

GBR

GLOBAL BUSINESS REPORTS

Argentina Agrochemicals and Fertilizers 2016

PRE-RELEASE
EDITION



Best Agricultural Practices for sustainable agriculture

www.casafe.org

Dear Readers,

CropLife Latin America is a non-profit industry trade association consisting of nine companies and a network of 25 associations in eighteen countries within Latin America. These organizations are recognized for their technological contributions to sustainable agriculture across the region.

CropLife conducts an annual forum at which we focus on the potential of the region to feed the world. This year we are in Buenos Aires, to discuss prescient topics for the Southern Cone. These include panels on aerial chemical application in Brazil, land use in Uruguay and Argentina's Good Agricultural Practice network. We aim to motivate other countries to conduct their best efforts in ensuring sustainable innovation – a priority of our industry.

Argentina's agricultural industry has experienced a rejuvenation in 2016. The elimination of export taxes on wheat and corn and a reduction in the taxes on soybean exports will impact positively on the agrochemical industry. We can expect to see growth of around 15% in 2016, with turnover for the full year reaching \$2.7 billion.

Best regards,

Juan Cruz Jaime
Executive Director Southern Cone
CropLife Latin America



My main goal as the new president of Aapresid (the Argentine No-Till Farmers' Association) is to continue working on improving the communication deficit we have with Argentina's farmers. We also want to continue strengthening our technology base, which is fundamental to our institution.

The current economic environment in Argentina is positive. However, it will require energy and focus on our part to ensure that our agricultural industry will create more jobs, improve our soils, increase our production and care for our environment.

Our annual Congress is the perfect setting to demonstrate Argentina's potential to produce food, fiber and energy in a sustainable way. Held between 3rd and 5th August 2016 in Rosario, it will have more than 250 speakers, 150 conferences and 5,000 attendees and is therefore the biggest event showcasing agricultural technologies in the world.

Pedro Vigneau
President
Aapresid





IMAGE: Courtesy of CASAFE

A New Era in El Campo

Although well known for its cosmopolitan lifestyle in the capital, upon leaving Buenos Aires, the urban landscape, crowds of Porteños and smart restaurants make way for miles upon miles of rolling green fields, crowned by a sunny blue sky in all directions. It was from this sky that President Macri arrived, by helicopter, to a field just outside Rosario on an afternoon in March 2016. His presence at Expoagro, the agricultural industry's annual event, was significant: a President had not been in attendance since before the turn of the millennium.

Addressing the assembled crowds, he spoke of an impending "production revolution" in the fields of Argentina: "We know that the world has a food crisis. We want our valuable raw materials to provide the solution." He continued: "I have made it clear to the Ministry of Agroindustry that we have to take responsibility for the smaller producers – who may in time become medium- or larger-sized producers – because in order to achieve growth, we have to go forward together, as one family."

Upon taking office in December 2015, Macri immediately demonstrated the importance of the agricultural industry to Argentina's overall economic might; 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%.

Maintaining restrictions on soybean exports indicates the crop could see a small dip in production, despite the fact it is 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. Improving the production levels of other crops will have additional environmental benefits, such as preventing flooding, as Aapresid's president, Maria Beatriz Giraudó: "The previous government's policies severely harmed production and environmental care in Argentina, but the new government's policies are already proving favorable."

Almost 1.5 million square kilometres (km²) of the country's 2.8 million km² land mass is arable land used for Argentina's legendary cattle ranches, sheep stations and crop fields producing wheat, corn and sorghum among other grains. Almost 20 million hectares alone is dedicated to the infamous soybean, with Argentina being the world's third largest pro-

ducer 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 (mt/y) in 2001 to 100 million mt/y a decade later.

The general feeling among agrochemical companies is that it has become easier to work with the government since the change in administration in December 2015. This has led some firms, such as Nova S.A., based in Santa Fe province, to expand their operations: "Business owners need predictability and the new government is starting to provide this," explained general manager Maura Piva. "All of our distributors have a positive attitude with regards to the recent governmental changes and, as a result, we have been encouraged to invest further in products and infrastructure."

