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Unshakable commitment to sustainability

Few sectors of the world economy have enjoyed growth such as that experienced by the Brazilian poultry industry in recent decades.

In less than half a century Brazil has become the world’s leading exporter of poultry meat and its third-largest producer—and here the industry is poised to rise one more position in the table, to rank second only to the United States.

It has been an extremely virtuous path. Poultry-raising in Brazil stands out for its sustainability in three areas: the economic, the environmental and social pillars.

A harmonious integration between producers and agribusiness companies is one of the most important differentiators in the economic area, guaranteeing the sanitary excellence of production; low water and energy consumption and respect for the Amazon Biome mark the environmental field; and an inestimable contribution to the development of communities, both in job creation and in income, reflect the social benefit of poultry raising in Brazil.

All of these aspects result in the supply of an animal protein of acknowledged quality and health at an affordable price—and one which is widely accepted both in Brazil and overseas by consumers seeking an extremely healthy food item.

Annual consumption of chicken by Brazilians has now reached 47 kg. And our product can now be found on the tables of consumers in more than 150 markets.

The sustainable aspect of Brazilian poultry production is extremely positive when one takes into consideration predictions by credible sources of an increase in the consumption of animal protein in the next few years by the world population.

As representatives of the Brazilian poultry industry, we hereby affirm our commitment always to seek to enhance this remarkable sustainability in our output. So that we can constantly meet the needs of consumers on all continents.
Fully sustainable production

The world’s largest chicken meat exporter, Brazil stands out for its sustainable poultry industry.
Brazil is one of the world’s leading agricultural and livestock product suppliers and one highlight is the poultry industry. Brazil ranks first in chicken meat exports as well as in beef, coffee, sugar, orange juice and other products. The country has achieved this level thanks to investments in research, development and innovation.

The success of Brazilian agribusiness is the result of the excellence of its agricultural companies, the skills of its producers, and the commitment of public authorities. Throughout the chicken production chain there is concern for the quality and health of the product.

Brazil, among the world’s leading chicken producers and exporters, remains in the enviable position of being the only country not to have recorded a single case of Avian Influenza, thanks to its excellent health status. The Ministry of Agriculture, Livestock and Food Supply monitors the industry constantly, and there are specific biosecurity procedures recommended by UBABEF to this end.

Constant surveillance also guarantees that Brazil’s chicken is free of hormones, the use of which is expressly forbidden by the Ministry of Agriculture, Livestock and Food Supply, which inspects the industry through the National Plan for the Control of Residues and Contaminants (Plano Nacional de Controle de Resíduos e Contaminantes—PNCRC), which makes sure all types of anabolic substance are absent from poultry.

Brazilian chicken has developed more rapidly, and with higher quality, better tasting meat, from the simple combination of advanced technology, genetics and corn and soy-based feeds, allied to an integrated system between growers and slaughterhouses, which has guaranteed a competitive edge few other countries enjoy.

The strict standards of the international market are an important corroboration of the absence of hormones in Brazilian chicken. Purchasing countries such as the European Union and Japan place strict sanitary demands on the import of foodstuffs, and one of the main requirements is a ban on the use of hormones in animals. Farms and slaughterhouses are constantly being inspected by overseas experts, and a whole range of tests of chicken meat are commonly applied even on arrival at the port of destination.

Birds are slaughtered in state-of-the-art slaughterhouses, where operations and processing are increasingly automated. Hygiene practices are extremely strict. The slaughterhouses adopt risk reduction and critical control point programs as well as other procedures recommended by Codex Alimentarius, the FAO body responsible for drafting the rules for foodstuff production.

During slaughter and processing, sanitary inspection is carried out by government veterinarians, guaranteeing that poultry slaughtered in Brazil is inspected by the Federal Inspection Service—Serviço de Inspeção Federal (SIF).

Francisco Turra states that prospects for increased world consumption of meats are encouraging for a country that has promoted an authentic revolution in poultry raising in the last five decades. “But”, he goes on to say, “this is not enough to guarantee Brazil—sustainably—a privileged position as the world’s leading supplier of an animal protein that is the most widely consumed on the planet”.

Renowned Dutch bank Rabobank, for example, founded in 1972 and specializing in agribusiness, predicts that world demand for meat will rise 44% by 2030, to reach 400 million tonnes annually. The highest growth, 60%, will be in poultry meat consumption, which will account for 39% of world meat demand in 2030. This share of the demand will replace pork as the most widely consumed animal protein in the world.

