most equitable country with the highest per capita income in Latin America. It is expected that in 2018 the country will maintain the trend.
- >> Uruguay has strong confidence from domestic and foreign investors. During the last decade it was the second country to receive Foreign Direct Investment (FDI) in relation to GDP (5.3%), and the second country in profits reinvested in total profits (61%) in Latin America.
- >> The Law of Promotion and Protection of Investments No. 16.906 establishes that foreign investment receives the same treatment as national investment, and there are no restrictions on the repatriation of capital, nor on the transfer of profits, dividends and interest.
- World demand for agricultural products will remain firm in the coming decades, mainly supported by the increased consumption of proteins, fats and sugars in developing countries¹.
- >>> Uruguay is part of the main food exporting region in the world (together with Argentina, Brazil and Paraguay)².
- >> Uruguay has 16.4 million hectares suitable for agricultural use, about 93% of the country's total land area. In addition, land value has substantially increased in Uruguay, multiplying by 10 in the last 15 years.
- Our country has comparative advantages in the production of food at an international level. The country has a recognized international prestige in the productive process and the quality of several agricultural products.
- >> In particular, cattle farming have a traceability system that allows to know all the information of the product from the birth of the animal until it reaches the end consumer.
- >> The system of traceability or georeferencing is also applied in other sectors such as poultry meat, honey, citrus or vineyards³.
- >> Uruguay has great potential to increase the production of agro-industrial goods. With a population of 3.49 million people, the country produces food for 28 million and is expected to produce enough food for 50 million people in the coming years.
- In Uruguay there are no limitations or restrictions on exports of agro-industrial goods. The agroindustrial sector had a participation of 79% of the total of goods exported by Uruguay in 2017.
- Uruguay maintains a strict policy of sustainable agricultural development, which includes, among others, plans for responsible use and management of soils, and plans for sustainable milk production.
- >> The agro-industrial sector is one of the most innovative. In the production of food and leather, 25% of the total investments were made in innovation and almost 30% of the professionals in innovation activities were employed⁴.

¹ Source: FAO – <u>"El estado de los mercados de productos básicos agrícolas"</u>

² See: <u>Seguridad Alimentaria Global y Recursos Naturales Agrícolas – GPS, 2013.</u>

³ Source: MGAP (Ministry of Livestock, Agriculture and Fisheries



2. Economic importance of the Agro-industrial Sector in Uruguay

2.1. Sector Description

2.1.1. GDP Share

Uruguay has experienced an uninterrupted growth process that led to quadruple its per capita income (measured in current US dollars), which rose from US\$ 4,229 (2002) to US\$ 15,062 (2016)⁵. Uruguay's GDP has grown uninterruptedly for 14 years, displaying a remarkably higher dynamism than that of previous decades⁶.

The agricultural sector and the agro industrial chains fostered the aforementioned dynamism since they have had a key participation in the economy. The agro-industrial sector comprised approximately 12% of the Uruguayan GDP in 2016. This participation was shared equally between the primary sector (agriculture, livestock and forestry) and the industries related to agriculture, with 6% each⁷. In addition, other sectors such as "Construction" and "Transportation, Storage and Communications" are also strongly associated with the development of the national agricultural and agro-industrial sector (see Chart Nº1).

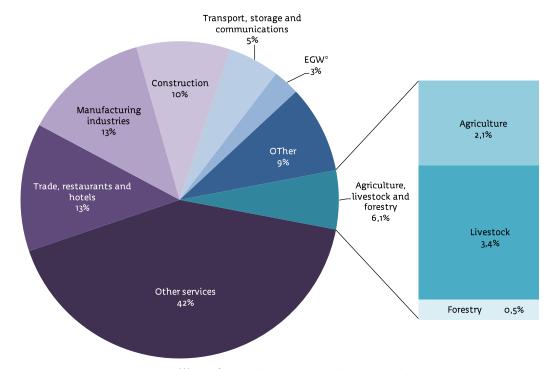


Chart № 1: Uruguay's GDP by activity sector (Part. % 2016)

Note (*): It refers to electricity, gas and water supply. Source: Uruguay XXI based on BCU.

⁴ Source Survey of Innovation Activities in the Uruguayan Industry – ANII (2012).

⁵ Source: Uruguay XXI based on BCU.

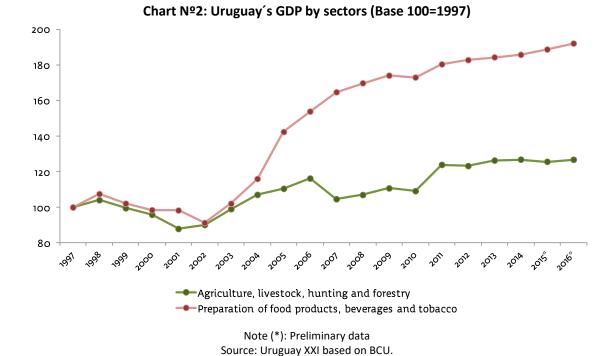
 $^{^{6}}$ Source: Uruguay XXI based on BCU and Cepal. The average anual growth of the economy was 1.1 % in the 80s and

⁷ Industries related to agriculture also include: "Manufacture of food products, beverages and tobacco (an estimate of the GDP of manufacturing beverages and other food products was deducted from the GDP of this sector) and "Manufacture of paper and paper products and cardboard". Source: Uruguay XXI based on BCU.



In that regard, according to estimates from Red MERCOSUR-FAO, the agricultural sector had the greatest diffusion effects on the economy as a whole at the beginning of this decade compared with the rest of the productive activities. The multiplying effects of agricultural activity on production and employment were above the average of all branches of activity⁸.

As Chart 2 below shows, the agro-industrial sector experienced a significant expansion during the last decade. In particular, the GDP of "Agriculture, Livestock, Hunting and Forestry" grew 2.3% annual average between 2002 and 2016.



Within the agricultural sector stands out the **dynamism of the agricultural sector** led by the cultivation of soybeans.

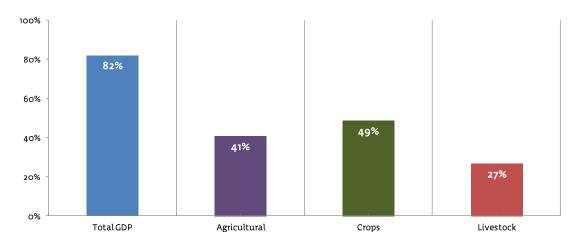


Chart Nº3: GDP - Cumulative real growth 2002-2016

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⁸ Sources: DECON – 2009 – <u>"¿Cuál es la importancia real del sector agropecuario sobre la economía uruguaya?"</u> ECLA – 2014 – <u>"Cambios en la dinámica agropecuaria y agroindustrial del Uruquay y las políticas públicas"</u>



2.1.2. Foreign Investment9

The increase in the international price of commodities during the last decade, Uruguay's appropriate business climate and clear comparative advantage in the production of land intensive goods had a significant impact on the inflow of Foreign Direct Investment (FDI) to the national agricultural and agro-industrial sectors. The FDI by sector and in particular for the case of "Agriculture, livestock, forestry and fishing", reached US\$ 3,915 million in the period 2002-2016.

The agricultural sector received the most investments, mainly related to the incorporation of technology in grain production. In this regard, Argentinean companies had a decisive influence. Some of the largest grain traders in the world have also settled in the country (ADM, Bunge, Cargill and Louis Dreyfus, Noble Group, Nidera, among others).

On the other hand, FDI stocks in the food processing industry amounted to US\$ 602 million between 2005 and 2016, with a heavy slowdown in 2016, product of loans returned by these industries¹⁰.

2.1.2.1 Some foreign investments in the sector"

>> Cargill



The commercial activities of the North American corporation Cargill include the purchase, sale, processing and distribution of grains and other agricultural goods, the cultivation and sale of livestock feed, and the sale of

ingredients for the pharmaceutical industry. It is present in 66 countries in the world and in Uruguay it operates through Crop Uruguay S.A. since 2005.

Archer Daniels Midland (ADM)



It is a US corporation dedicated to food processing and commodity trading that operates in more than 270 plants worldwide. It has been present in Uruguay since 2008, and is engaged in the wholesale trade of grains, seeds and oleaginous fruits.

Marfrig



It is the third largest food company in Brazil. It is present in 22 countries and exports to more than 100, being the fourth largest producer of meat in the world. In 2006, the Marfrig group acquired the Tacuarembó Slaughterhouse. Between

⁹ For the FDI data, the Central Bank of Uruguay was used as source. Data from the years 2002 to 2011 correspond to the Balance of Payments Manual 5th edition, while the data from 2012 to 2016 correspond to the 6th edition, which implies a change in the methodology.

¹⁰ Source: Uruguay XXI based on BCU. This figure considers the sector of "Production of Food and Beverages" (5th edition), and "Production of beverages" (6th edition) in its entirety, without excluding the soft drink production branch, which does not produce products of agricultural origin.

¹¹ It should be noted that both companies in the forestry sector and the productive structure of the sector are analyzed in greater detail in the <u>Forestry Sector Report</u> of Uruguay XXI.



2006 and 2007 Marfrig Group also incorporated four other productive units in Uruguay: the San José Industrial Plant, located in the southwest of the country; the Salto Industrial Plant, to the northwest; the Colonia Industrial Plant, on the south coast and the Fray Bentos Industrial Plant, in the west region on the banks of the Uruguay River.

>> Minerva

The Minerva slaughterhouse is the second largest meat exporter and the largest exporter of livestock in Brazil. The company has plants in Brazil, Paraguay and Uruguay, from where it exports to 100 countries. In 2011 Minerva made the purchase for US\$ 65 million from the Pul slaughterhouse and the entire company Pulsa S.A. In 2014, it also acquired the Carrasco Slaughterhouse, while in 2017 it acquired the Canelones slaughterhouse.

Lactalis

The group of French origin Lactalis bought in 2015 the two milk plants of the company Indulacsa that previously belonged to the Mexican group La Esmeralda. The company has 200 industrial plants in the world. Since 2011, it owns 83.3% of Parmalat, the main Italian dairy company with a presence throughout the world.

>> UAG

UNION AGRICULTURE GROUP largest exporters of meat, rice and wool worldwide. The company has been listed on the Montevideo Stock Exchange (BVM) since 2013, being one of the largest companies listed there.