Rotam Argentina, the Argentine subsidiary of a large China-headquartered agrochemical company, also feels positive about the new government's work to support the agricultural industry and sees great potential for their long-term operations in the country. The company also expects to grow by more than 20% during 2016. "We now have greater access to ministers, which improves their understanding of our industry when making policy decisions. We also believe this government will be easier to predict in areas such as importing. The clear messages we are receiving from the government have improved our planning abilities and we now have clearer goals for the future," confirmed country manager Javier de la Rúa.

Manufacturing, Representation and Distribution of Chemical Products for Agricultural, Domestic and Veterinary Use

Tel/Fax: 4621-4228 / 4481-3766
E-Mail: www.reopen-sa.com.ar




Agrochemicals and Fertilizers

Enabling the growth of Argentina's agricultural industry

With the world's population set to grow to nine billion people by the middle of the century - spurred on by China's termination of its almost 40-year old one-child policy in 2016 - global food producers will be under increasing pressure to improve yields and use resources more efficiently. Argentina, as the world's third largest producer of soybeans, fifth largest producer of corn and tenth largest producer of wheat, could do both.

In a speech to farmers following the official announcement of the removal of agricultural levies in December 2015, President Macri showed his awareness of Argentina's potential 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 (mt/y) to 160 million mt/y – 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 Ulrik Ekenon, south Latin America manager at Nufarm Argentina "Argentina's corn production will increase by around 700,000 hectares to 3.4 million hectares."

LOBBYING FOR CHANGE

Argentina's agricultural industry has a healthy relationship with the agrochemical industry, whose products will be key in improving yields. Representing the interests of agrochemical companies across the spectrum, from multinationals including Monsanto and Syngenta, to local players such as Agrofinia and Gleba, 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. The first is Deposito OK, which aims to certify facilities used for the storage of

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

The biggest event of agricultural sustainable technologies in the world

XXIV Aapresid Congress
3, 4 and 5 August 2016
Metropolitano Convention Center, Rosario, Argentina



www.congresoaaapresid.org.ar



sites; multinational companies will not sell their products to such facilities," explained Federico Landgraf, CASAFE's executive director.

CASAFE's second program is Agrolimpio, 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. Rotam Argentina, Dow Agrosiences and Rizobacter are also establishing a foundation to ensure the safe packaging and storage of agrochemicals. "When agrochemicals are properly applied and containers are disposed of correctly, there is no problem; however, when the correct procedures are not followed, toxic material can leach out into the environment and pose a danger to human health," explained Rotam Argentina country manager Javier de la Rúa.

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.

Member company Gleba, which has been in the market since 1950 and now has an annual turnover of around \$40 million following a cash injection of \$1.5 million into its plant at the turn of the decade, is supportive of the opportunities provided by CIAFA: "CIAFA is a great platform to share ideas, problems and solutions, as well as to network with firms. CIAFA and CASAFE share a good relationship and there are many areas on which we share points of view. However," remarked Gleba's commercial manager Miguel Seara, "it is also beneficial that we are able to discuss different points of view with complete freedom and openness." For Gleba, one of the main issues affecting the agrochemical industry at present is the rapid opening up of the market and the effect uncontrolled competition may have on local players. Under the previous administration, domestic chemical companies enjoyed import restrictions on formulated products from abroad; with the removal of these restrictions, combined with a lack of investment into improving checks on imported products, the industry fears low quality chemicals will make their way into the value chain. "Competition in the agrochemical market

is high in Argentina and we need more control over Chinese companies importing into Argentina," explained Seara. "The industry needs to see several stages of checks on imported products, covering areas such as environmental protection, processing and impurities, as SENASA does not conduct 100% checks."

FERTILE SOILS

Argentina is particularly proud of its fertile soil, which has been safeguarded since the late 1980s by Aapresid. This association was established by farmers concerned about soil erosion stemming from poor land management, with the aim of using good agricultural practices to prevent further erosion by winds and flooding. Although the no-till growing method was introduced to Argentina's farmers in the 1970s by the National Institute of Agricultural Technology (INTA), a lack of specialized machinery meant the practice was not widely adopted. "It was the middle of the 1990s when no-till farming really took off," explained Maria Beatriz Giraudo, president of Aapresid. "Approximately 92% of farmers use the no-till method nowadays. When the system is combined with crop rotation, it improves all the soil's physical, chemical and biological properties. Our soils are now in great shape to withstand issues that may arise in the future, such as flooding and drought cycles."