Despite the growth and importance of poultry raising, there are still countries that set up unjustified barriers in order to protect the local industry.

According to World Bank figures, developed countries adopted 35 trade restricting measures between Octo-
ber 2008 and February 2009, including increased tariffs, subsidies, non-tariff barriers, and even anti-dumping measures. The case of chicken meat is emblematic. For years Brazilian exporters have faced frequent difficulties in accessing major markets, owing to protectionist policies. An authentic duel that has already seen one Brazilian victory at the World Trade Organization (WTO) when the European bloc, some years ago, altered the tariff classification of salted cuts of chicken, leading to an increase in the tariff that had been applied up until that moment.

These practices, which include technical barriers, quantitative restrictions, sanitary barriers and export subsidies, deprive the consumers of many countries of access to this important protein. Chicken meat, in addition to its proven quality and sanitary status, has also been shown by doctors and nutritionists to be one of the healthiest and most nutritious types of meat.

The crucial participation of Embrapa Suínos e Aves (the pork and poultry arm of Brazil’s Agricultural Research Corporation EMBRAPA) must be mentioned here, playing a fundamental role to enable the poultry industry to achieve the status of world’s leading chicken meat exporter. The results of this work is that production grew by 1,417% from 1960, when it was virtually non-existent, to 2011, when it reached 13,058,000 tonnes.

Birds are slaughtered in state-of-the-art slaughterhouses, where operations and processing are increasingly automated.
The integrated system, a benchmark

*Concern for biosecurity guarantees the quality and sanitary conditions of a product that is recognized all over the world*

Brazil enjoys one unique feature in its process that has made it the world’s largest chicken meat exporter and third-largest producer: its unique integrated production system, a benchmark for other Brazilian agribusiness products, with its stringent sanitary status, quality and sustainability as defining characteristics.

Over 90% of Brazil’s poultry raising is currently based on the integrated system, which originated in the United States in the 1950s, and took root in Brazil in the 1960s. A few years later, in 1976, it paid off when the first shipment of Brazilian chicken to the international market took place, and it became a paradigm for the industry.

The partnership between integrated farmers and agribusiness companies provides opportunities for training, such as through rural and environmental and quality management programs. These are concepts that participants can also apply to their other activities. One example of the potential of this partnership is in the production of broiler chicks, which rose from approximately 1.5 billion in 1989 to 6.5 billion within 20 years.

Sustainability is also addressed through a partnership between growers and companies. Environmental conditions are thus observed within technical, legal and economic parameters. Integrated farmers are given guidance so they can meet sanitary standards, use water and manage land rationally, and receive instruction as to the importance of preserving and recovering gallery forest, and biodiversity and nutrient management.

Expansion of chicken farming, particularly with the deployment of the integration system, which is characterized by a high degree of confinement of animals, and by concentrating production on a smaller number of productive units, typically with closed sheds, has driven the activity both technically and in terms of health. The growing of birds in confinement has enabled greater control over production, handling, and the health of the birds, as well as control over feed distribution, and the application of medications and vaccines.

This type of growing results in greater industry concern for animal welfare. Given the importance of welfare for
the birds, UBABEF has developed a “welfare protocol for chickens and turkeys” and carried out training sessions for growers of associated companies, at which the importance of good practices and suitable handling of the animals was stressed.

Best practices in Brazil meet international standards and World Animal Health Organization (OIE) guidelines on animal welfare, and in recent years have shown great progress. One of the indicators is the average density of chickens per square meter in poultry houses. In Brazil, this is currently 34 kg/m², lower than in markets such as the European Union, where maximum density is 39 kg/m².

The development of the Brazilian poultry industry also rests on biosecurity as another concern. Integrated growers and the agribusiness companies themselves comply with a set of technical, conceptual, operational and structural procedures to prevent or control contamination of poultry flocks by infectious diseases that can impact productivity and/or the health of consumers of products deriving from this protein. Additionally, all Brazilian chicken exported is controlled by the Federal Inspection Service (SIF) with inspection carried out by teams of veterinarians working for the Ministry of Agriculture.