>> Louis Dreyfus Company

The company opened its first office in Uruguay in 2002 and started its activities in the agroindustrial sector of the country. It works with 4 platforms: Cereals, Oilseeds, Rice, Fertilizers and Inputs. The company is present around the world, produces and transports 81 million tons of commodities. In Uruguay it employs around 120 people¹².

>> Estancias del Lago



The project that is linked to the Bulgheroni family, who already has several investments in Argentina and Uruguay, was based on the construction of a mega-tambo in the department of Durazno, which has the largest installed capacity in the country. The entrepreneurship

occupies an area of 37,000 has, where the different processes are integrated and include agriculture, intensive cattle ranch and the most modern industrial plant. At full capacity there

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¹² Source: <u>LDC</u>



will be 13,000 cows in production, of which 450,000 liters of milk per day will be obtained. Also, the industrial plant will produce 20,000 tons of milk powder a year¹³.

Camil Alimentos S.A. - SAMAN





Saman is the main rice company in Uruguay. It handles 50% of the country's rice production and is the main export company in the sector in Latin America. In 2007 the company was acquired by the Brazilian

company Camil Alimentos¹⁴.

Breeders & Packers Uruguay S.A.



State-of the-art slaughterhouse, built in the center of the country (Durazno). It has the most modern and safe technology applied to meat processing. The investment was made by English capital, and acquired in 2017 by the Japanese group NH Foods.

Maltería Oriental SA



Maltería Oriental S.A. is a company with 75 years of experience in the production and marketing of malt and brewing barley. It has its industrial plant 12 km. north of the port of Montevideo and an average distance of 200km. of their barley crops. It works with a consolidated network of

distributors and producers, which allows it to cover its brewing barley requirements annually. It also has its own varietal development program. The malt produced is destined to prestigious breweries in Brazil, Venezuela, Chile, and Paraguay. The company belongs to the Transoceanica group of Chilean capitals.

Garmet S.A.

It is a company of Argentine investors that is dedicated to the Garmetsa commercialization of fertilizers, seeds, agrochemicals, herbicides, fungicides, insecticides and auxiliaries. The firm is one of the main grain exporters in the country.

Nirea (Frigorífico San Jacinto S.A.):



Company dedicated to the production and export of beef, which operates in the country since 1963. Currently 50% of the share capital belongs to Argentine capital. In Uruguay the company is one of the main exporters of beef and producer of Premium lambs¹⁵.

AB InBev (Malteria Uruguay S.A)



The Belgian-Brazilian company is the world's largest beer manufacturer, with a share of the world market close to 25%. Produces brands like: Budweiser,

7

¹³ Source: <u>estanciasdellago.com</u>

¹⁴ Source: <u>www.saman.com.uy</u>

¹⁵ Source: http://www.nirea.com.uy



Stella Artois, Beck's, Staropramen, Leffe, Hoegaarden, Skol, Brahma, Quilmes, Labatt's Blue, Michelob, Harbin, Sedrin, Cass, Klinskoye, Sibirskaya Corona, Gilde, Chernigivske and Jupiler. In October 2001 he bought the brewery Patricia, which marked the beginning of the group's operations in Uruguay¹⁶.

>> ADP (Agronegocios del Plata S.A)

It is a company dedicated to livestock and grain production, the commercialization of seeds, and the provision of specialized services for the agricultural sector, including technical advice. Currently the company is one of the largest grain producers in Uruguay.

2.1.3. Land valorization

The important development of the agriculture and cattle farming sector in Uruguay is clearly reflected by the evolution of the price of land.

Data provided by the Direction of Agricultural Statistics (DIEA - MGAP) regarding the purchase of land for agricultural use shows that the average price of transactions in 2002 was US\$ 385/ha, while in 2017 it rose to US\$ 3,716/ha, being the second highest in history. Thus, in 15 years the price of land has practically increased tenfold, which, since Uruguay has 16.42 million hectares of agricultural use, makes the estimated total value of land in Uruguay reach US\$ 61.017 billion in 2017, a remarkable increase from US\$ 6.322 billion in 2002.

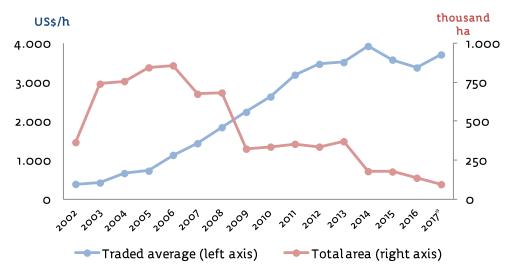


Chart №4: Average Hectare Price for Agriculture/Livestock Use (US\$/ha)

Note (*): Data from the first semester. Source: Uruguay XXI based on DIEA – MGAP.

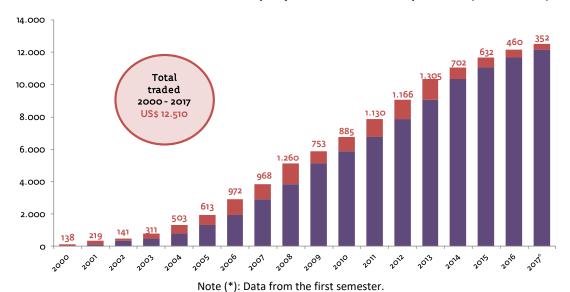
Between 2000 and the first semester of 2017, 36,362 operations for the purchase of land were closed, which involved 8.1 million hectares. The total amount accumulated in this period reached US\$ 12.51 billion and in particular during the first semester 2017, it amounted to US\$ 352 million.

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¹⁶ Source: <u>http://www.abinbev.com</u>



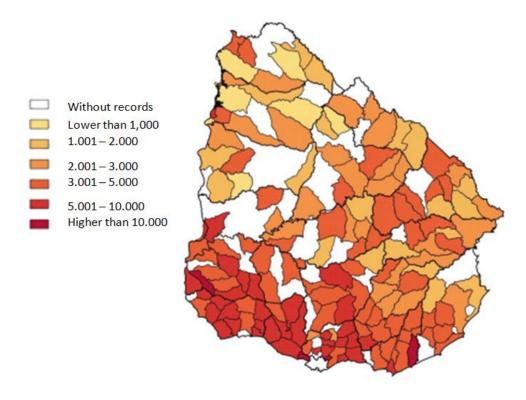
Chart №5: Total amounts transacted per year in land sale and purchase (US\$ Million)



Source: Uruguay XXI based on DIEA – MGAP.

Map N°1 shows the average price of land sold in the first half of 2017. It shows a higher value on the south-west, traditionally agricultural and agricultural/dairy area. The highest price coincides with the areas with the highest productivity of the land in these activities.

Map № 1. Average sale price of land - U\$S/ha, by judicial section. First semester 2017



Source: Prepared by DIEA based on information of DGR. Link

Similarly, the average price of land lease has shown a remarkable dynamism since the beginning of the last decade. From its lowest, US\$ 24/ha per year in 2002, the cost of leasing



land increased fivefold thus reaching US\$ 113/ha in the first semester 2017, keeping the average price regarding the previous year.

Chart № 6: Average Price of Land Leases (US\$/ha per year)

Source: Uruguay XXI based on DIEA - MGAP.

2.1.4. Employment

The number of people employed in the agro-industrial sector amounted to approximately 221,000 in 2017, accounting for 15% of the total labor force in the country during that year. The sector of Agricultural Production employed 72% of workers. Within this subsector, the largest number of employed people fall under the "Cattle Raising" (62,500) and "Growing of cereals (except rice), leguminous and oil seed crops" (26,700) categories.

Table Nº1: Employed Personnel -Agro –Industrial Sector 2017¹⁷

	N° of people
Agricultural Production	158.305
Processing of food products	47.586
Forestry Sector	15.353
Total	221.244

Source: Uruguay XXI base don from BPS as of August 2017.

It is worth noting that these figures refer only to direct employment. In this regard, the agroindustrial sector has also had an impact on the generation of indirect jobs and the development of localeconomies.

Likewise, approximately 51,400 companies are registered in the sector, of which 90% correspond to agricultural production companies

¹⁷ Source: Uruguay XXI based on data from BPS to August 2016. The following divisions of the ISIC Rev. 4: 01, 02, 03, 10, 11, 12, 16 and 17 were included in the agro-industrial sector.



2.1.5. Exports

With a reduced domestic market of only 3.48 million people, the growing production of the country's agro-industrial sector is destined to exports. In this regard, the total food exports of the country cover the food needs of 28 million people in the world¹⁸, and it is expected to produce food for 50 million people in the coming years.

The agro-industrial sector plays a key role in the country's external insertion, which is reflected in the 79% share in the total value of goods exported by Uruguay (2017). In that year, agroindustrial sales were around US\$ 7,176 million. The main export product within the agroindustry was beef, followed by wood pulp and soybeans¹⁹.

On the other hand, if food exports are analyzed specifically, they reached US\$ 4,955 million in 2017, equivalent to 55% of the total. Beef, soy, dairy and rice were the main foods exported by Uruguay in 2017.

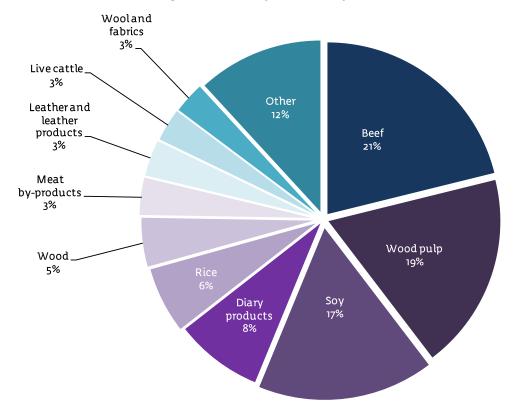


Chart Nº7: Agroindustrial Exports -Main products 2017

Source: Uruguay XXI based on data provided by National Customs Office, Nueva Palmira and Montes del Plata

In terms of destinations, 35% of agro-industrial sales went to China, the main destination for beef, pulp, soybeans, wood, meat by-products, and wool. Brazil is the second export destination, positioning itself as the first destination for dairy products, fish, rubber, sheep meat, malt and barley.

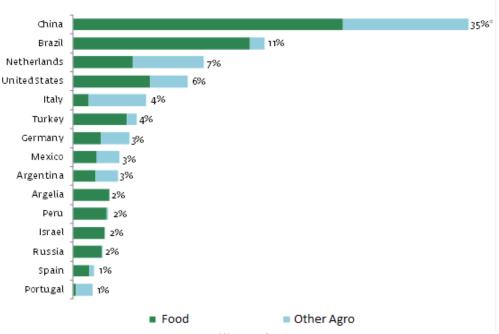
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¹⁸ Source: MGAP – 2017 - <u>Uruguay Agrointeligente – Los desafíos para un desarrollo sostenible</u>.

