



The Dynamics of the Crop Protection Market in Brazil

Brazil has consolidated itself as one of the largest food producers in the world and the agribusiness is the most dynamic sector in the Brazilian economy. The numbers prove it.

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ArenaAgri® is an agro-industrial strategy and planning consulting firm, specialized in crop protection technologies for the Brazilian market.

Mérieux NutriSciences® one of the world's largest laboratories is dedicated to protect consumer's health by offering solutions in chemical analysis and studies to a wide range of industries, including food sector, water and environment, agrochemicals, and crop protection.

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Agribusiness is the most dynamic sector in the Brazilian economy.

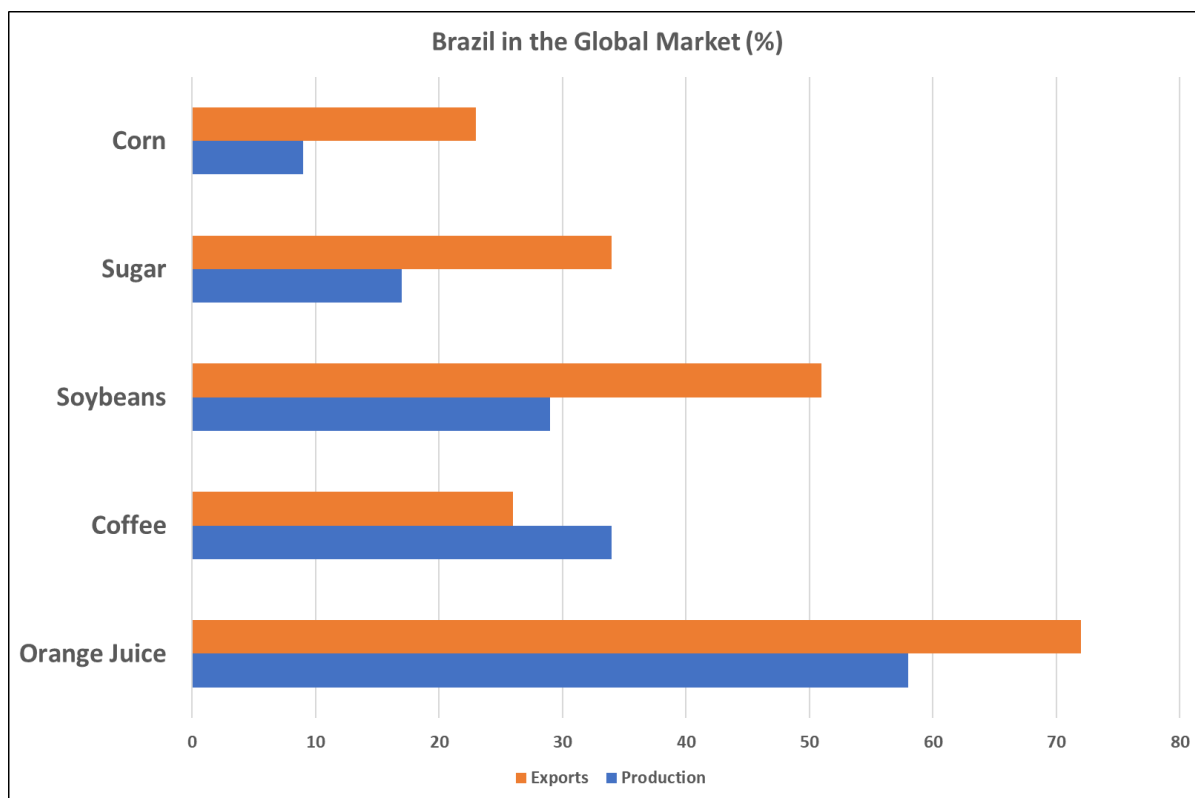
The numbers prove it.

In 2019, according to CEPEA - Center for Advanced Studies in Applied Economics at the University of São Paulo, the agribusiness represented 21.4% of the total national GDP, being responsible for the total increase in exports mainly due to increased demand of soybeans, meat complex, corn, cotton, coffee, fruits and ethanol.

Agribusiness is responsible for generating more than 20% of all jobs in the country, while Brazil occupies approximately 9% of its territory for cultivated areas, estimated at 65 million hectares (2019/20 season).

Regarding agriculture, according to the Ministry of Agriculture, the Brazilian grain production estimated for 2020 is 253.7 million tons, above the previous harvest, representing a new record, with an increase in production in almost all crops, with emphasis on soy, corn, cotton, wheat, corn, rice and beans.

Brazil occupies a relevant global position, as a producer and exporter of some of the main agri-commodities, being responsible for 58% of orange juice consumed at global level, 29% of all soybeans, 34% of coffee, 17% of sugar and 9% of corn. So, Brazil will continue to gain importance in agriculture.