The Brazilian government also has two major programs for the sanitary control of the poultry industry which have become international benchmarks. One is the National Poultry Health Program (Programa Nacional de Sanidade Avícola—PNSA), which carries out epidemiological and sanitary surveillance for avian diseases: the regionalization plan is a part of this program. The other is the National Plan for the Control of Residues and Contaminants (Plano Nacional de Controle de Resíduos e Contaminantes—PNCRC), which addresses animal and plant products. Both comply with OIE and Codex Alimentarius standards.
In addition to this, companies apply sanitary programs and tools that are internationally recognized for managing animal production quality. These programs include Hazard Analysis and Critical Control Points programs (HACCP), Sanitation Standard Operating Procedures (SSOP) and Standard Operating Procedures (SOP).

Thanks to this, Brazil, among the world’s leading chicken producers and exporters, remains in the position of being one of the few producing countries not to have recorded a single case of Avian Influenza.

Another aspect of Brazil’s concern for biosecurity is the proposal to introduce a compartmentalization process, a program set up by the OIE to avoid disruption to the international poultry and poultry product trade in the event of an outbreak of disease.

Brazil, therefore, as a country that has never had an outbreak of Avian Influenza, cooperated with OIE in introducing the pilot compartmentalization project, coordinated by the Ministry of Agriculture, Livestock and Food Supply.

Unlike regionalization, which normally involves an entire State, compartmentalization concentrates on one company and its entire production process, over which it must keep strict control of hygiene, traceability and critical control points in virtually all stages. Even if there is a health problem in some regions of the country, the compartmentalized company will be able to maintain exports because it complies with all the guidelines of the program.

According to UBABEF Scientific and Technical Director, Ariel Mendes, some basic concepts are essential for a better understanding of the importance of compartmentalization for biosecurity. Ariel explains that a compartment requires the integrated work of the entire production chain from the feed mill, slaughterhouses, parent bird farms, and genetic material, all the way to broiler farms and slaughterhouses.

Several factors are essential to effectively implement compartmentalization: epidemiology of the disease in the country, environmental agents, biosecurity measures, the health status of animals in adjacent areas, and relations between the public and private sectors.

“Brazil ticks all of these boxes, and is therefore qualified to effectively introduce compartmentalization in a short period of time”, says Ariel.

“Companies are already seeking to set themselves up in places or in states that allow compartmentalization, where they will be more isolated and enjoy total control over biosecurity within their production system, to avoid contact with viruses, in the event of the state or country being contaminated”, he adds.

The four Brazilian companies that took part in the pilot project have been assessed in situ by the Ministry of Agriculture regarding each of these risk factors, and over the course of this year they will likely be formally approved as fit to take part in the program. Additionally, within this process, the Ministry of Agriculture is expected to produce specific legislation for compartments, laying down rules to be followed by all companies requesting compartmentalization in the future, and criteria for certifying them.

According to the Director of the Animal Health Department of the Ministry of Agriculture, Guilherme Marques, such recognition will allow agribusiness companies to continue their activities and even their exports in the event of an outbreak of disease in regions close to their production units, thus mitigating possible impacts such as those of trade bans and a standstill to their activities. “One can see the compartmentalization project as a huge ‘insurance policy’ for poultry companies, who will be able to continue producing and maintain their activities in times of crisis and health emergency”, he states.

Once the report on Brazil’s program—sent by the Ministry of Agriculture to the OIE—has been approved, work can begin in seeking recognition of compartments by importing countries.

“Compartmentalizing poultry farming is therefore a safe way of keeping the country exporting and assuring quality and competitiveness. We must reinforce the project so that we can maintain a sound health defense structure and make it credible in all Brazilian states”, Ariel Mendes concludes.
Environmental Preservation: a reality in Brazil’s poultry industry

Sustainable production is the fruit of a partnership between growers and agribusiness companies within technical, legal and economic parameters

Poultry-raising in Brazil stands out for its deep respect for the environment: This is a concern shared by the entire production chain, working to expand the industry, but always within rules that guide sustainable production.

A study by the United Nations Food and Agriculture Organization (FAO) and the Organization for Economic Cooperation and Development (OECD) shows that in the next ten years the preference of consumers for chicken will increase over that for other meats, especially beef. This forecast is based on increased production costs of meats owing to compliance with environmental demands and increasingly rigid sanitary standards. According to the FAO/OECD document, demand for animal protein will be increasingly associated with lower greenhouse gas emissions.

In the specific case of animal protein, the FAO/OECD study estimates that by 2018 no less than 82% of consumption will be concentrated in developing countries. To offset shortfalls in other regions, Brazil will have to increase its own production by 40%, which means it will need to grow by approximately 4% per year. The
prospect is that Brazil will be able to achieve this leading position since it has a great potential for the production of biomass, as well as abundant water, grains and arable land.