¹⁹ Source: Uruguay XXI based on Dirección Nacional de Aduanas, Nueva Palmira y Montes del Plata.







Note (*): Out of scale

Source: Uruguay XXI based on data provided by National Customs Office, Nueva Palmira and Montes del Plata and Penta Transaction.

The amounts exported to the European Union were registered for each country of destination, but if they are added, they constitute the second destination for agro-industrial products, with an amount close to US\$ 1,361 million, and being the main destination for leather, citrus fruits, equine meat, honey, non-citrus fruits, and fruit preparations.



2.2. Agricultural Sector

In the last decade, Uruguay has witnessed great changes in the agricultural sector. This transformation was led in particular by the agriculture sector that registered a strong expansion of production as a result of an increase in demand and international prices

Figure Nº9 shows the evolution of agricultural GDP and shows the remarkable growth it had since 2002, including the peaks between 2011 and 2013.

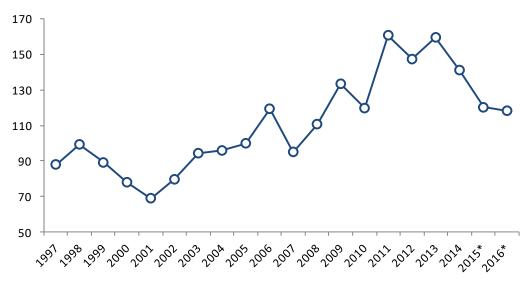


Chart №9: Uruguay's agricultural GDP (Base 100= 2005)

Note (*): Preliminary Data.

Source: Uruguay XXI based on BCU.

Uruguay has historically been a livestock country; however, between 2000 and 2011²⁰, the 138% increase in land for agricultural use stood out. According to DIEA data, agriculture currently occupies 10% of total agricultural land²¹. This expansion was led by the remarkable increase in the area planted with soybeans, which in turn affected the growth of the area planted with wheat. The arrival of foreign investments (mainly from Argentina) led and accelerated the modernization of the agricultural sector²².

²¹ Source: "Regiones agropecuarias del Uruguay" DIEA – MGAP - 2015

The greatest contributions seem to be identified in the "organizational and process" innovations rather than in the "agronomy" of the crop. Source: Information provided by Opypa.

13

²⁰ Source: Agriculture/Livestock Census from DIEA – MGAP.



Chart Nº10: Uruguay's main crops – Sown area (Thousand ha)

Source: Uruguay XXI based on DIEA and Deloitte.

2.2.1. Soy

The cultivation of soy began to gain increasing relevance in Uruguay from the growth of global demand led by China. The rise in international prices that was recorded as of the first decade of this century, together with the new technologies for planting and seeds, and foreign investments in the sector, generated important increases in the area sown and in the yield of the crops. As a consequence of this phenomenon, in recent years soy has been one of the main export products of the country.

Since the 2003/04 harvest, the oilseed crop is the largest area sown in the country²³, currently occupying more than 60% of the total agricultural land. After a poor performance in the previous harvest, the yields of the 2016/17 harvest reached record levels, which exceeded 3,000 kg / ha. This yield is 56% higher than that of the previous harvest and was explained by optimal climatic conditions for the development of the crop. Although the area was reduced by 12%, the increase in yields was enough to obtain a record production of approximately 3.3 million tons, marking a record in volume produced. Additionally, if the quality of the production is analyzed, it is located at a much higher level²⁴, given the percentage of burned and pre-germinated grains of the previous harvest.

14

²³ It is expected that in the next years sown area will not experience great growth, due to the implementation of plans for the responsible use of soils. This is related to the goal of sustainable production and defense of the country's natural resources. See Section 3.3.

²⁴ Source: Deloitte – "Soybean Cultivation"



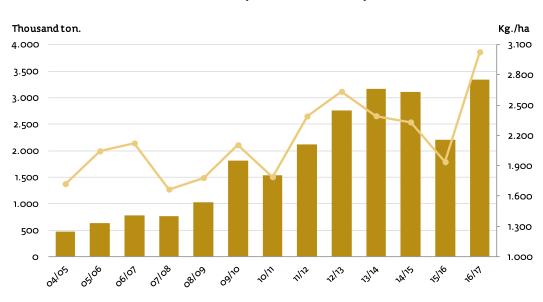


Chart Nº11: Soy - Production and yield

Yield (right axis)

Production (left axis)

In line with the general rise in the price of commodities that occurred in international markets, the average price of soybeans exported by Uruguay grew 152% between 2001 and 2017 (Chart N°12). Notwithstanding the foregoing, since the end of 2012 there have been significant drops in the international prices of oilseeds, as a result of the increase in international supply. The international price maintained in 2017 the downward trend, product of a high global harvest, especially in Brazil. Specifically, the price of soybeans in Chicago was down 15% year- on-year.

Regarding exports, the last decade showed unequal behavior per year, but recorded a progressive growth of export volumes, with a peak of 3.5 million tons exported in 2013. Since 2009, soybeans are one of the three main products of the country's export, and **Uruguay has positioned itself among the six main exporters of soy in the world**²⁵.

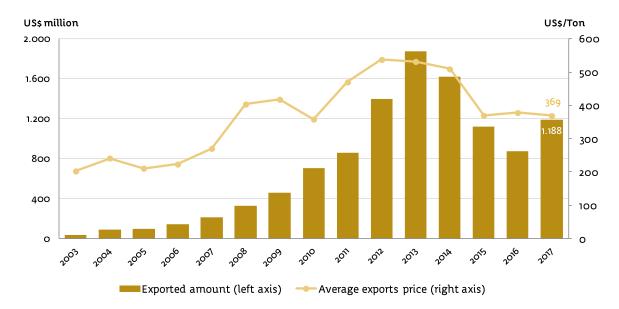
In 2017, the total export of soybean reached 3.2 million tons (more than 95% of the produced), and the amounts were around US\$ 1,189 million. Uruguayan soybeans reached 17 markets in 2017²⁶ soy ranks third in products exported by Uruguay.

²⁵ Source: TradeMap - 2017 - Ranking: USA, Brazil, Argentina, Canada, Paraguay y Uruguay.

²⁶ This number may be undervalued, given that the Netherlands functions as an intermediate destination for part of the soybean, which is subsequently distributed to other European destinations. This phenomenon is commonly known as the Rotterdam effect.

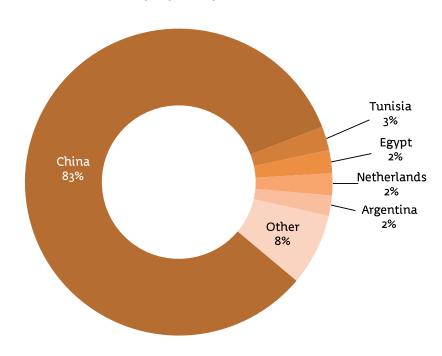


Chart №12: Soy Exports and Average Export Price (US\$ Million and US\$/ton)



As for the destination of Uruguayan soy exports, China has remained in the first place. In particular, in 2017 the Asian country increased its share by 10% compared to 2016, receiving 83% of exports.

Chart Nº13: Soy exports by Destination – Part. % 2017



Source: Uruguay XXI based on data from National Customs Office and Nueva Palmira.

In 2017, the phytosanitary requirements protocol for soybeans exported from Uruguay to China began to apply. The document formally established certain sanitary requirements, most of which were already required from China, and the procedures to be followed in the face of any phytosanitary event were also determined. In the first year of implementation of the new



protocol there was no case of rejection of shipments of soy²⁷, which shows that the protocol strengthened cooperation and exchange between the two countries

In addition, from the official visit to China in 2016, an agreement is reached between China and our country - through INIA and the Agricultural Academy of China - for the joint production of non-transgenic soy for human consumption²⁸. China has numerous varieties of the oilseed, a fact that would allow Uruguay to access varieties that generate higher yields by attending to its adaptability to the soil²⁹. Currently, soybeans exported by Uruguay are used in the Asian country as animal feed, so this advance could open new niches of consumption in the world's largest oilseed consumer.

On the other hand, Uruguay exports soybeans to the United States for planting, which exceeded 5 thousand tons in 2017. The production supplies this market in particular, given that the production process and the commercialization of these are in counter-season³⁰. The production and subsequent export of seeds is an alternative of greater added value in the agricultural sector.

Finally, for the next harvest it is estimated that the planted area will grow slightly, while the record yields of the previous harvest would not be equal. These factors would result in a production 14% lower than that of the 2016/17 harvest³¹. On the other hand, a slight improvement in the reference prices is expected, according to the World Bank data. In this way, soybeans would remain the main crop of the country.

2.2.2. Rice

Rice cultivation began to gain importance in the country after 1970. Moreover, in the 80s exports started to increase in connection with successive trade agreements made with Brazil. For decades, rice remained the country's main agricultural export product, a position which was lost in the last decade against soy exports.

The use of state-of-the-art technology throughout the value chain is a feature of the industry which earned Uruguay an excellent international reputation as rice producer and exporter. Care for the environment and sustainability of rice systems have been a priority for this sector, and today studies and indicators confirm its low environmental footprint and product the sown area for rice was 165,000 hectares in the 2016/2017 harvest, which represented a 2% increase over the previous harvest. In turn, the technological improvements implemented in the last decade allowed the yield of the harvest to be one of the highest in the world. In the past harvest, the yield reached was 8,571 kg / ha, 8% higher than in the 2015/16 harvest, and close to the record of 8,686 kg / ha in the 2014/15 harvest.

17

²⁷ Source: MGAP - <u>Link</u>

Most of the Chinese soybean demand is used for animal feed. The one destined for human consumption has a non-transgenic origin.

²⁹ Source: El Observador: "Uruguay y China producirán soja no transgénica para alimento humano"

³⁰ Source: Opypa Yearbook, 2017, p.183.

³¹ Source: Opypa Yearbook, 2017, p.187.



Thousand ton. Kg/ha 9.000 1.800 1.600 8.500 1.400 8.000 1.200 1.000 7.500 800 600 7.000 400 6.500 200 6.000 01.08 08.09 0970 233 37A

Chart Nº14: Rice- Average Production and yield

Yield (right axis)

Production (left axis)

In this way, Uruguay's accumulated rice production exceeded 14.7 million tons in the last decade. The historical maximum occurred in the 2010-11 harvest that coincided with the largest planted area of the period. However, the highest yield was in the 2014/2015 harvest. In the last harvest (2016/2017) the production totaled 1.4 million tons, 8.1% higher than the previous one³².

