

# Argentina Pre-release Agrochemicals and Fertilizers 2016

*Dear Readers,*

Although well known for its cosmopolitan lifestyle in the capital Buenos Aires, one of the foundations of the Argentine economy remains its strong agricultural industry. Almost 1.5 million square kilometres (km<sup>2</sup>) of the country's 2.8 million km<sup>2</sup> land mass is arable land used for Argentina's infamous cattle ranches, sheep stations and crop fields, producing wheat, corn and maize among other grains. Almost 20 million hectares alone is dedicated to the infamous soybean, with Argentina being the world's third largest producer of the crop behind the United States and Brazil.

Using a mixture of crop protection products, biotechnology and the no-till growing system, introduced to Argentina in the 1970s, agricultural production doubled from around 50 million tons per year in 2001 to 100 million tons a decade later. Upon taking office in late 2015, new President Mauricio Macri announced his intention to grow the industry by a further 60% by the end of his four-year term.

The agrochemical and fertilizer industries play a key role in these plans for growth. Although Argentina has some of the most fertile soils in the world, the previous government's export restrictions, combined with a lack of incentives to rotate crops, has proven detrimental. The new administration is now debating the implementation of a Soil Improvement Law, in which farmers receive tax breaks for increased use of fertilizers. And while the country's fertile land is a boon to growing crops, it also means herbicides are in high demand, accounting for the majority of agrochemicals used by farmers.

In this short report, we speak to the Chamber of Agricultural Health and Fertilizers (CASAFE), the Argentine Chamber of Industry of Fertilizers and Agrochemicals (CIAFA), and some of their member companies for their views on the agrochemical industry as it currently stands. We also look into how the new government's actions have impacted on Argentina's farmers in the first quarter of 2016, and include some of our interviewees' insights on the outlook for the rest of the year.

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# Supplying Demand: Argentina's Agrochemical and Fertilizer Industries

By Harriet Bailey

## OVERVIEW

One of President Macri's first moves demonstrated the importance of the agricultural industry to Argentina's overall economic might; upon taking office in December 2015 he removed controversial restrictions on agricultural products, introduced by Argentina's previous administration to bolster government revenue. Making good on his campaign pledge, export taxes on foodstuffs such as wheat, corn and beef – which were at 23%, 20% and 15% respectively – were completely removed. Levies on soybean derivatives, of which Argentina is the world's largest producer and exporter, remain in place, but were lowered from 35% to 30%.

Macri's actions suggest a greater awareness of the need to keep the country's agricultural industry – the backbone of the country's economy – on side. Closely aligned with the success of this industry is the agrochemical sector, which experienced a difficult 2015 as farmers shunned crop protection and fertilization products in an attempt to curb their outgoings. "The business environment has been very tough," commented Ulrik Ekonen, South Latin America manager at Nufarm Argentina. "In the six months before the elections, farmers were increasingly uncertain about the future of the industry and decided not to plant crops. These factors affected the majority of the agrochemical companies in Argentina in some way and the pressure on margins was huge."

## LOBBYING FOR CHANGE

Representing the interests of companies across the spectrum, from multinationals including Monsanto and Syngenta to local players such as Agrofina, are two organizations: the Chamber of Agricultural Health and Fertilizers (CASAFE) and the Chamber of Fertilizers and Agrochemicals (CIAFA).

CASAFE in particular focuses on promoting best practice and the responsible use of crop

protection products to both regulatory bodies and the public. It has two programs in place to standardise practices in Argentina and to make good agricultural practices the norm across the industry. Agrolimpio is a program endorsing the globally recognized triple rinsing protocol of chemical containers and their subsequent recovery.

CASAFE is ultimately lobbying government for a nationwide law to enforce the collection of these containers after use. Deposito OK is a program for certifying facilities which store agrochemicals. "We have around 600 to 700 certified facilities in Argentina, which is around 50% of the total facilities in the country. The uncertified facilities are usually smaller, local sites; multinational companies will not sell their products to such facilities," explained Federico Landgraf, CASAFE's executive director.

CASAFE typically represented the interests of multinational companies in Argentina. With the government's recent appeasement of the industry, the opportunity for growth may mean more international players decide to expand their operations in the country. Global corporations also bring with them global standards, which should work in CASAFE's favour when seeking increased governmental, as well as popular, support for more stringent safety regulation.

A third program run by CASAFE is Spray OK, which it hopes to begin rolling out across the country in 2017. Currently, anybody can use spraying equipment without certification; CASAFE, in partnership with the Institute of Standardization and Certification, aims to certify companies, operators and the machinery itself for both ground and aerial application of crop protection products. "Most companies do not own their own spraying equipment, preferring to rent it from larger companies. Our aim is to ensure best practice in the use and maintenance of these machines," said Landgraf.