Specialists from these two major international agencies state that there is a universal preference for chicken over other meats, and that the trend will continue in the next decade. In this context there are very striking World Bank figures that indicate that 6.5 kilos of feed, 15,500 liters of water and 365 days go into producing every kilo of beef; for pork, this is 4 kilos of feed, 4,800 liters of water and 180 days; whereas for chicken the figures are only 1.6 kilos of feed, 3,900 liters of water and a mere 42 days.

The Water Footprint (Mekonnen & Hoekstra, 2011) has said that international trade can save water globally if a water-intense commodity is traded from a region with high productivity of water resources to one with low resources. The international institution says that approximately 4% of world agricultural water use is saved through international trade.

Regarding direct impact on the environment, the figures also prove that production is sustainable. Expenses on energy consumption and impacts on global warming, eutrophication and acidification are striking when comparing the production of beef, pork and chicken, which is clearly lower by ton of meat for all items, according to AJC International.

One good example is a comparison between the environmental impact of poultry farming in Brazil and in the United Kingdom. According to DEFRA (the Department for the Environment, Food and Rural Affairs), energy consumption and greenhouse gas (GHG) emissions in Brazil are 25% and 17% lower, respectively, when compared to Britain. The main reasons are: feed produced in Brazil is easily available, which reduces transportation costs; low energy consumption for ventilation and heating the poultry houses, owing to Brazil’s climate; and a simplified production structure.

Brazil’s sustainable poultry industry, which is concentrated in the southern, mid-western and south-eastern regions of Brazil, is strategically based on the preservation of the Amazon Biome. Furthermore, the industry has invested in such environmental areas as participation in projects under the United Nations Framework Convention on Climate Change to help reduce greenhouse gas emissions; the planting of eucalyptus and pine for reforestation and future use as a source of energy; measures for water treatment, the protection of springs, and reduction of consumption; the use of litter to produce biogas; the use of culled chicken as organic fertilizer; and chicken fat to produce biodiesel.

The partnership between agribusiness companies and growers in the integrated system is a key factor in making Brazil’s poultry industry sustainable. Environmental conditions are thus observed within technical, legal and economic parameters.

Agribusiness companies have increasingly invested in activities focusing on the quality of the environment and on sustainable production. BRF, for example, runs a program entitled Environmental Attitude (Programa Attitude Ambiental), in which it separates, selects, transports, treats and suitably disposes of residues from animal health services it uses in integrated production of pork and poultry. This work is a partnership between stakeholders, including input suppliers and medication suppliers, and the company that specializes in treating and disposing of the waste.

The results of the project have been that over 10,000 rural producers have been trained and deployed, and over 300,000 tonnes of residues have been collected. Conservationist activities have been promoted among all stakeholders in the chain.
Another practice adopted by growers and slaughterhouses to mitigate the impact of their activities on the environment is the reuse of water. Seara Alimentos and the Cooperativa Agroindustrial Lar are two companies that have used a methodology to reduce the purchase of potable water and the emission of effluents. Cooperativa Lar is also banking on electricity generation using residual biomass from the slaughter of birds, and, among other results, has reduced greenhouse gas emissions into the atmosphere, generating by itself 1.42% of the electricity consumed by the industry, and producing carbon credits.

The poultry industry today is fully aware of the need to preserve the environment as a fundamental factor underpinning sustainable development. The issue has become increasingly important in negotiations with a range of markets, in order to please increasingly demanding consumers.
The poultry industry promoting development in communities

Poultry farming, where established, raises GDP while investment generates income for local inhabitants.

Introduction of the integrated system and the industry’s productivity account for the high Human Development Index (HDI) of several Brazilian cities. The social importance of poultry farming in Brazil is massively obvious in the country’s hinterland, above all in the southern and south-eastern states where in many cities chicken farming is the main economic activity.

The system has leveraged Brazilian poultry farming to an incomparable level of productivity. This poultry model, based on the ceaseless work and dedication of integrated farmers, enables the country to develop performance levels that make the Brazilian poultry industry one of the world’s leaders.

Data show that for every million Reals invested in Brazilian agribusiness, 212 new jobs are created. Investment in the industry leads to income generation, since the setting up and development of agribusiness companies raises the GDP wherever they are installed.