In the last decade, rice export amounts grew 60%, driven by both growth in volumes and an improvement in placement prices. Although in the previous two years, the average export price experienced a negative trend, in 2017 the average price recovered, reaching US\$ 454 / ton, 3.1% higher than the previous year.

The high technology applied in the whole agroindustrial chain and the effective integration between all the components of the same have allowed to position Uruguayan rice as a "premium" product in international markets, obtaining prices per ton similar to those of the relevant markets in quality matter of rice.

In 2017 this crop was the second agricultural export product of the country with a value of US\$ 448 million. These amounts position the country as one of the world's leading exporters: in 2016³³ it ranked ninth in the world, being also the main exporter in Latin America.

-

³² Source: Uruguay XXI based on DIEA

³³ Source: TradeMap. – Last data available for international comparison

US\$ million

600

500

400

300

200

100



100

US\$/Ton 700 600 500 400 300 200

2012

201A

Average export price (right axis)

2013

2015

Chart Nº15: Rice exports

Source: Uruguay XXI based on DNA.

2008

2009

2006

2001

Exportad amount (left axis)

In terms of the main destination markets, in 2017 sales went to Peru (26%), Brazil (19%) and Mexico (13%).

2.2.3 Wheat

200A

Wheat has traditionally been the main winter crop in Uruguay. It was generally associated with satisfying the domestic market, and exporting surpluses, if any. Since the agricultural rebound of the last decade in the country, wheat has grown remarkably.

In the last harvest, the planted area fell sharply (-35%), and was located in the area of 215,000 hectares. As a result, production totaled around 757,000 tons, 36% less than the previous harvest. Although yields remained stable and relatively high-close to the record of the 2015/16 harvest-they did not compensate for the sharp drop in the area occupied by the crop.

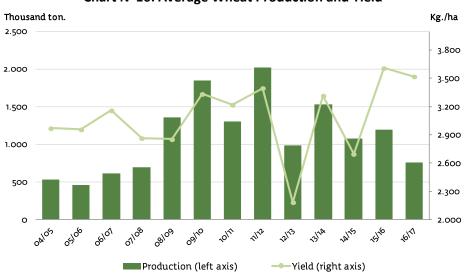


Chart Nº16: Average Wheat Production and Yield



When considering external sales, wheat is the third grain in terms of value exported in recent years. Up to 2012, exports increased significantly, but in 2013 there was a significant drop in production. In 2017, cereal exports continued the negative trend, both in value and volume. The total was around US\$ 40 million, and 230,000 tons (62% and 58% lower than the previous year, respectively).

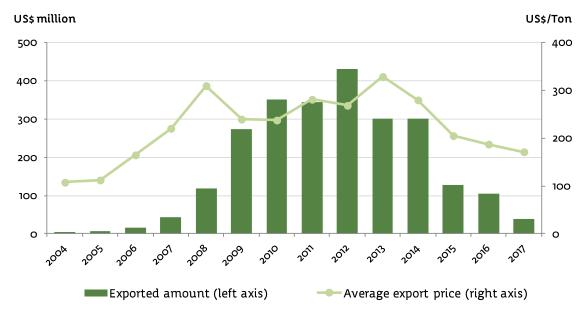


Chart Nº17: Wheat exports (Millions US\$)

Source: Uruguay XXI based on the National Customs Office.

Wheat sales were concentrated in Algeria, which in 2017 represented 62% of the total exported. Brazil (13%) and the Netherlands (10%) were other important cereal destinations³⁴³⁴.

2.2.3. Other grains

Barley and Malt

The production of brewing barley in Uruguay has been historically destined almost entirely to the export and subsequent production of malt by the Brazilian industry. Currently, the sowing of forage barley for export has gained momentum. Phytosanitary agreements have recently been signed to enter different markets, including China.

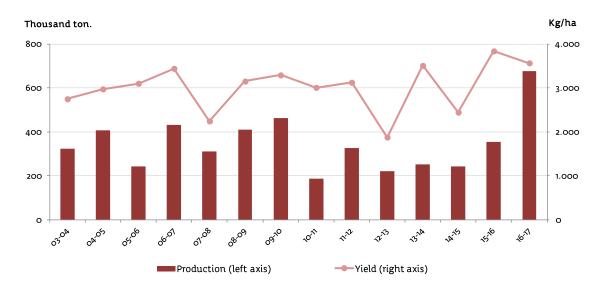
In the last harvest, the area planted was record and reached 190,000 hectares, more than doubling the area of the 2015/16 harvest. This, added to a performance that remained at a high level from a historical perspective, generated a 91% increase in production, with 678,000 tons.

-

³⁴ Source: DNA and Nueva Palmira.



Chart Nº18: Barley - Production and yield



Source: Uruguay XXI based on DIEA and OPYPA.

In the last decade, malt exports averaged 280,000 tons, and in the last year, the amounts totaled US\$ 184 million. Average export prices in 2017 kept the downward trend that they have shown since 2011. As it is intra-company trade with Brazilian brewing companies, 73% of the value exported from Uruguayan malt was concentrated in the northern country.

Sorghum

In recent years there has been an increase in the area planted with sorghum as a result of the greater use of cereal for animal feed, adding later the demand of ALUR³⁵, that uses this crop as an input for the production of biofuels.

For the production of ethanol the company prioritizes the use of this cereal as raw material since it combines several advantages such as high yield, low cost and great hardiness. In particular, for its commercial plan 2018/19, ALUR plans to triple the volume of the oilseed, which would reach 75,000 tons³⁶.

Table Nº2 - Yield by raw material in biofuels in Uruguay

Biofuel	Raw Material	Litre/ha		
Biodiesel	Ricin	1.320		
Biodiesel	Rapeseed(Sorghum)	1.100		
Biodiesel	Sunflower	890		
Biodiesel	Soy	420		

Source: Prepared by Uruguay XXI based on data from IICA – 2010

 35 ALUR is a company dedicated to the development of biofuels among other activities: $\underline{www.alur.com.uy}$

21

³⁶ Source: Blasina y Asociados - <u>"ALUR quiere triplicar volumen de colza; área total puede aumentar 50%."</u>



ALUR plants in Paysandú and Bella Unión have a joint production capacity of 100 million liters per year and use sorghum and sugar cane as raw materials. Bioethanol is supplied to ANCAP for mixing in the different varieties of fuels.

Thousandton. Kg/ha 400 5.000 4.000 300 3.000 200 2.000 100 1.000 o1⁻⁰⁸ 06,01 og.09 09,10 7A,755 Ф^Л 11.72 37A ф^Л Production (left axis) Yield (right axis)

Chart Nº19: Sorghum – Sown Area, Production and Yield

Source: Uruguay XXI based on DIEA.

2.3.Animal Production

2.3.1. Bovine cattle

Cattle raising is one of the most important activities in Uruguay. Its sustainable production system, based on animals that live outdoors all year round, and that are fed on natural pastures, makes Uruguayan meat natural, safe, highly nutritious, extra lean and with a distinctive flavor³⁷. It also has great international prestige, exporting to nearly 50 countries, which positions Uruguay as **one of the 10 main exporters of beef in the world³⁸**.

The sector has a system of traceability of production that allows knowing all the information of the product, from the birth of the animal until it reaches the end consumer. This allows certifying the quality and harmlessness of the food, which has had a great acceptance in the most demanding international markets and has positioned Uruguay as a world reference in the process of traceability of meat products³⁹.

Despite increasing competition from agriculture for the use of land, cattle farming have not lost its importance in recent years. Although several productive units have been converted to agricultural plantations, the number of cattle has remained relatively stable during the last decade. On the other hand, slaughter of animals shows a growing trend since 2013. The stock

³⁷ Source: Uruguay XXI based on INAC.

³⁸ Source: Uruguay XXI based on a Trade Map.

³⁹ Source: Uruguay XXI based on INAC.



of cattle was reduced in 2017 to 11.7 million heads. Meanwhile, the work continued to grow and reached 2.3 million heads⁴⁰.

Chart Nº20: Cattle Stock and Slaughter

(Thousands/Head of Cattle) 12.000 2.700 2.500 11.500 2.300 2.100 11.000 1.900 1.700 10.500 1.500 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 Cattle(left axis) Slaughter (right axis)

Source: Uruguay XXI based on DIEA and INAC

In 2010 there was a drop of about 650,000 heads in the cattle stock due to a low procreation rate. However, in the following years the stock recovered. Beef production for the year ending June 2017 was 1.2 million tons, standing 13% higher than the previous year's production.

Table №3: Beef production (Thousands of tons/live cattle – Agricultural year)

	10/11	11/12	12/13	13/14	14/15	15/16	16/17*
Slaughter	939	972	1035	950	1.019	1.034	1.171
Live cattle exports	90	20	19	26	42	66	70
Stock variation	-22	73	14	96	40	67	-84

Note (*): Projected Source: Uruguay XXI base don OPYPA.

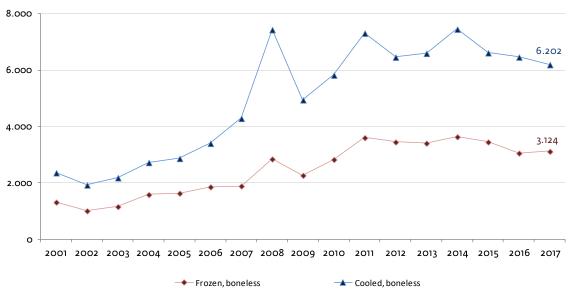
The analysis of average export prices shows a higher level of chilled meat on frozen meat. This difference is explained by the markets and the cuts that supply the different types of refrigeration. The chilled meat focuses on premium cuts that are directed to the European Union, while frozen meat is mainly directed to China, a destination that has relatively low import prices. Within the performance of each niche, the price of chilled meat decreased 4% in the last year, while frozen meat experienced a growth of 2% in relation to the 2016 average.

-

⁴⁰Source DIEA



Chart №21: Beef Average Export Price (US\$/ton- dressed weight)



Beef has traditionally been Uruguay's main export product. In 2017 the beef returned to lead the ranking of products exported by the country.