As well as maintaining the fertility of the soil through no-till farming methods, Aapresid is also aware of the benefits of using fertilizers appropriately. Of the 40% of a farmer's revenue spent on agrochemicals, only 10% of that is allocated to fertilizers; this number was even further reduced in 2015 as farmers were forced [continued on page 9>>](#)

gleba
sigamos creciendo
**GROWTH THROUGH
SUSTAINABLE SOLUTIONS**

Production, commercialization and distribution of goods for crop protection, pest control and agricultural diseases

GLEBA S.A
Av. 520 y Ruta Provincial 36 Melchor Romero
La Plata - Buenos Aires
Phone: 0221- 491 3062 www.gleba.com.ar

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.

What is the relationship between CASAFE and the regulatory bodies in Argentina, and how does CASAFE work towards industry-positive legislation?

CASAFE works hand-in-hand with the Ministry of Agroindustry, focusing on promoting best practice. We have a technical document that details best practices for the safe and effective use of crop-protection products, covering all topics from correct spraying procedures in certain weather conditions; required wind speeds for best results; and location-specific requirements for the maintenance of safety in sensitive areas such as rivers and highly-populated areas. We have performed 14 field tests to confirm this data is correct. This document is also provided to schools and teachers in farming areas as this is an effective way to reach parents and improve their methods. We also have a program to promote the wearing of personal protective equipment when using crop protection products.

CASAFE has three programs to ensure the safe use of crop protection products. Could you tell us more about Agrolimpio, Deposito OK and Spray OK?

Our aim with Agrolimpio is to promote the recovery of empty agrochemical containers. CASAFE believes Argentina requires a national law to enforce the collection of these containers and this is something for which we are lobbying. Although we do not personally collect the containers, we encourage their recycling and promote best practice in their use. We also advocate a triple rinsing protocol, which removes 99.9% of the residual agrochemical prior to recycling.

We certify facilities for the storage of agrochemicals through our Deposito OK certification program. We have around 600 to 700 certified facilities in Argentina, which is around 50% of the total facilities in the country. The uncertified facilities however are usually smaller, local sites; multi-

national companies will not sell their products to such facilities. Finally, Spray OK is a program we are working on and which we hope to have up and running by the start of 2017. Similar to Deposito OK, it is a certification companies can gain for their spraying machinery. 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. This program is being conducted in partnership with IRAM, Argentina's Institute of Standardization and Certification. Before CASAFE became involved, nobody was certifying this equipment and there is therefore a huge need for this service in Argentina.

Could you tell us more about the state of Argentina's agricultural industry?

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, in light of the global population increases?

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. •

Maria Beatriz Giraudo

Former President,
Aapresid



How has Aapresid developed over the last quarter of a century and what services do you provide your members?

The association began as a group of around 20 farmers in the late 1980s in response to concern surrounding poor land management, leading to soil erosion. The aim was to use local farming to promote no till farming methods and as a tool to prevent ongoing erosion from the water and the air. At present, Aapresid has around 2,500 members; these are farmers from both established and smaller farms across the country, as well as technicians.

Our first activity centered on farm days; farmers advised other farmers on important issues, which worked out very well. We then implemented a newsletter, containing articles on topics such as no-till farming. This has since developed into our monthly magazine Red de Innovadores/ Network of Innovators.

Could you tell us more about the introduction and promotion of no-till farming in Argentina?

The no-till system was introduced to Argentina in the 1970s when a group of farmers with the National Institute of Agricultural Technology (INTA) began to prove the no-till concept in Cordoba province. At the beginning, the biggest obstacle was obtaining agrochemicals for weed control that were both compatible with the no-till method and reasonably priced. Furthermore, due to the lack of specialized machinery, no-till farming was in large part abandoned.