Brazil Participation in Global Exports, Global Production (%) and Ranking Position										
	Orange Juice		Coffee		Soybeans		Sugar		Corn	
Global Exports	72	1	26	1	51	1	34	1	23	2
Global Production	58	1	34	1	29	1	17	1	9	3

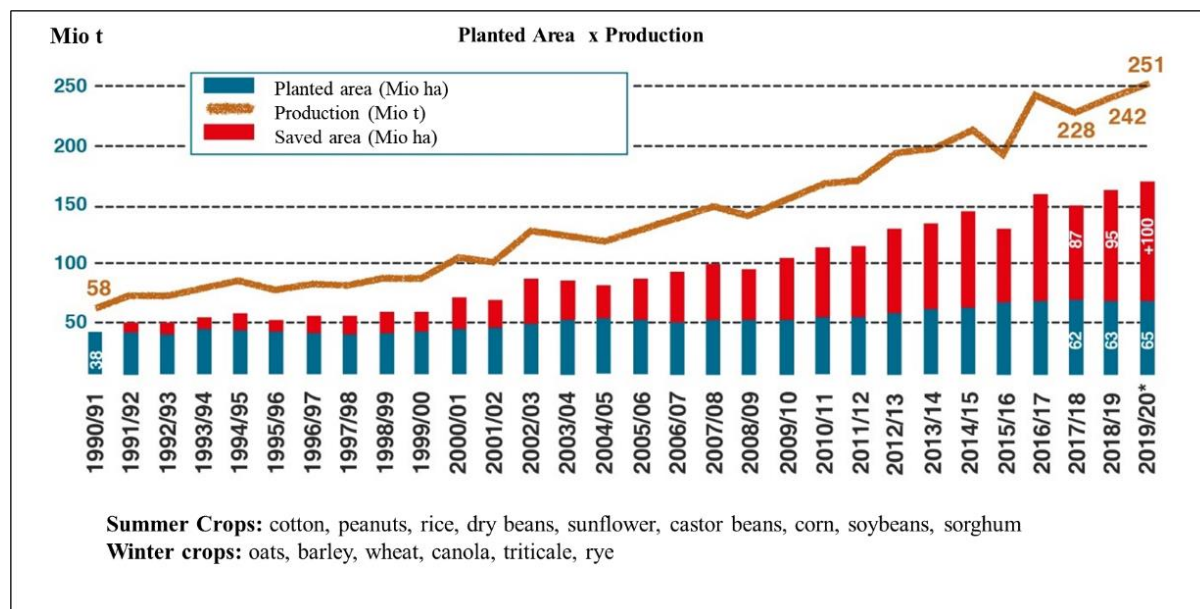
Source: USDA, FGV Agro

Besides the natural resources and the high agronomic knowledge focused on tropical conditions, the extensive use of technology will make Brazil stand out more and more, increasing its productivity levels year after year.

The key to increasing productivity is the relentless pursuit of global competitiveness through productivity gains. The graph below shows the evolution of the planted area and the productivity levels obtained, clearly demonstrating that, while the agricultural area remains relatively stable, productivity gains have been increasing significantly, as a result of the use of technologies available for the sector.

According to harvest data from the National Supply Company – CONAB - in the period from 1990/91 to 2019/20, grain production in Brazil increased 334% while the planted area grew 71%, meaning that the use of technologies has increased productivity over the years.

To better understand the evolution, considering the yield in 1990/91, to produce 251 million t (in 2019/20 season), it would be necessary more 100 Mio ha planted in addition to the 65 Mio ha used today.



Source: CONAB. *5º Survey – Season 19/20 – Feb 2020.

Yield will continue to grow, according to projections from the Ministry of Agriculture of Brazil. According to the document “PROJECTIONS OF AGRIBUSINESS Brazil 2019/20 to 2029/30 Long Term Projections”, the planted area may grow 16.7% until the 2029/30 season compared to 2019/20, while productivity may increase 26.9%.

	Produção (000 t)		Área (000 ha)	
	Projeção	Máximo	Projeção	Máximo
2019/20	250.871	-	65.406	-
2020/21	257.256	279.293	66.946	69.845
2021/22	264.572	288.641	68.142	73.129
2022/23	271.074	301.065	69.228	75.943
2023/24	277.996	310.666	70.270	78.453
2024/25	284.619	321.053	71.295	80.753
2025/26	291.416	330.509	72.314	82.906
2026/27	298.098	340.119	73.330	84.951
2027/28	304.850	349.348	74.344	86.913
2028/29	311.558	358.555	75.359	88.808
2029/30	318.293	367.571	76.373	90.649

Variação %	
2019/20 to 2029/30	
Produção (mil t)	26,9%
Área Plantada (mil ha)	16,70%

Source: GGAPI/DCI/SPA/MAPA. SIRE/Embrapa and UNB Statistics Dept. Data from CONAB

Regarding the use of technologies, a fundamental factor for the success of agriculture in tropical conditions is the correct use of pesticides. This input has an important role in the management and/or control of the main pests, diseases and weeds in the Brazilian market. Under local conditions, the non-use of pesticides may cause losses of up to 40%, or the equivalent of 100 million tons of grains.

According to Sindiveg, Brazilian crop protection market is quite relevant in the global scenario, with a value estimated (applied product) in US\$13,7 MM in 2019. Market has grown 8% in comparison to previous year. More than 80% of this value is concentrated in soybean, corn, sugar cane and cotton.