As seen in Table Nº4, exports have been very dynamic in the last decade. Since the foot-and-mouth crisis in 2001, the country has managed to recover almost all of its markets and even new ones have been opened

In 2017, exports of beef totaled US\$ 1,511 million, which meant a growth of 6% compared to the previous year. In this way, beef had a 17% share of total sales.

Table Nº4: Uruguay - Beef exports

Year	Mill US\$	Thousand tons. Dressed weightl	Prom price. US\$/ton
2007	804	395	2.034
2008	1.194	376	3.176
2009	954	390	2.445
2010	1.103	366	3.014
2011	1.295	339	3.822
2012	1.391	379	3.671
2013	1.291	355	3.637
2014	1.459	365	3.996
2015	1.419	387	3.668
2016	1.432	434	3.299
2017	1.511	447	3.381

Note: Includes headings 0201 - Fresh or chilled beef and 0202 - Frozen beef. Source: Uruguay XXI based on DNA (amounts) and INAC (volume).



The following graph shows that the increase in the value exported in the last decade was based on the price increase, an increase associated mainly with sales to the European Union. Both the volume and the average price showed positive performances in 2017. In particular, both indicators grew at a rate of 3% in the year-on-year comparison.

Chart Nº22: Beef Exports Index 41 (Base 2003=100)

400
350
300
250
100
50
Average price

Thousand tonnes

Source: Uruguay XXI based on the National Customs Office and INAC.

In 2005, the main destination represented 64% of meat exports, while in 2017, the first market concentrated around 40%. In 2017, the sales of chilled beef (25% of the total exported amount) went mainly to the European Union and Brazil. On the other hand, exports of frozen beef (75% of the total exported amount) are more diversified and are led by China, North America, Israel and the European Union.

China is the main individual destination of Uruguayan meat. Their participation, measured in terms of exported values, went from 0% to 40% in nine years, even though the average export prices in this market are lower than the total average. In terms of volume, this participation was higher than 50% in 2017. This increase in demand is based on a structural change in Chinese society, with a growing urbanization and consequently, a shift towards a diet with a higher protein content.

In addition, the commercial traceability agreement between the National Meat Institute (INAC) and the China Certification & Inspection Group (CCIC) was signed in December 2017. The objective of the agreement is to put the consumer in China in contact with the characteristics of the production processes in Uruguay by reading a QR code on the products. This seeks to generate greater added value and a link of consumer loyalty. The CCIC is an independent organization dedicated to providing inspection, verification, certification and testing services and has the accreditation of the Chinese institution that controls the quality of the products (AQSIQ)⁴².

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 $^{^{41}}$ It includes codes 0201 y 0202.

⁴² Source: MGAP



We are continuously working towards the opening of new markets, and we are currently in the final stages of negotiations to enter the Japanese market. The technical report on Uruguayan beef, carried out by a Japanese Sub-Committee, was approved in December 2017. Uruguay received a very positive balance regarding the sanitary control of beef. The opening of the Japanese market would be an important milestone since it is the only country of high demand in sanitary matters to which there is still no acces^{43.}

Chart №23: Chilled Beef Exports by destination (Part. % 2017)

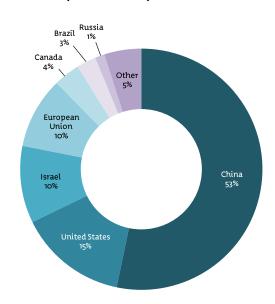
European
Union
70%

United States
7%

Switzerland
4%

Russia
1%
Other
1%

Chart №24: Frozen Beef Exports by destination (Part. % 2017)



Source: Uruguay XXI based on National Customs Office

In parallel, starting in 2010 and due to the start of purchases from Turkey, exports of live cattle were strongly boosted. Until that year, the relationship between exportation of live cattle / slaughter was around 3%, while that year amounted to 10%, and in 2017 it was around 14%. In this way, Turkey became the main destination of live cattle, along with China and Egypt in specific years. In 2017, the total export exceeded 332,000 animals, a record for the country⁴⁴. Currently, exports are composed of calves and steers for rearing, which are finished at destination. Also, there is an alternative export current that responds to a demand for genetics by China or Brazil, for dairy heifers⁴⁵.

2.3.2. Sheep farming

The sheep sector has a long tradition and prestige in Uruguay. The quality of the product positions Uruguay as one of the 11 main exporters of sheep meat in the world and the first in the region. In addition, at the regional level it is also the second exporter of combed wool (fifth in the world). In the last 20 years, the demand for wool has dropped worldwide and this has caused the stock of sheep to have fallen in all the main producing countries, even in Uruguay.

⁴³ Source: MGAP

⁴⁴Source: Blasina y Asociados - <u>"Exportación récord de ganado en pie en 2017 con Turquía como principal comprador"</u>

comprador".

Source: Yearbook 2017 - OPYPA



After 17 years of negotiation between the United States and Uruguay, the first shipment of sheep meat with bone to that destination departed in November 2017. The opening of this market for Uruguayan sheepmeat also represents an opportunity for other possible future markets.

Thousand Heads tons 12 160 140 10 120 8 100 6,5 6 80 60 4 40 2 20 o 2004 2005 2009 2011 2012 2013 Wool production (right axis) Meat production (thousand of tons on foot) / (Right axis) → Million heads (left axis)

Chart Nº25: Evolution of Sheep Stock and of the production of shorn wool and sheep meat.

Source: Uruguay XXI based on DIEA and INAC.

In this sense, the production of sheep meat has experienced increases in the last 2 years, while exports have accompanied this trend only in the last year. In 2017, exported volumes grew 36%, and totaled US\$ 63.8 million. In the coming years, a greater increase in exports of sheep meat could be expected, especially as a result of the opening of the US market. The Brazilian market concentrated 56% of Uruguayan exports of this product in 2017. Sales were complemented by placements in China (18%) and the European Union (14%).

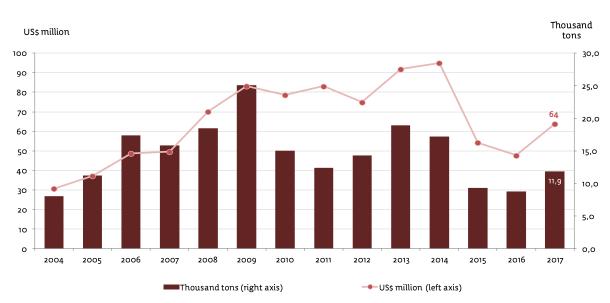


Chart Nº26: Sheep Meat Exports

Source: Uruguay XXI en based on National Customs Office.



Regarding wool, it is observed that although the volume exported showed an average slowdown in the last decade of 5.6%, the average price of the same had an upward trend (4.8% annual average in the same period), which made it possible to compensate in part for that fall. In 2017, 31,330 tons of wool was placed abroad, which meant a foreign currency income of US\$ 211 million.

Table Nº5: Wool Exports - Uruguay

Year	Millions US\$	Thousands tons	Average price (US\$/ton)		
2007	232	53	4.408		
2008	206	41	4.992		
2009	175	44	3.960		
2010	232	47	4.971		
2011	281	38	7.422		
2012	242	34	7.166		
2013	263	41	6.347		
2014	254	40	6.325		
2015	248	37	6.638		
2016	205	29	7.015		
2017	211	31	6.742		

Source: Uruguay XXI based on the National Customs Office

When observing the destination markets for Uruguayan wool, China and the European Union stand out, with 43% and 31% shares, respectively.

Within the Uruguayan market, some fineness or specific qualities are complemented by imports of wool in temporary admission, which in turn complements the production of the top industry. This type of imports totaled US\$ 45 million in 2017, almost exclusively corresponding to dirty wool.

2.3.3. Dairy Sector

The dairy sector plays an important role in the economic structure of Uruguay, being one of the items that generate the greatest added value. Given its geographical location, the country has excellent natural conditions of soil and climate that make it suitable for the production of milk and give it comparative advantages. In particular, it stands out for its ability to obtain quality milk at a low production cost from pastoral and open-air system.

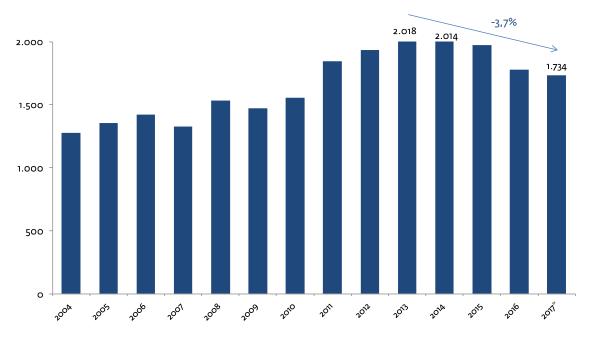
Milk production in the country grew uninterruptedly between 1975 and 2013. As can be observed in the following graph, the milk remission⁴⁶ reached a historical record in 2013 thanks to the 2,018 million liters remitted, almost doubling the production of the beginning of the decade. In the last harvests after that year, the remission has shown a downward trend, although it maintains historically high levels.

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⁴⁶ Milk captured by industrial plants.



Chart Nº27: Milk delivered to plants (Millions of liters)



The great dynamism shown by the sector occurred in a context of strong increase in productivity. The primary sector has continuously incorporated technical advances, both in pastures, livestock supplementation, machinery and equipment, sanitation and genetic improvement of the rodeo.

The industrial sector, made up of transnational and national companies -and led by a national cooperative company- has continuously expanded its installed capacity, working together with the primary sector. This has allowed these companies to capture all the milk produced, diversify their production in the domestic market and export various products.

With an internal market with one of the highest consumption in Latin America (255 liters per capita per year⁴⁷), any increase in production goes to export, which currently accounts for 70% of the volume produced annually⁴⁸.

In the last decade, exports grew by an average of 5% per year, and in particular, they reached US\$ 591 million for 2017, 4% higher than the previous year. The increase of 25% in average export prices, managed to compensate the fall of 17% in the volume exported.

 $^{^{\}rm 47}$ Source: DIEA – Statistical yearbook 2016. Liters of milk equivalent to the year.

⁴⁸ Source: INALE.