By the middle of the 1980s, soil erosion had again become such a problem that there was renewed interest in no-till farming. Although adoption of this technique increased, it was very hard to encourage such a dramatic shift in agricultural practices. A group of farmers began to prove the technology and developed the specialized machinery required. Farmers and the machinery then began to work together to develop machinery not just tailored to the new requirements of no-till farming, but also to the needs of individual regions.

However, it was the middle of the 1990s when no-till farming really took off, following the approval of genetically modified soybeans for use in Argentina. Approximately 92% of farmers use the no-till method nowadays. When the system is combined with crop rotation, it improves all the soil's physical, chemical and biological properties. Aapresid then went on to develop a program for the strategic use of fertilizers, leading to further improvements on the quality and stability of crop yields, while reducing water usage. These farming practices have also led to an increase in the capture of atmospheric carbon, equipping us with a

new tool in the fight against climate change. Our soils are now in great shape to withstand issues that may arise in the future, such as flooding and drought cycles.

How important are programs such as Responsible Use and could you tell us more about sustainability and environmental stewardship in Argentina's agricultural industry?

Misusing agrochemicals is an acute problem which we are working very hard to solve. Almost two decades ago we implemented a program called Certified Agriculture, which guarantees that those with this certification are working in an environmentally friendly manner and in accordance with the law. There are protocols for various soil and water samples to be checked and reported. This quality control program is gaining ground among farmers who see the need for such certification programs internationally. We also provide financial incentives from external economic reserves to encourage more farmers to become certified.

In 2015, Aapresid began working with IRAM to certify machinery and operational procedures during spraying, planting and harvesting. We are also working with the provincial governments of Santa Fe, Cordoba and Buenos Aires on certification for sprayers; the ultimate aim would be that without certification, workers would be unable to use such products. This is a slow process but once we succeed in these provinces, we can extend the program to the rest of the country.

What initiatives does Aapresid have in place to promote good agricultural practices to its members?

The main way we can do this is at our Annual Congress in August, at which institutional specialists, technicians and farmers come together to share ideas. In 2015, almost 5,000 people from across Argentina attended the event, with the same number viewing the congress online from 25 countries worldwide. It is the largest agricultural event globally. In 2017 we are hosting the 7th World Congress on Conservation Agriculture together with the Confederation of American Associations for Sustainable Agriculture (CAAPAS). Our main focus at the moment is a combined protocol for contract sprayers between Aapresid and CASA-FE, which should become the benchmark for best practice in this area.

What will Aapresid be focusing on in future?

We strongly believe that following good agricultural practices is the only way to create economic, environmental and social stability in the agricultural industry. The keys to this are the no-till system; continued soil coverage by either crops or protective coverings, protecting the soil from exposure to air, wind and rainfall; crop rotation to improve diversity and intensity; integrated management of weeds, insects and diseases, using strategic and balanced nutrition; choosing specific agrochemical and biological controls; with responsible use of crop protection products in terms of correct product choice, operators and application.

With so many of Argentina's farms using the no-till method, our mission has shifted towards promoting a sustainable system for food, fiber and energy, based on our network of innovators. Here at Aapresid, we believe we can be a strategic collaborator with local, provincial and national governments. We believe Aapresid is a brand which can be exported all over the world.

to tighten their belts. Giraudo continued: "Aapresid then went on to develop a program for the strategic use of fertilizers, leading to further improvements on the quality and stability of crop yields, while reducing water usage."

Fertilizar is Argentina's non-profit fertilizer association, working on behalf of the industry to promote the 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 Soil Improvement Law. It 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. "Fertilizers are crucial for the industry in producing more wheat and corn, rather than relying on soybean crops. Ten years ago, soybean planting was both very cheap and very easy, while the return on investment was high; this led to an over-reliance on soybean crops to the detriment of other crops and nutrients were leached from the soil without being replaced," explained Fertilizar president and Bunge marketing manager Jorge Bassi. "Rules have to be made in order

to focus on this sustainability objective and to ensure the quality of the soil for the future. In the future, we will also have rules for the correct usage of agrochemicals."

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 mt/y in 2014. 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, wzw's president.