In the town of Marau, in Rio Grande do Sul state, industrial poultry farming is the main economic activ-
ity. Fifteen thousand of its 36,700 inhabitants are employed in the industry, and per capita GDP comes to R$ 31,000. There are 1,026 establishments producing 7.6 million birds. This productivity has caused the town to rank first in the state on the FIRJAN (Federation of Industries of the State of Rio de Janeiro) Municipal Development Index—IFDM, which measures employment, income, education, and health. Another example is the town of Xaxim in Santa Catarina state, where 8,000 people out of 25,500 inhabitants are employed in the poultry industry. The town, ranking 27th in the state on the IFDM, produces one million birds and has 435 establishments. There is also Palotina, in the state of Paraná, where 10,500 out of 27,000 inhabitants are working in the poultry industry, generating a per capita GDP of R$ 28,600. There are 566 establishments in the municipality, producing 5,593,000 birds. These figures put the town 17th in the IFDM for the state.

UBABEF President Francisco Turra says that family agriculture is the key to social integration in the countryside, for which reason integrated poultry farming is the best and fairest type of agrarian reform that Brazil has ever undertaken, distributing income and guaranteeing quality of life for partners. “The integration system between producers and slaughterhouses in the poultry industry is the basic reason why this sector is one of the most important industries in Brazil’s agribusiness”, he points out.

The importance of poultry farming in Brazil’s social and economic context is borne out by excellent figures. There are thousands of holdings in Brazil, 3.5 million Brazilians involved in the chain, and 32 exporting companies that are UBABEF associates, accounting for 98% of chicken meat shipments, and 286,000 factory jobs. There are over 10,000 integrated growers in Rio Grande do Sul and 32,000 poultry houses; in the state of Paraná there are nearly 15,000 integrated growers and in Santa Catarina approximately 20,000 integrated growers.

To meet the needs of this specific population, agribusiness companies adopt best practices in corporate governance, and therefore are very active in the social aspect. One example is the work carried out by BRF, through its Instituto BRF, which boosts community development in those states where the company is established. This includes collective activities that genuinely improve the quality of life of those communities and promote environmental balance in a sustainable and transforming fashion.

In the view of UBABEF’s president, the poultry industry is aware that investing in sustainability is a major
factor behind continuing and successful business. “Agribusiness companies today adopt best corporate governance practices and are committed in the environmental, social and cultural spheres. These are increasingly important aspects within negotiations in a range of markets, where more and more demanding consumers seek products that are not only healthy and of the highest quality but also committed to sustainability”, he says.

The social side of the sustainability of the poultry industry in Brazil is also marked by the presence of immigrants. They played a fundamental role in modernizing and expanding the industry, and also, therefore, the excellent social performance of this industry. Growing domestic demand meant that poultry farms, formerly concentrated in Minas Gerais and São Paulo, spread to the states of Rio Grande do Sul, Paraná and Santa Catarina, as well as to Mato Grosso and Goiás.

This process led immigrants from every region of the world—Italians, Germans, Swiss, Ukrainians, Dutch, Swedes, Portuguese, Arabs and Japanese—to move to these states after choosing Brazil for their new homeland. This new population brought in crops and farming techniques hitherto unknown in Brazil and contributed a great deal to improvements in living conditions for the national flock, as well as to the inhabitants of these states.

Another crucial contribution to Brazil’s poultry industry was made by Japanese immigrants. They brought their knowledge to the countryside and helped write the history of Brazilian agribusiness, one of the country’s most powerful activities. The first breeder hens were imported from Japan, boosting genetic improvements to the flock.

“This sharing of know-how and technology proves how important the immigrants were to the success of Brazil’s poultry industry today, both economic and socially”, says Turra.

Unlike many other leading industries, chicken breeding uses mainly Brazilian inputs and labor because corn and soy are the basic products for feeding the flock, which underscores the wide-ranging social aspect in the poultry industry. The issue of sustainability in agribusiness companies is pervaded by social responsibility activities among which the following stand out: charity campaigns; the upkeep of nurseries; environmental education for children; dental projects with the distribution of oral hygiene kits; singing and dancing lessons for the children of employees and the community at large; and training and self-enhancement programs for growers.
Technology and sustainability

Head of Embrapa Poultry and Pork, Dirceu Talamini, describes how this unit of Brazil’s Ministry of Agriculture, Livestock and Food Supply has contributed to the expansion of the poultry industry in the country in recent decades. As well as to the sustainability of one of the most important Brazilian agribusiness industries.