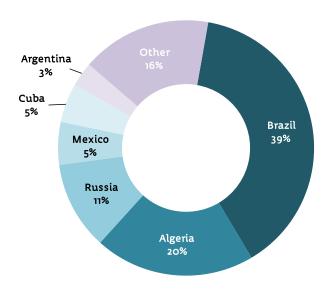


Chart Nº28: Dairy Sector exports



In the last two years, Venezuela and Brazil, two decisive markets for the dairy sector showed strong retractions in their purchases, product in both cases of an uncertain economic and political situation. Venezuela has problems since 2016, when purchases were 52% lower than those of the previous year⁴⁹. In 2017, the Brazilian market was the most affected; sales to that destination were reduced by 34% -mainly, in any case, as the main destination of the sector. Given this scenario, the emergence of Algeria as an export destination was important, tripling its purchases compared to 2016 and totaling US\$ 120 million. In addition, sales to Russia and Cuba also had a positive impact and helped cushion the fall of the northern market.

Chart Nº29: Exports of Dairy Products by Destination (Part. % 2017)



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⁴⁹ Payment problems were added as a result of currency restrictions. Part of the exports were in the framework of an official agreement to exchange food for the cancellation of the debt between Ancap and PDVSA. The agreement included 44,000 tons of milk powder and 12,000 tons of cheese.



The average export price reached a record in 2014 at US\$ 3,906/ton. However, by 2015, prices began suffering a retraction as a result of the increase in production in the main exporting countries – particularly the European Union, due to the abolition of dairy quotas- and lower demand from China.

However, in 2017 prices returned to the path of growth, as a result of a slowdown in production and the recovery of demand. In this way, the average price of domestic exports grew 25%, reaching US\$ 3,074 / ton in that year.

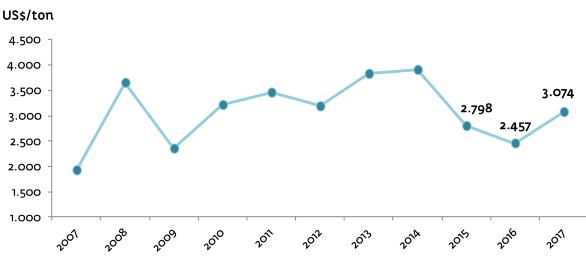


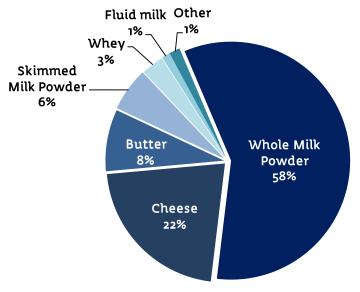
Chart №30: Average Export Price of Dairy Products (US\$/ton)

Source: Uruguay XXI based on DNA

If dairy exports are analyzed by products, it is observed that whole milk powder (LPE) maintained its traditional leadership in the ranking of products, despite a 25% retraction in the amounts exported. Following are the sales of cheeses - which remained stable - and butter (with growth of 21% year-on-year).



Chart Nº31: Dairy Exports by product (Part. % 2017)



2.4. Fruit Sector

2.4.1. Citrus Fruits

Citrus production has a long tradition in the country and much of it has been destined for export. The effective area used for planting citrus was 15,000 hectares approximately in 2016, half of which corresponded to oranges Citrus production in the 2016 harvest was 252.000 tons, which implies a 22% retraction compared to the previous season.

+8% ■ Grapefruit Lemon Tangerine Orange

Chart Nº32: Citrus Production (Thousand Tons)

Source: Uruguay XXI based on DIEA-MGAP.

For its part, the destination of citrus production has been variable in recent years. Exports continue to be the main destination of production despite having registered a reduction in its share in the total.

Uruguay XXI
INVESTMENT, EXPORT AND COUNTRY
BRAND PROMOTION AGENCY

Industry
27%

Fresh
exports
38%

Domestic
market /
losses
35%

Chart Nº33: Destination of citrus production

Source: Uruguay XXI based on DIEA-MGAP.

Despite the decreases in volumes produced in recent years, the increasing trend of international prices has led to an 8% increase in the value of citrus exports in the last decade

Table Nº6: Citrus Fruits Exports and average export price

Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
FOB US\$ mil.	74,4	76,4	73,1	85,4	74,2	60,1	79,2	91,7	72,3	82,8	80,1
Tons	147.327	124.854	130.295	150.307	121.640	93.496	110.894	119.903	95.215	106.193	97.110
Average Price (U\$S/Ton)	505	612	561	568	610	643	714	765	759	780	825

Source: Uruguay XXI based on National Customs Office.

Nearly 33% of exports in 2017 went to the European Union, the main destination of the sector, although its share tends to fall due to the exclusion of Uruguay from the SGP, with the consequent increase in tariffs.

On the other hand, the commercial negotiations carried out in 2013 enabled exports to the US market. In 2017, exports to that destination were around US\$ 26 million and had a similar share to the European Union in the total exported. The sector values very positively the opening of this market, for which it had to adapt the logistics and the productive processes to comply with the agreed conditions. Among these advances, an operational traceability system stands out in all its export lots, which covers from the place of production to the final destination^{50.} It is expected that the Uruguayan supply will continue to improve, particularly advanced with the varietal replacement, and in this way, continue to diversify the destination markets⁵¹.

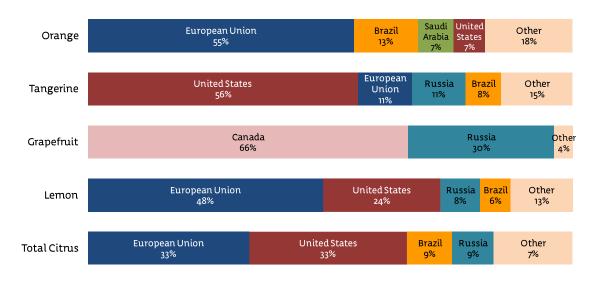
Chart №34: Citrus Exports Share by Destination – 2017

- -

⁵⁰ Source: INIA <u>Link</u>

⁵¹ Source: Opypa- Yearbook 2015





Source: Uruguay XXI based on data provided by National Customs Office.

2.4.2. Deciduous Fruit

The main varieties of deciduous fruit produced in Uruguay are apples, pears, peaches, plums and quince.



Chart Nº35: Land Area and Production of Deciduous Fruit

Source: Uruguay XXI based on DIEA-MGAP.

Traditionally, most of these fruits are destined for consumption in the domestic market and the export impulses manage the surplus of the domestic market with a volume close to 4% of the total produced in 2016.



Table № 7: Production by Species (in thousands of tons-by agricultural year)

Others Year Apple Pear **Peach** 2005 77,3 18,4 14,8 11,9 2006 61,3 17,7 15,8 10,9 66,9 18,7 17,6 2007 8,9 51,3 2008 15,8 18,6 6,7 58,8 13,3 17,3 2009 8,0 52,2 21,4 2010 18,7 9,4 2011 50,3 18,3 21,9 11,6 45,6 8,7 16,8 8,0 2012 52,8 2013 11,9 17,2 6,7 2014 55,5 12,6 15,4 7,7 2015 37,7 5,0 12,9 7,5 51,3 15,8 6,7 2016 18,6

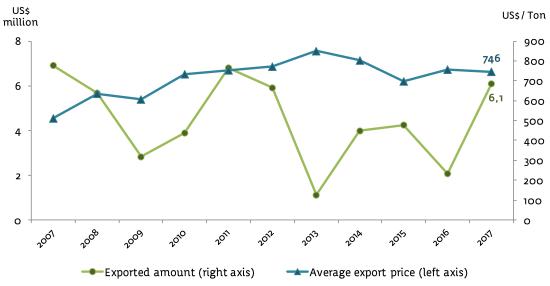
Table Nº8: Yield by Species (Kg./plant)

Harvest	Apple	Pear	Peach
2004/05	33	35	12
2005/06	24	36	12
2006/07	24	36	13
2007/08	17	30	12
2008/09	20	26	12
2009/10	17	33	15
2010/11	23	23	15
2011/12	16	28	15
2012/13	15	14	13
2013/14	20	22	15
2014/15	21	23	14
2015/16	14	9	12

Source: Uruguay XXI based on DIEA-MGAP.

During the period, deciduous fruit exports experienced its lowest point in 2013, due to climate issues. This led to a reduction in exports to less than 1,500 tons. From that year on, exported volumes increased at a rate which made it possible to absorb the drop in average export prices. In 2016, the volumes placed suffered due to adverse weather conditions, to later recovered in 2017 and totaled 8,170 tons, with a value of US\$ 6 million. Three quarters of these sales corresponded to apples, and the rest to pears.

Chart Nº36: Deciduous Fruit Exports (Mill U\$S)



Source: Uruguay XXI based on National Customs Office



2.5. Forestry Sector

The Uruguayan forestry sector has shown a high level of dynamism in the last decade, exhibiting an average annual growth rate of 7.8% in that period. The exports of the sector have accompanied this process, which was strongly associated with the installation of the UPM and Montes del Plata pulp mills, which allowed an important added value, and led to a jump in the placements of the sector as of 2008.

The plantations and other activities linked to the forestry activity are regulated by the Forest Law (Nº 15,939 of 1987), and its regulatory decrees and subsequent modifications. This law declares national defense, improvement, expansion, the creation of forest resources, the development of forest industries and, in general, forestry economy.

Chart №37: GDP forestry, logging and related services (Index 2004=100)

Note (*): Preliminary data
Source: Uruguay XXI based on data provided by Banco Central del Uruguay.

The stability of the legal framework, coupled with a national code of good forestry practices, is the basis of business confidence in Uruguay. Added to this, climate and soil conditions in Uruguay allow international competitiveness to be assured, given that they are similar to those of the main forestry enterprises in the southern hemisphere.

Forestry sector is analyzed in detail in the Forestry Sector Report, prepared by the institute.



3. Projects approved by COMAP

The institution responsible for receiving applications to be included under the investment promotion regime is the Private Sector Support Unit (UNASEP in Spanish), which, upon collecting all the information required by the Commission for the Implementation of the Investment Law (COMAP) determines the Ministry and agency in charge of the appropriate evaluation, depending on the nature of the project and the corresponding activity⁵².

In the Agribusiness sector, the total value of investments promoted between 2008 and 2017⁵³ amounted to approximately US\$ 4.478 billion. Agribusiness accounted for approximately 25% of the total investments promoted by COMAP in recent years.