While Profertil is Argentina's domestic fertilizer company, its main competition comes from U.S.-headquartered Bunge. While Argentina's annual harvest is around 100 million tons, Bunge's Bassi claims the fertilizer market is

"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,"

- Miguel Morley,
President
Profertil



**MORE THAN 70 YEARS SERVICING
THE FARMING INDUSTRY IN LATIN AMERICA**

- HIGH QUALITY
- BETTER SERVICE
- INNOVATIVE FORMULATIONS
- BROAD PRODUCT PORTFOLIO

Chemotécnica S.A.
González y Aragón No. 207, Esq. Marconi, Ruta 205 km 43.5 (B1812EIE)
Carlos Spegazzini, Buenos Aires, Argentina
+ 54 227-4429000 www.chemotecnica.com



CHEMOTECNICA

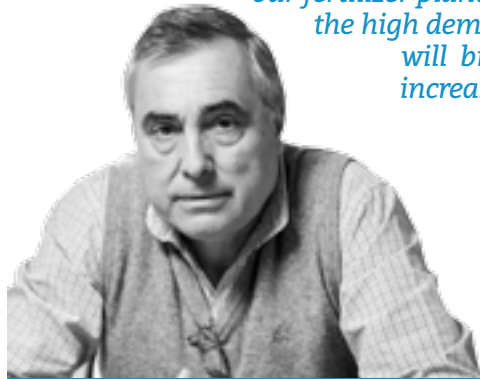
only around three million tons. This dropped to approximately 2.5 million tons in 2015 but, with improved agricultural tariffs in Argentina and the focus on the Soil Improvement Law, he expects demand to increase to 4.5 million tons in the near future. "We could see a complete turnaround in the Argentina agricultural model in the next two to three years as we encourage farmers to take care of the soil and adopt environmentally friendly measures," said Bassi.

It appears that not only Bunge is aware of the potential in Argentina's fertilizer market. Rizobacter, a local company focusing on seed treatments and active ingredients for agrochemicals, and with an annual turnover of \$100 million, is set to expand into the fertilizer arena. "Our objective is maintaining the soil's fertility. We are finishing our fertilizer plant for micro-granulated, phosphorous-based fertilizers with high solubility in partnership with De Sangosse, in time for its opening in June 2016," said Ricardo Yapur, president of Rizobacter. "When our fertilizer plant starts operating, the high demand for fertilizers will bring the company increased profitability. Rizobacter will be the exclusive producer of De Sangosse products in Argentina."

A PHOENIX RISING

As well as affecting sales in the fertilizer industry, farmers also avoided buying crop protection products in an attempt to curb their outgoings, as Ulrik Ekonen, south Latin America manager at Nufarm Argentina, explained: "The business environment has been very tough. 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

"Our objective is maintaining the soil's fertility. We are finishing our fertilizer plant for micro-granulated, phosphorous-based fertilizers with high solubility in partnership with De Sangosse, in time for its opening in June 2016. When our fertilizer plant starts operating, the high demand for fertilizers will bring the company increased profitability."



- Ricardo Yapur, President, Rizobacter

affected the majority of the agrochemical companies in Argentina in some way and the pressure on margins was huge."

Argentina's agricultural production for the year 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. Corn acreage grew 500 hectares in under a month because of the possibility of a new government and, in turn, fertilizer sales increased," said Ekonen. "Before the announcement that taxes on corn and wheat would be eliminated, the port was already discounting freight prices."

This new openness in the market could mean that chemical importers, such as InsuAgro, are bypassed by their suppliers in favour of establishing their own operations in Argentina. InsuAgro was launched in 2002 and distributes for clients such as Arysta LifeScience and FMC Brazil, as well as international companies from Europe, China and India. "The only challenge we may face is the potential for foreign players to leverage the low commodity price period and enter the market, which may cause interference in distribution. However, InsuAgro remains a small enough company to be an agile player and quickly respond to change," said commercial director Jose Mrejen. "We foresee a good period of growth ahead across all crop areas we supply to, which should improve our revenue stream."