Soybean is the main crop representing around 50% of planted area, leading global production and exports as well, responsible for 53% of the value of sprayed value; corn is the second crop with 12%, sugar cane, 11% and cotton, 8%.

Regarding crop protection segments, fungicides are the most important with 31% of sprayed value, insecticides are the second most relevant with 29% and herbicides and seed treatment with 27% and 12% respectively.

Several factors have influenced the market value in recent years, the high inventories of crop protection products starting in 2014 having a great impact, causing a fall in the following years, with recovery of the value in 2019. The exchange rate is always a determining factor in the fluctuation market value.

The crop protection market in Brazil, reflecting the global situation, has been through a consolidation process, which has been affecting the set of forces in the market. This dynamic market is disputed by several companies, and approximately 60% of its value is concentrated in the Research and Development + Biotechnology companies such as Bayer, Syngenta, BASF and Corteva, who are investing in innovative chemistry, new germplasm and new traits that can combine germplasm with chemistry.

A 30% market share is concentrated in companies such as UPL, FMC, Sumitomo, Adama and Iharabras, companies with mixed business models between post-patent and R&D, some of which are results of recent consolidation processes.

The recent moves in the group of R&D + Biotechnology companies have brought changes in the offer of products and services and in the way of interacting with their customers. The new offer includes patent protected chemistry, seeds and traits, digital platforms and services, with these companies looking to differentiate themselves through marketing programs and how they deliver value to their customers.

Crop Protection – The Tropical Challenge

The dynamics of pests, diseases and weeds determine the high value of the pesticide market and adoption rates for crop protection products.

In the herbicide segment, the control of grasses and some broad leaves, especially in no-till areas, has brought challenges to farmers. The main problem is the increasing tolerance to the modes of action available on the market, based on products such as glyphosate, paraquat, ACC-ases and ALS type, just to mention some the main active ingredients. In addition to the resistance acquired by the weeds, biotechnology, creating crops tolerant to non-selective herbicides, has generated new “weeds” - the voluntary crops. Corn is an example.

In the fungicide segment, Asian soybean rust is the main disease. Some of the current products are already beginning to show efficiency reduction due to the high exposure to the diseases, making the concept of phytosanitary defense to become more “management” instead of “control” of the diseases. The management consists of adopt, in addition to all the possibilities of rotation of the fungicide's modes of action, using agronomic practices such as not planting soybeans after soybeans, use of short-cycle varieties with some tolerance to the diseases, strong field monitoring, early planting, crop rotation, use of biological products, etc. Other diseases are also gaining importance in addition to rust, making it important to identify the disease and use the right tools.

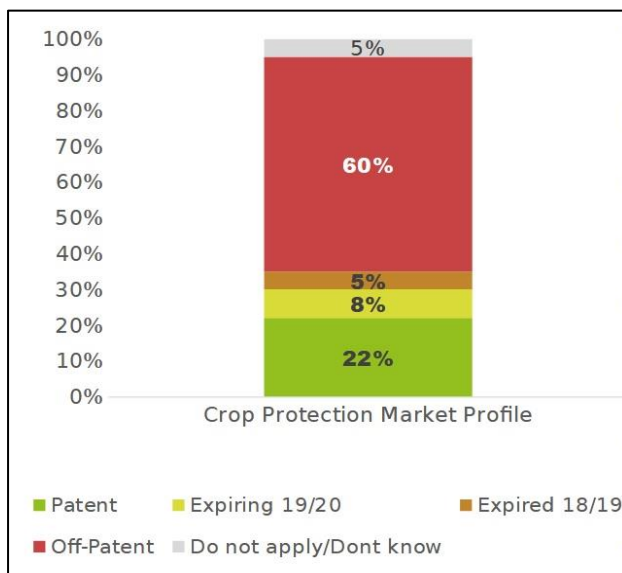
In the insecticide segment, for Lepidoptera control, in addition to conventional crop protection products, Bt technology (GMO) is being widely used, however, there are reports or suspicions of reduced performance to some technologies, which makes it essential to use areas of refuge for greater efficiency in the control and to protect the technology, avoiding the formation of resistance and therefore the need for new generations development.

There are opportunities in the Lepidoptera segment in markets where Bt technology is not yet relevant (some regions and soy varieties), for rescue control and the use to protect the technology in applications in refugee areas or in Bt areas aiming to break the pests cycle.

The sucking pests segment market is gaining more and more relevance, such as stink bugs in soy, corn and cotton

For all the crop protection segments, it is essential that new modes of action are developed to maintain agriculture with viable alternatives for sustainable agricultural production.

According to a study prepared by Kynetec, the Brazilian market consists of products in different stages of maturity, with 75% of the value will be based on off-patented products by the end of 2020.



Source: Agropages/Kynetec

Finally, Brazil is a big and interesting market for crop protection companies. With more than 2 seasons per year, tropical conditions and pest shifts, the use of pesticides is essential in scale-based agricultural production, with gains in efficiency and productivity, essentially by reducing or eliminating losses due to biotic factors.

Brazil is a market for professionals. If you are interested to know more about this market, please, contact ArenaAgri and Mérieux NutriSciences consultants.

Book a telecon and talk with our specialists.



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