Brazilian Poultry Magazine – How was Embrapa Poultry and Pork created?
Dirceu Talamini – The Brazilian Agricultural and Livestock Research Company—Empresa Brasileira de Pesquisa Agropecuária, Embrapa —was set up in 1973 in order to provide technological support for the development of Brazilian agriculture and livestock. Brazil had everything necessary for an expansion of agribusiness, thanks to factors such as the climate, soil, availability of water, and labor capacity. But there was a need for greater development in the field of technology. As part of this strategy, Embrapa brought in a model that would set up several national centers for specific activities. That is how Embrapa Pork and Poultry was created.

Where is the unit headquartered?
In the south of Brazil, in the town of Concórdia, Santa Catarina state. It is one of the most important chicken meat production centers in the country. One of the factors in this location was the importance of the region’s products. Both in pork production and in poultry production, western Santa Catarina led efforts to modernize and professionalize. The two activities spread to other regions of Brazil, such as the Mid-west. But the leading companies still have their headquarters very close to Embrapa Suínos e Aves.

What is the role of Embrapa Pork and Poultry?
To support and carry out research, catering to pork and poultry production throughout Brazil. More recently we have also set up intense cooperation with countries in Latin America and Africa. All of this is due to the development of pork and poultry in Brazil and the international interest this has aroused.
What are its main activities?
Our unit works with all the important fields for poultry production and is supported by laboratories. It is a complete overview of the entire production chain. In addition to providing know-how for specific areas, such as lineages of chickens, the composition of feeds, methods to prevent and control diseases, and technology to treat production residues, we are always available, to the Brazilian government and to private companies, to provide supervision and help them overcome challenges that arise over time.

How can this contribution be measured?
Since we began operating, we have generated more than 400 technologies. In the last 20 years alone, studies have shown that Embrapa Pork and Poultry has contributed 40% of the technological progress in pork production and nearly 30% in poultry, which is very significant. We are a Brazilian institution that compares to internationally renowned research institutes such as the US Agricultural Research Service. Public investment in science and technology brings high returns to society, actually exceeding those from investments in rural credit. The level of Brazil’s poultry industry increasingly demands that Embrapa work in tandem with universities to guarantee the sustainability of these initiatives.

What is the profile of its employees?
Our unit has 220 employees. Half of the team is made up of researchers and analysts, all of whom have Master’s degrees and Ph.D’s, particularly from overseas, and some of whom have post-doctorate qualifications. Brazilian science is increasingly endowed with highly prepared professionals to meet the needs of agribusiness.

What stands out in Embrapa Pork and Poultry’s contribution to the health of Brazil’s poultry industry?
There are several aspects to poultry health. One of them is putting forward methods to prevent and control diseases that can break out among flocks. This is one of our most important lines of research. We also develop diagnostic methodologies for diseases which enable laboratories carrying out active and passive monitoring to follow and maintain the excellent sanitary level of Brazilian poultry production. Additionally, we have developed vaccines, and inputs for vaccines and antigens in the past. That is a body of know-how that helps preserve the high sanitary standard of Brazil’s poultry industry.

In terms of sustainability, what activities would you highlight?
In the environmental field, we have a set of methods for treating and using poultry residues, ranging from composting to the production of biogas, as well as the production of biofertilizers that can be used in poultry farming. From the economic and social point of view we have conducted studies into labor, production costs, and above all the balance of the integrated system between slaughterhouses and poultry growers, thus harmonizing distribution of profits. The coordination and linkup between growers and companies is an important competitive edge for Brazil’s poultry industry.

What about the future of Embrapa Pork and Poultry?
Research, science and technology are activities that are indispensable for Brazil’s growth, and for maintaining the sustainability and competitiveness of production chains. Our view is that federal, state and municipal governments as well as the corporate sector are well aware that investments in the activities of Embrapa Pork and Poultry, both in personnel and in laboratories, must continue. Science and technology still have much to contribute to the economic and social development of Brazil’s poultry industry.

What is your perception of Brazil’s role as a world class chicken exporter?
Brazil has many important advantages with regard to production factors, quality, health, and a competitive price for our chicken meat. We also have a competitive edge in our commercial and marketing structure. As the result of this I am convinced that Brazil will remain the world’s leading chicken meat exporter.
**Economy**
Chicken meat is the animal proteins that consumes least water in its production process. Approximately 3,900 liters of water are necessary throughout the chain to produce 1 kg of chicken meat, from growing the grains to the final product, whereas for beef this is 15,500 liters and for pork 4,800 liters.