CIAFA, which has 53 members, is a uniting voice for agrochemical companies in Argentina. It works with regional and national government agencies on legislation affecting the industry, and also works with farming associations to achieve its objectives. Although it has no barrier to membership, CIAFA is known for its work with Argentinian chemical companies: “We can promote local players by price and availability. If you import product from abroad, it could take around three months to arrive. This is not ideal in a market as dynamic as ours, so local products have the advantage,” explained Armando Allinghi, CIAFA’s executive director.

#### THE ONLY WAY IS UP

Argentina’s agricultural production for 2015 dipped below 2014 levels as farmers refused to plant new crops in protest at the uncertain political situation, resulting in an overall turnover of around \$2.4 billion for the industry, down from \$2.7 billion a year previously. Nevertheless, the rapid pace of agriculture – over other industries which rely on plants and pipelines – means farmers can react almost immediately to economic developments. “When it seemed likely Macri would win, farmers immediately began to buy seed.

*“We should be applying more fertilizer and crop protection products in a preventative way, rather than when a problem arises.”*

Fernando Lespiau  
Commercial Director  
Southern Cone, UPL



Corn acreage grew 500 hectares in under a month because of the possibility of a new government and, in turn, fertilizer sales increased,” said Nufarm’s Ekonen. “Before the announcement that taxes on corn and wheat would be eliminated, the port was already discounting freight prices.”



Photo courtesy of Pexels



# Federico Landgraf

Executive Director

CASAFE



## Could you tell us more about CASAFE and the association's operations in Argentina?

CASAFE is a chamber that represents the interests of the agrochemical industry, with a particular focus on best practice and the responsible use of crop protection products. The association counts both national and multinational companies among its members. CASAFE also focuses on communication and education, using social media campaigns to highlight the need for crop protection products. We are also highly active in product stewardship, as this is an area where responsible use by growers makes a real difference to both efficacy levels and product safety standards.

## Could you tell us more about the state of Argentina's agricultural industry compared to that in neighboring countries?

Argentina has very fertile soils so the use of fertilizers is not as important an issue as the use of crop protection products. As an example, soybean farmers will allocate 30% of their resources to such products, compared to around 10% on fertilizers. The most important crop protection products for growers are herbicides, with 78% of that market taken up by glyphosate. The ratio of fungicides and insecticides varies depending on the weather. Argentina uses both crop rotation and no-till methods of growing, which

naturally improves the soil's nutrient content.

## With the change in government, what positive developments are we seeing for the agricultural industry?

In the past, Argentina implemented difficult policies for farmers which caused them to end crop rotation in favor of planting the highest value crop, such as soybeans. This was detrimental for soil quality, as crop rotation is key to maintaining the fertility of the soil. It appears the current government will focus more on the agricultural industry; it has already removed export taxes on many of our crops, such as wheat and corn, and has cut export taxes on soybeans.

## Could you explain the importance of new technological developments in the agricultural industry to ensure the viability of the land for future generations?

The aim of biotechnology is to improve some characteristic of the grain or future plant, such as improved resistance to insects or pests, drought, flooding or freezing, for example. In some cases biotechnology can work in tandem with a specific agrochemical. Chemical companies are investing in both areas, but there will be no magic solution from technology in the near future. As a consumer, you expect technology to solve all of humanity's problems, but this

will not be the case. The world needs industrial farming to continue to feed the population.

## What can we expect for the future of the agrochemical industry in Argentina?

The agricultural industry is very important for both Argentina, in terms of the income we generate, as well as the world as a whole, as we are capable of producing more food. In addition to Argentina, Brazil and some countries in the former USSR could increase crop production; the United States and Europe however are at their limit. We think we could increase our output by 60% through fertilization, better practices and the development of more arable land. In the next decade our farmers could be producing 160 million tons of grain per year, compared to 100 million tons at present.

## Could you tell us more about the future development of CASAFE?

We are working very diligently to develop training in responsible use and best practice in farming areas and small towns. We have teachers and instructors to promote the topics of best practice and responsible use. In 2015, CASAFE trained 1,600 people, ranging from schoolchildren to adults. In future we would like to improve on this further, not just in terms of numbers but in terms of the level of training we can provide.

# Armando Allinghi

Executive Director

CIAFA



**Could you tell us more about CIAFA since its foundation in 1990 to the present day, covering any recent major milestones?**

CIAFA has 53 member companies, 35 of which focus on crop protection products, with the remainder covering fertilizers. Our key objective is to connect these companies with government representatives that are legislating on the various issues that affect them. We also work with farming associations to achieve our objectives and presenting a united voice; this is more effective than for each company to communicate with government figures individually.