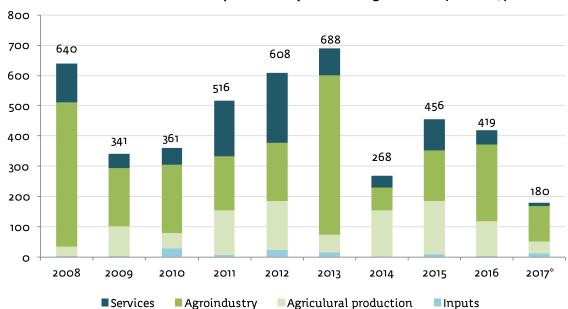


Chart Nº 38 - Investment promoted by COMAP -Agribusiness (Mill. US\$)

Note (*): Period January- September Source: Yearbook 2017 – OPYPA based on data by UNASEP

3.1.3. Sector Indicators for the Agriculture Sector⁵⁴

When presenting a project in order to obtain tax benefits under Law No 16,906, companies must select a set of indicators under which the project is to be assessed. Among possible indicators are those which generally apply for all projects and others which are specific to each sector. In particular, for projects in the agricultural sector evaluated by the Ministry of Livestock, Agriculture and Fisheries (MGAP), industry indicators to consider are:

- Investments in adaptation to climate change ⁵⁵.
- Training of ruralworkers⁵⁶.

⁵² http://comap.mef.gub.uy/

⁵³ Source: Yearbook 2015 – OPYPA based on data from UNASEP

⁵⁴ Source: <u>CPA Ferrere</u> y <u>Unasep</u>.

⁵⁵ It is one of the most used by companies. Includes investments that aim to adjust production systems, based on climate stimuli, seeking to reduce the impact of climate variability and change in economic activity.



• Differentiation of products and processes⁵⁷.

Out of these three indicators, "Investment in adaptation to climate change" is usually the most used for projects approved in Agribusiness. Another widely used indicator, although not specific of the sector is "Increasing indirect exports."

4. Institutions and relevant stakeholders

Uruguay has traditionally boasted a good relationship between the public and private sector for the designand implementation of policies. The agricultural sector is agreatex ample in that regard.

General Direction for Agricultural Services-MGAP



It is responsible for organizing, developing, and executing policies for the quality and control of plant products and agricultural inputs, as well as facilitation and management of the marketing of grains. <u>Web.</u>

General Direction of Livestock Services- MGAP



Operating within the MGAP, this Direction acts as the one responsible for guiding and implementing health policies, ensuring sanitary hygienic condition of food and animal products and

supporting investment in the productive sector. Web.

>> General Direction of Rural Development-MGAP

This Department is responsible for designing policies for rural agricultural activities. Web.

>> General Farming Directorate - (DIGEGRA)-MGAP

This agency is responsible for the development of policies seeking to encourage the progress of the farming sector and the improvement of living conditions for the farming population. Web.

>> National Energy Directorate-MIEM



This agency is responsible for designing, conducting, coordinating and evaluating energy related policies. Web.

This indicator seeks to measure the participation of employees in certain training and technical development programs, such as those provided by INEFOP or CETP.
 For the measurement of this indicator, official certifications or international recognition are considered, referring

⁵⁷ For the measurement of this indicator, official certifications or international recognition are considered, referring to attributes of the product or the productive process, such as cases of sustainable forest production or organic meat.



National Milk Institute - INALE



It is responsible for promoting sustainable development of the dairy product chain in Uruguay. It was set up in 2008 by public and private sector stakeholders and advises on the design of dairy policies by articulating ideas and generating information for decision making. Web.

National Meat Institute – INAC



Institute formed by the main public and private referents of the sector. Its objective is to promote, regulate, coordinate and monitor the activities of production, processing, marketing, storage and transportation of meat of all kinds, their offal, by-products and meat

products. It also aims to coordinate production and export activities, understood as part of the same economic activity, through meat policies. <u>Web.</u>

>> National Wine Institute - INAVI



This agency is in charge of executing wine related policy through advising, designing and outlining the economic development of the

industrial process since its inception. It monitors the production processbyregulating volume and quality, aiming at the industrial development of the sector. Its roles also include the promotion, development and research of the wine industry. Web.

>> National Seeds Institute - INASE



The institute seeks to promote seed related activities through the use of high quality products, encouraging seed exports and research and promoting the enactment of provisions for the protection of the

industry. It is responsible for protection of cultivars and for carrying the national register of cultivars. It also authorizes private laboratories and manages the import and export of seeds, among other functions. Web.

National Logistics Institute - INALOG



This institute provides a space for articulation where sector stakeholders lead the process of promotion, professionalization, innovation and training required to turn Uruguay into a Logistics

hub to boost national development, Web.

>> CREA – FUCREA Uruguayan Federation



This federation gathers farmers from different areas (Agricultural and cattle farmers, Livestock farmers and Dairy Farmers) with the aim of promoting the improvement and development of the sector. The CREA method is based on group work among farmers. Through exchange and discussion on specific



issues, producers achieve business and family solutions. Web.

>> Rural Association of Uruguay-ARU



The association includes agriculture producers from all over the country and aims to defend and promote the interests of agricultural production and its complementary and related industries. Founded in 1871, it is the oldest institution in the field of agriculture in the country. Web.

Rural Federation



The **Rural Federation** is a federal institution of rural producers' associations whose aim is to increase and improve agricultural production in Uruguay, promote soil care and conservation and to encourage the settlement of families in rural areas as well as the balanced distribution of the country's production. Web.

>> National Colonization Institute



The institute seeks to promote a rational subdivision of land and its proper exploitation. It also encourages the settlement and welfare of rural workers, thus promoting the increase and improvement of agricultural production. Web.

>> National Institute for Agriculture Research-INIA



The institute seeks to promote sustainable agricultural development through the generation and adaptation of knowledge and technologies. Through the development of a series of technological proposals the

institute promotes sustainable intensification, competitiveness and the international insertion of Uruguay. Web.

>> Pando Technology Hub Institute



The Institute belongs to the School of Chemistry of the University of the Republic. It is dedicated to research and development in the areas of chemistry, biotechnology, environmental and material science, seeking to improve the productive sector through improved techniques and inputs. Web.

>> Chamber of Commerce and Export of Agriproducts



This chamber is devoted to the study and promotion of agricultural and livestock production and its marketing, processing and exports. It also seeks to be the liaison between the public sector and the unions that are part of the institution. Web.

Uruguayan Wool Center



The Center coordinates livestock production complexes and integrates producers in competitive agro-industrial chains, providing global solutions (commercial, financial, technological, and information related) to



improve –in collaboration with the cooperatives- the socioeconomic level of producers in the cooperative system. Web.

>> Uruguayan Wool Secretariat- SUL



Institution financed and directed by wool producers, whose main purposes are the promotion and defense of fiber in all its aspects: Production, commercialization and industrialization. Web.

Rice Cultivators' Association - ACA



This Association was formed to protect, guide and represent the interests of rice growers and defends and promotes the cultivation of rice and related industries. Web.

Uruguayan Civil Association for the Protection of Plant Breeders - Urupov



A private association founded in 1994 with the aim of protecting the rights of plant breeders and ensuring genetic progress Web.

>> National Commission for Rural Development



The National Commission for Rural Development is the main organization of small and medium producers in rural areas, throughout the country. At present, it includes 98 Rural Development Societies, Agrarian Cooperatives and other organizational forms which in turn bring together 15,000 family producers from all over the country. This commission combines union and promotional actions, seeking social and economic development of the rural

environment. Web.

Federated Agricultural Cooperatives



CAF represents a network of more than 20 agricultural cooperatives and rural development societies with more than 13,000 associated producers, along the whole country.

Through the Union and governance action, CAF participates in developing public policies in several topics related to the agricultural activity. <u>Web</u>.



5. Outlook⁵⁸

The agro-industrial sector has been one of the main drivers of the growth experienced by Uruguay in the last decade. While the international context partly prompted this growth, investments and transformations in the Uruguayan agribusiness enhanced that expansion.

The price of commodities is a determining factor for the situation of the sector. The fall in these prices since the end of 2014 had negatively affected the sector in previous years. However, the price of raw materials showed a growing trend since mid-2016, which allowed a partial recovery of depressed prices. In addition to weather conditions that pushed up food prices, some production costs were reduced. In the long term, the international prices of the agricultural sector would not show significant variations, since both the growth of production and the demand would face a slowdown, which would promote stability.

Table №9 - Evolution of Prices of Commodities - World Bank

World Bank	Year		2015	2016	2017	2018	2019	2020
	Var. %	Meat	-10,7%	-11,1%	6,9%	-0,2%	-0,2%	0,0%
		Soy	-20,7%	4,1%	-1,5%	2,3%	2,2%	2,2%
		Rice	-8,7%	2,6%	1,0%	0,8%	0,7%	0,7%
		Wheat	-28,4%	-18,1%	4,8%	2,3%	2,8%	2,2%

Source: Uruguay XXI based on Banco Mundial

The outlook shows population growth in developing countries as the main factor for growth in food demand. Likewise, the increase in per capita income in these countries will be decisive. This increase has in turn generated changes in consumption habits. The demand for calories increases, followed by demand for proteins, sugars and prepared foods⁵⁹. These transformations occurring in the international context place Uruguay in a privileged position as a supplier of quality food to meet the growing needs of the global population.

Agricultural Products

The main destination for the world's agricultural production is food. Although it is estimated that food demand will continue to grow, it is also expected that this growth will progressively decelerate. This is explained by the less dynamic growth in world population, as well as by the level of income in emerging economies. However, demand for certain agricultural products will present great dynamism, as is the case for meat, fish and dairy products. Livestock based production will in turn encourage the growth in demand for animal feed.

As for the factors influencing price determination, and with regard to supply, it is expected that yields will improve according to current trends. In developed economies, technological frontiers progressively hamper improvements in yields. Meanwhile, developing economies have margins for improvement which may be complemented by more efficient agricultural practices, within which improvements in Asia and Latin America will be crucial for expanding the supply.

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⁵⁸ Source: Uruguay XXI based on OPYPA – MGAP, Deloitte, FMI, FAO, and World Bank.

⁵⁹ Source: Uruguay XXI based on "Agriculture Outlooks 2016-2025" - MGAP and FAO.



On the demand side, population growth slows down at the same time as income in developing countries, where consumers show less willingness to spend on food. The trends for each agricultural product would show particular perspectives, so some considerations can be made below.

In the case of **Soy**, global production is expected to continue increasing, but at lower rates than last decade. In the case of oilseeds, in addition to the general factors to be taken into account (climate, oil price), the expansion of production depends on the availability of land, which varies depending on environmental protection legislation. As for prices, estimations indicate a slightly increasing trend, reflecting the higher content of protein flour, demanded for the growing production of livestock. The national outlook is a retraction in soy exports, explained by lower yields which will generate a lower volume.