Contract manufacturer Reopen, which formulates products on behalf of multinationals including Sumitagro, Dow Agrosiences and Bayer, is using this period of decreased agrochemical usage to improve its plant. Seeing potential for growth in the future, it is installing modern technologies to remain at the forefront of the tolling business. "The requirement for agrochemicals will slowly increase by the end of the year; although conditions for agricultural producers are good at present, they are cautious about future investments. New crop growth will require both more herbicides and more insecticides," said vice president Fabian Gomila. With farmers regaining around 20% of their profits from the removal of export taxes leading to an increase in *continued on page 12 >>*

Armando Allinghi

Executive Director,
Chamber of Fertilizers and
Agrochemicals (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 who 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.

Our website also contains information on crop protection products and fertilizers for use by producers and farmers, such as which products control which type of pest or weed. We also have Agro Deposito program which concerns the safe storage and management of these products.

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.

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 develop-

ing 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 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.

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. The new administration also wants to increase production from 100 million tons per year (tpy) to 160 million tpy over their four-year period in government.

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.

agricultural production, agrochemical companies are seeing 2016 as a transition year to bigger and better things.

WEED RESISTANCE

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.

Around 200 million liters of glyphosate and nine million liters of 2,4-D are sold in Argentina per year, with local company Chemotecnica producing more than half of the country's 2,4-D requirements. UPL Argentina, which is moving away from commodity agrochemicals to a more differentiated portfolio, stated herbicides have a 65% market share compared to other types of crop protection products: "Because of Argentina's no-till system, farmers consume herbicides year round. Insecticides and fungicides, on the other hand, are seasonal products and account for \$300 million and \$250 million of the overall market respectively," said Fernando Lespiau, commercial director at UPL Argentina. Glyphosate alone accounts for \$800 million of the \$2.5 billion agrochemical industry in Argentina, but is losing ground to specialised formulations as a result of increasing glyphosate resistance in weed varieties. Companies such as Arysta LifeScience are shifting the focus of their research and development activity onto new preparations, which is proving a shrewd move: "Our main product and income generator con-

trols 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 very few companies in Argentina which has the capabilities to synthesise its own products. With 85% of the global agrochemical market based on sales of commodity chemicals, and 93% in Argentina, national players such as Agrofina need to innovate in order to compete against multinationals and provide new solutions for farmers: "We have deep process knowledge on new ways to formulate and manufacture product and this has become our core business," said CEO Horacio z 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."

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-Indus-

"As yields increase, it will become even more important to protect crops. Farmers may not choose to apply pesticides or fungicides if the difference will only be around 7% of yield increase. However, if farmers can improve the differential to 30% or 40%, demand for crop protection products will rise."



- Alejandro Golfari,
President,
Chemotecnica

try 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."

Furthermore, argues UPL's Lespiau, more than 50% of Argentina's arable land is not owned by the farmers who grow crops on it: "This leads to a focus on production and profit rather than environmental stewardship. Argentina requires some new legislation on how to properly manage rented fields, which will improve the sustainability of our farmland," he said.

Aapresid is also working with the governments of Santa Fe, Cordoba and Buenos Aires provinces to gain certification for sprayers, with the aim of rolling this program out across the country following success in these key regions. "Misusing agrochemicals is an acute problem which we are working very hard to solve," explained Aapresid's Giraud. "The ultimate aim would be that without certification, workers would be unable to use such products."

LINING UP THE ALTERNATIVES

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 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 industry as a whole is also feeling the impact of the global trend for



IMAGE: Thinkstock

Quality for your crops

Ruta Nac. N° 9 Km 379,9 / Tel.: + 54 3471 422312 / Cañada de Gómez / Santa Fe / Argentina / info@laboratoriosnova.com
www.laboratoriosnova.com

sustainable operations and green solutions. This is particularly felt by multinationals and domestic companies working on joint ventures with international players, such as Chemotecnica, which is moving towards a more environmentally friendly portfolio of products with several U.S. companies. "We are seeing the market for solvent-based formulations reduce, while demand for green products and environmentally friendly solutions is increasing," said the company's president, Alejandro Golfari. Some companies are modifying their entire business model to embrace bio-solutions, such as Brometan, which is the only company in Argentina working on crop-oriented biological controls. Its solutions are typically more expensive than traditional crop protection products, but it claims the return on investment is far higher than normal. Working with global companies on innovative solutions, general manager Pablo Raimondo notices the differences between attitudes towards chemical usage internationally compared with Argentina. "There is not a real consciousness of healthier foods among our local consumers and there is no clear legislation concerning fresh food production. A small number of producers are concerned about how to produce fresh products using sustainable and safe solutions and, for domestic consumption, quality is low and chemical usage is higher," claimed Raimondo. "For external demand, buyers establish the rules and production uses greener and gentler chemicals."