**One of CIAFA's main objectives is to promote local agrochemical companies. How can you ensure farmers choose local products in a market dominated by multinationals?**

We can promote local players by price and availability. If you import product from abroad, it could take around three months to arrive. This is not ideal in a market as dynamic as ours, so local products have the advantage in this case. In Argentina, we have the opportunity to produce. The most important herbicides, among other pesticides. Some of our member companies have the ability to synthesize, formulate and sell these products here, reaching high standards and mitigating the wait on the supply chain.

**In what ways does CIAFA work with regional and national regulatory bodies to ensure progressive legislation for the industry?**

Depending on the nature of the work we work at both a federal and a national level. The aim is to work with government in the development of laws pertaining to the crop protection industry, and this entails working with various ministries, including the Ministry of Agro-Industry. At a regional level we work with local governments to improve safety and understanding of pesticides, for example.

**Could you tell us more about how CIAFA can ensure a balance between high production levels on the one hand, and worker safety on the other?**

The public has a negative perception of the crop protection industry due to the improper use of agrochemicals. By encouraging best practice across Argentina, this will both improve the efficacy of crop protection products and lower the associated risks. Technology and new formulations can also help to reduce the impact of these product in populated areas. It is easy for our producers to introduce new technologies, as the uptake by farmers is rapid when compared with other countries.

**What sort of technological developments can we expect in the agrochemical industry in the future?**

I believe seed technology will be particularly important, because new genetically modified seed products under development have different resistances to pesticides. Likewise, the development of new agrochemicals will create products able to tackle strains of weeds that are developing a resistance to the most commonly used herbicides. The demand for fungicides will also increase as the climate becomes hotter and wetter. New formulations will also be key to combatting this.

**Could you tell us more about how Macri's agricultural reforms will improve the situation for the agricultural industry through 2016?**

President Macri has reduced taxes and opened the market so producers now have the opportunity to vary the crops they grow and export goods such as wheat, corn and sunflower without as many difficulties as before. As well as an increase in our local market, I think we will also see the size of the average farm expand. An increased use of technology will also encourage greater yield. Although there may be some financing problems, which could limit growth, the feeling among farmers and the agrochemical industry in general, around both production and new technology, is positive



Photo courtesy of Profertil

Increasing production is not only possible, but necessary. With the world population set to grow to nine billion by the middle of the century, spurred on by the ending of China's almost 40-year old one-child policy in 2016, there will be increasing pressure to improve yields and use resources more efficiently. In a speech to farmers following the official announcement on the removal of agricultural levies, it seems President Macri is also aware of the potential for Argentina to be the supplier for the increase in demand: "We have to go from being the breadbasket of the world to the supermarket of the world."

During the current government's four-year term, the intention is to intensify production from 100 million tons per year (tpy) to 160 million tons – an increase of 60%. The impact of removing taxes on crops such as wheat and corn has already been felt, with output set to hit record highs by 2017. "We can expect wheat acreage to grow by one million hectares to around 4.7 million hectares; this will however still be lower than the six million hectares we have previously seen," said Nufarm's Ekonen. "Argentina's corn production will increase by around 700,000 hectares to 3.4 million hectares."

Maintaining restrictions on soybean exports, however, indicates that the crop could see a small dip in production, despite being 80% cheaper to grow than corn.

However, a decrease of one million hectares on a crop that sees annual production of around 20

million hectares means it will remain as Argentina's largest harvest.

Farmers regaining around 20% of their profits from the removal of export taxes, coupled with this increase in agricultural production, should prove a boon to agrochemical companies' sales. The three most commonly used crop protection products in Argentina are glyphosate, making up around 78% of total agrochemical sales in the country in 2013, followed by atrazine and 2,4-D. Monsanto discovered glyphosate in 1970 and it was brought to market under the trade name Roundup in 1974. The company then produced glyphosate-resistant seeds, increasing crop production dramatically; it therefore comes as no surprise that around 90% of Argentina's main crops, such as corn and soybeans, are genetically modified.

However, considering these products have been used on Argentina's soils for more than 40 years, weeds are becoming increasingly resistant. Companies such as Arysta LifeScience are therefore seeing the need to focus research and development activity on new formulations to regain market share. "Our main product and income generator controls grasses which have become glyphosate resistant," explained Eduardo Maier, director of marketing and R&D. "Clethodim ranks number three worldwide for herbicides and, despite the overall decrease in the agrochemical market last year, it saw a 25% increase in sales volume."