With regard to **wheat**, all over the world, recent harvests stood out for being exceptionally high, especially in 2014, and this abundance of cereals generated a slowdown in demand, which in turn affected prices, which tended to decline. However, this trend reversed as of 2017. In the case of Uruguay, wheat is expected to maintain the downward trend, due to a new fall in the sown area, and lower than normal yields

The high yields obtained by the national **brewing barley** in the last harvests, would not be repeated in the next season, affected by adverse weather conditions. Likewise, a decrease in the sown area is expected. The sum of these factors allows foreseeing difficulties to satisfy the offer of the national malting industry.

For **rice**, the reference prices for the future show relative improvements; although at the local level a retraction is expected in the sown area, and yields that would remain stable. Internationally, rice production is expected to increase 14% by 2025, driven by Asian production -especially in India, Indonesia and Vietnam- although, as in Uruguay, the area planted will be limited.

Animal production: meat, wool and dairy.

FAO estimates that global consumption will continue to rise, driven by the demand of developing countries, with their population growth, urbanization and resulting dietary changes as main explanations. A particularly strong increase of the consumption of poultry is expected.

International **meat** prices have remained above the historical average in the last years, especially in the case of beef. However, different trends are expected for the different types of meat. In the short term, a growing trend is projected for the prices of pork and sheep meat⁶⁰.

At the national level, the **beef** scenario will be determined by the progress of live cattle and slaughter of females. In this sense, the breeding system is under pressure in the replacement of bovine heads that keep the stock.

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 $^{^{60}}$ Source: Outlooks for the Price of commodities at short term – August 2016 – IMF



As for **wool**, international demand is expected to remain at current low levels and —along with the relative retraction in prices⁶¹- external sales are expected to decrease at national level. On the other hand, it is estimated that meat prices will be driven by lower world production, which added to the opening of new markets (United States) makes us expect higher exports in the next year.

In the case of dairy products, international demand -especially Chinese demand- generated an increase in international prices. In Uruguay, it is expected that the remission to plants will increase, and that the prices in the short term will remain stable.

In summary, projections by Uruguay XXI show a growth in the Uruguayan agricultural sector, with positive results expected in a large part of the analyzed products, which will be eventually determined according to climatic factors and prices⁶².

Table Nº10 - Uruguay's exports

Projections 2018							
	Million US\$		Variation				
		Value	Volume	Price			
Beef	1.526	2%	A	=			
Pulp	1.453	10%	=	A			
Soy	999	-16%	_	A			
Diary products	590	1%	A	=			
Rice	444	0%	_	A			
Timber	388	20%	A	A			
Meat by-products	256	4%	A	A			
Other agricultural	1.471	1%	-	-			
Total	7.126	1%					

Source: Estimation of Uruguay XXI based on OPYPA, Deloitte, World Bank

Finally, the agro-industrial sector in Uruguay shows a solid production capacity, which allows the country to overcome global adverse conditions. Moreover, it has great potential to continue growing and consolidating itself as a supplier of quality food for the most demanding markets worldwide.

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 $^{^{61}}$ The price may vary depending on the fineness of the wool.

⁶² Uruguay XXI, as an agency to promote exports and investments, prioritizes the Agribusiness and Forestry-Timber sector. The activities of the institute linked to these lines of work can be found in the <u>institutional schedule</u>.



6. Annex

6.1 Investment promotion regime

Uruguay has kept an active policy with regard to the promotion of investment in the country. **Law No.16.906** (1998) declares the promotion and protection of national and foreign investments a matter of national interest. One of its main items is that under the law foreign investors enjoy the same incentives as local investors; there is no discrimination with regard to taxation or restrictions on the transfer of profits abroad.

The Law has been updated by Decrees 455/007 and 002/012. For investment projects regardless of activity sector, which are presented and promoted by the Executive Power, it is possible to obtain an exemption from the Income Tax on Economic Activities (IRAE by its Spanish acronym) from between 20% and 100% of the amount invested, according to the type of project and the resulting score of a matrix of indicators. The single national rate for IRAE is 25%. Fixed assets and civil works are also exempted from Wealth Tax (Impuesto al Patrimonio in Spanish) and VAT is recovered from purchases of materials and services required for the works. Additionally, the law also exempts the importation of fixed assets, declared noncompetitive of the domestic industry from taxes and duties.

Additionally, in February 2018, the Ministry of Economy and Finance announced a series of measures aimed at stimulating investment and employment⁶³. One of the measures includes changes in the evaluation matrix of the projects that are presented to make use of the fiscal benefits foreseen in the investment promotion regime.

The creation of employment, together with research and development and innovation, will be weighted with a higher score, so that a higher rate of tax exemption can be obtained than with the current regime.

In addition, the exemption percentage for investment projects that are presented between March 2018 and February 2019 will be increased by 10%, and at least 75% will be executed by December 2019.

Finally, it is expected that a Bill will be presented to Parliament to exempt all taxes (including VAT on imports), from goods destined to integrate the cost of machinery and equipment for agricultural use, as well as parts and accessories⁶⁴.

6.2. VAT exemptions for certain agricultural products

In Uruguay, the Executive Branch has the capacity to apply exemptions on value added tax (VAT) to the transfer of several articles, including sheep meat and fish. In turn, Law No. 18,132

⁶³ See more: https://www.mef.gub.uy/innovaportal/file/23910/9/gacetilla-de-prensa.pdf

⁶⁴ This exemption will be granted provided that the main activity of the company is effectively the production of parts, spare parts and / or agricultural machinery and provided that the goods have been declared non-competitive of the national industry.



empowers the Executive Branch to exempt the VAT rate on poultry, pork, rabbit and offals thereof⁶⁵.

6.3 Soil and Water Legislation

The use of land and water is regulated by Law No. 15,239, which declares the use and conservation of water and soil with agricultural/livestock purposes as a national interest. Moreover, Uruguay has declared irrigation for agricultural purposes as a matter of national interest as well under Law No. 16,858. Both laws have ancillary regulations⁶⁶.

The transformation of the Uruguayan agricultural sector in the last decade generated greater risk of soil erosion. Within this context, the implementation of Plans for Responsible Use and Management of Soils aims to prevent and control soil erosion and degradation⁶⁷. This legislation contributes to Uruguay's goal of having sustainable agricultural production systems.

Additionally, Law No. 17,283 regulates the management of waste derived from the use of chemical or biological products in agriculture, horticulture and forestry, and is regulated by Decree 152/013.

⁶⁵ Recently, examples of this exemption have been given. Decree No. 126/013 of April 24, 2013 decreed the extension of the exoneration of VAT in force on disposals of poultry, pork, sheep and rabbit from April 1, 2014 to March 31, 2015.

⁶⁶ Relevant legislation:

⁻ Decrees No. 333/004 and Decree No. 405/008 that regulate Law No. 15,239, and Law No. 18,564 that introduced amendments.

⁻ Decree-Law No. 14,859 in which the water code is approved.

⁻ Decree No. 335/004 that establishes which are the competent bodies in water matters.

⁻ Decree No. 404/001 that regulates Law No. 16,858.

⁻ Resolution of the MGAP of 05/14/03

⁶⁷ Source: OPYPA Statistical Yearbook - 2014



Uruguay at a glance (2018)*

Official name	Republica Oriental del Uruguay				
Geographical location	South America. bordered by Argentina and Brazil				
Capital City	Montevideo				
Area	176.215 sq mts. 95% of its territory is productive land apt for farming exploitation				
Population (2017)	3.49 million				
Population growth (2017)	0.4% (annual)				
GDP per capita (2017)	US\$ 16,939				
Currency	Uruguayan Peso (\$)				
Literacy index	0.98				
Life expectancy at birth	77 years				
Form of Government	Democratic republic with presidential system				
Political Division	19 provinces or departments				
Time Zone	GMT - 03:00				
Official Language	Spanish				

Main Economic Indicators 2012-2018*

Indicators	2013	2014	2015	2016	2017	2018 e
GDP (Var % per year)	4.6%	3.2%	0.4%	1.7%	2.7%	3.4%
GDP (US\$ Million)	57,435	57,180	53,182	52,734	59,170	61,525
Population (Millions of people)	3.44	3.45	3.47	3.48	3.49	3.51
GDP per Capita (US\$)	16,695	16,556	15,339	15,152	16,939	17,549
Unemployment rate – Annual Average (% EAP)	6.5%	6.6%	7.5%	7.8%	7.9%	8.5%
Exchange rate (Pesos per US\$, Annual Average)	20.5	23.3	27.4	30.1	28.7	30.5
Exchange rate (Annual Average Variation)	0.9%	13.4%	17.6%	10.1%	-4.8%	6.3%
Consumer Prices (Var % annually accumulated)	8.5%	8.3%	9.4%	8.1%	6.6%	7.0%
Exports of goods and services (US\$ millions)**	18,100	18,380	15,591	14,649	16,177	16,114
Imports of goods and services (US\$ millions)**	17,289	16,767	13,908	11,821	12,160	12,878
Commercial Surplus/Deficit (US\$ millions)	811	1,613	1,684	2,828	4,017	3,236
Commercial Surplus/Deficit (% of GDP)	1.4%	2.8%	3.2%	5.4%	6.8%	5.3%
Overall Fiscal Balance (% of GDP)	-2.3%	-3.5%	-3.3%	-3.8%	-3.5%	-3.5%
Gross capital formation (% of GDP)	22.5%	21.2%	19.7%	17.8%	15.7%	-
Gross Debt of Public Sector (% of GDP)	57.6%	58.6%	59.0%	63.2%	65.4%	-
Foreign Direct Investment (US\$ millions)***	3,460	2,328	920	-743	-125	-
Foreign Direct Investment (% of GDP)	6.0%	4.1%	1.7%	-1.4%	-0.2%	-

^{*} Source: GDP data were taken from the IMF, foreign trade data from IED, foreign exchange rates, international reserves, and foreign debt come from the BCU; the population growth rate, literacy, unemployment and inflation come from the INE (Statistics National Bureau). Estimated data for 2018 based on BCU surveys and Deloitte.

^{**} In 2017, the BCU adopted the methodology of the 6th balance of payments manual. The data based on this new methodology includes purchase of merchandise and re-exports and is available since 2012.

^{***} In 2017, the BCU adopted the methodology of the 6th balance of payments manual. The data are net flows so they can take negative values.