However, with external markets leading the way, Argentina and the rest of South America will soon follow. Brometan believes that Argentina is at the forefront of a change in attitudes and is developing products accordingly. "Our portfolio, with its spread of traditional and greener products, is intended to manage the bridge between current usage trends and the requirements of the future," continued Raimondo.

Aapresid is also promoting greener farming practices with financial incentives, based on the European Commission's Roundtable on Responsible Soy certification. This standard, implemented to meet the requirements of the European Renewable Energy Drive, covers areas such as protection of biodiversity, water use and soil fertility. As Giraudo explained: "The Roundtable for Responsible Soybean is a fund that promotes greener farming practices with financial incentives for soy production. Our certification program is much wider and farmers following this program receive a better payment for adopting sustainable soil practices."

"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

"The Argentine farmer is part of a value chain which has incorporated a range of technology in recent years, including in seeds, equipment and knowledge, Argentina has an incalculable potential in terms of the agricultural sector."



- Mauro Piva,
General Manager,
Nova

A PACKAGE DEAL

Agrochemical companies are acutely aware of the importance of their industry to Argentina's future on both a domestic and global level. The industry is aware of the need to move away from glyphosate, and its cousins atrazine and 2,4-D, to more specialist, sustainable products. "The Argentine farmer is part of a value chain which has incorporated a range of technology in recent years, including in seeds, equipment and knowledge," said Nova's Piva. "Argentina has an incalculable potential

Brometan
SOLUCIONES SUSTENTABLES

**THE BEST OPTION
TO PROFIT YOUR CROP**

Buenos Aires 2170, Parque Industrial Burzaco
Burzaco, Buenos Aires, Argentina
Tel/Fax: +54 11 4299 1888
info@brometan.com.ar www.brometan.com.ar

in terms of the agricultural sector."

The first improvement in agricultural yield followed the introduction of hybrids in the 1980s, while the second followed the introduction of no-till farming and genetically-modified seeds in the 1990s. Argentina is now long overdue for a third wave of improvement in the sector. Chemotecnica's Golfari believes this will stem from precision chemical use and combining new crop protection technologies with fertilizers: "As yields increase, it will become even more important to protect crops. Farmers may not choose to apply pesticides or fungicides if the difference will only be around 7% of yield increase. However, if farmers can improve the differential to 30% or 40%, demand for crop protection products will rise," he explained. "Focusing on the crop protection and environmental health sectors will enable us to achieve

the government's goal."

The aim of the incumbent government is to increase Argentina's agricultural output by 60% by the end of the decade. Agrofina's 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 Soil Improvement Law, 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. •



IMAGE: Thinkstock

Table of Contents

3. Opening Letter
4. **A New Era in El Campo**
5. **Agrochemicals and Fertilizers**
7. Interview with **Federico Landgraf**, Executive Director, CASAFE
8. Interview with **Maria Beatriz Giraudo**, Former President, Aapresid
9. Article continued: **Agrochemicals and Fertilizers**
11. Interview with **Armando Allinghi**, Executive Director, Chambers of Fertilizers and Agrochemicals (CIAFA)
12. Article continued: **Agrochemicals and Fertilizers**



GLOBAL BUSINESS REPORTS

Argentina Agrochemicals and Fertilizers 2016

Project Director: Laura Brangwin
Industry Analyst: Harriet Bailey
Editor: Mungo Smith
Graphic Designer: Inanc Duman
Cover Photo: Thinkstock

A Global Business Publication
For updated industry news from our on-the-ground teams around the world, please visit our website at gbreports.com, subscribe to our newsletter by signing up to our VIP list through our website or follow us on Twitter: @GBReports

www.gbreports.com