Agrofina is one of only three companies in Argentina, alongside Monsanto and Atanor, which can synthesise its own products. With 85% of the global agrochemical market based on sales of generics products, and 93% in Argentina, national players such as Agrofina need to innovate in order to compete against multinationals. "We have deep process knowledge on new ways to formulate and manufacture product and this has become our core business," said CEO Horacio Busanello of Agrofina's parent company, Grupo Los Grobo. "Being an Argentinian company, we are able to tailor our products to the local market, unlike multinationals which produce the same chemicals for all their markets."

Argentina is proud of its fertile soil, which is further safeguarded thanks to its use of no-till growing methods in 70% of production areas, as well as crop rotation systems to restore nutrients. While 30% of a farmer's resources are spent on crop protection products, only 10% is allocated to fertilizers; 2015 saw a significant reduction on fertilizer usage as farmers tried to cut costs. Fertilizar is Argentina's non-profit fertilizer association, working on behalf of the industry to promote responsible use of fertilizers and the stewardship of high-productivity environments. One of its main activities at present is working with the government to bring

in the Law of Soil Improvement. The law aims to incentivize farmers to use more fertilizers, and ultimately improve the quality of Argentina's already fertile soil by providing a tax break for farmers who use more fertilizer.

Compared to two decades ago, Argentina's fertilizer production is fairly strong, due partly to YPF and Agrium's joint venture into Profertil. The urea plant, located in Bahia Blanca, now produces around 90% of Argentina's urea and 89% of Argentina's ammonia, and was able to export 15,000 tons in 2014. Alongside Bunge, Profertil has transformed domestic fertilizer production, with around 45% of the fertilizers used in

Alongside Bunge, Profertil has transformed domestic fertilizer production, with around 45% of the fertilizers used in Argentina being nitrogen based and reliant on natural gas as a feedstock: "The domestic urea market in particular faced a significant production deficit. More than 90% of Argentina's total fertilizer consumption – more than 1.5 million tons – was imported, while urea demand was at around 600,000 tons," explained Miguel Morley, Profertil's president.



Mosquito. Photo courtesy of CASAFE

*“Companies are realizing that there is no single solution to increasing yield and it will take a combination of biotechnology and agrochemical technology to achieve the desired effect”*

Horacio Busanello  
CEO Agrofina



### JOINING FORCES

Public opinion surrounding the use of agrochemicals is of concern to companies and growers alike. Both CIAFA and CASAFE focus on the need for education about the benefits of crop protection products, particularly in conjunction with responsible use programs, and CASAFE has also initiated a social media campaign to reach out to young people. “The public has a negative perception of the crop protection industry due to the improper use of agrochemicals,” said CIAFA’s Allinghi. “By encouraging best practice across Argentina, this will both improve the efficacy of crop protection products and lower the associated risks.” Best practice is particularly important in the application phase of various agrochemicals, and CASAFE works with the Ministry of Agro-Industry to promote their safe and effective use. This covers a variety of topics from standard spraying procedures in certain weather conditions, required wind speeds for best results and correct safety distances for

highly populated areas. However, the program has not yet reached everyone involved, as outlined by Arysta’s Maier: “One of the big problems we have in this area is the use of contracted chemical sprayers, who are paid by hectare and therefore do not always take product application issues, such as wind speed and direction and proximity to populated areas, into account. CASAFE is working hard to educate people in the effects of product drift, for which there was a big campaign in 2015.

If these sprayers adhere to the guidelines, there will be no problems with either ground or aerial application.” An area which is coming into its own in Argentina is biotechnology, which aims to genetically improve a plant’s growing habits, for example by improving its resilience to pests and extreme weather conditions. According to Agrofina’s Busanello, the mergers of Dow and DuPont, and ChemChina’s acquisition by Syngenta, are indicative of wider global trends in this area: “Companies are realizing that there is no single solution to increasing yield and it will take a combination of biotechnology and agrochemical technology to achieve the desired effect. In five years, the chemical market will look very different to now.” The aim of the incumbent government is to increase Argentina’s agricultural output by 60% by the end of the decade; Busanello believes production could increase by 20% for 2017/18. Argentina has the potential to increase productivity, not only by converting up to four million more hectares of viable land into crop fields, but also by increasing its use of biotechnology. The fertilizer industry, spurred on by Profertil’s expansion of its Bahia Blanca site in 2013 and the Law of Soil Improvement, is also growing. Combining better practices and increasing the usage of fertilizers, seed technology and crop protection products should see the sector produce not only enough to satisfy domestic demand, but also create a surplus to dominate the supply chains of such crops across South America.



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