**Taste**
Chicken meat has a high nutritional value. It is rich in essential proteins and amino acids; the cut presenting the highest rates of these substances is the skinless breast. Furthermore, it is also an important source of B complex vitamins, and minerals such as iron, potassium, zinc and magnesium.

**Sustainability**
The production of chicken is that which has the lowest impact on global warming. According to a study on environmental impact, greenhouse gas emissions are approximately four times less than in the case of the production of other meats.

**Integration**
Over 70% of chicken meat exports are concentrated in southern Brazil, far from the Amazon Biome. Production centers upon farms in the states of Paraná, Santa Catarina and Rio Grande do Sul, on small holdings integrated with slaughterhouses.

**Biosecurity**
Brazil has never recorded a case of Avian Influenza. Despite never having had a single case of the disease, Brazil introduced its National Plan for the Prevention of Avian Influenza and for the Control and Prevention of Newcastle Disease in 2006, modernizing laboratories, setting up sanitary barriers and providing training.

**Reduced Costs**
Electricity consumption in the chicken production chain is roughly half that for the production of other meats.

**Genetics**
Thanks to the selection of specific lineages for meat production, it only takes 45 days to produce a whole chicken today.

**On a high**
The average per capita chicken consumption in Brazil in 2011 was 47.4 kg, according to UBABEF figures. This is greater than consumption in the United States, which was 44.4 Kg, according to the United States Department of Agriculture (USDA).
Environment

The production of chicken meat has the least impact on the soil. A recent study shows that levels of eutrophication and acidification are up to four times lower than in the case of pork and beef production.

Quality

Slaughterhouses inspected by the Federal Inspection Service have international quality certificates and processes. Brazilian slaughteringhouses have international certification such as that of Global G.A.P. (Good Agricultural Practices), ISO (International Organization for Standardization), BRC (British Retail Council), and comply with quality processes that are recognized and used throughout the world, such as HACCP (Hazard Analysis and Critical Control Points), GMP (Good Manufacturing Practices), SSOP (Sanitation Standard Operating Procedures), and others.

Precautions

Brazil’s poultry industry applies animal welfare principles. Brazil is committed to abiding by the rules of animal welfare laid down by the World Organization for Animal Health (OIE), and in 2008 signed a cooperation agreement with WSPA (World Society for the Protection of Animals) to provide scientific information and enhance the knowledge of poultry farm and slaughterhouse teams with regard to bird welfare.

Halal

Most Brazilian slaughterhouses today are certified for Halal slaughter. This work is entirely overseen by certifying agencies acknowledged by Islamic authorities, and inspected by auditors from religious entities of Islamic countries.

Yield

In addition to providing several types of cuts, the litter from chicken bedding is also used as organic fertilizer in agriculture, and chicken skin and fat are used to produce biodiesel and pet food.

Productivity

The enhanced performance of Brazil’s poultry industry is the result of years of research in genetics, handling, nutrition and health.

Safety

For its animal products, including chicken meat, Brazil has strict controls for residues and contaminants. To ensure healthy, safe product, the Ministry of Agriculture, Livestock and Food Supply introduced the National Plan for the Control of Residues and Contaminants which comprises the recommendations of the Codex Alimentarius and is recognized by the health authorities of several importing countries.
Environmental initiatives leads to production efficiency in the poultry industry

Brazilian agribusiness companies are increasingly investing in environmental management

Poultry products of Brazilian agribusiness companies are sold today in over 150 markets. And they are bought by consumers who not only demand quality and sustainability, but are increasingly concerned about environmental issues. To cater to these consumers and also to assure sustainable production, Brazilian poultry companies are increasingly investing in environmental management. There are several examples of good practices in this field.

One of BRF’s concerns is with the collection of residues from animal health services and therefore it developed the program entitled “Environmental Attitude” to boost environmental sustainability all along the animal production chain through the separation, collection, transport, treatment and suitable final disposal of animal health residues used in the integrated production of poultry and pork.

This program has enabled BRF to promote a partnership within the integrated production company to include growers, input suppliers and the company that specializes in treating and disposing of the waste. It also mapped those farms taking part, educated and
Another example of water reuse comes from Marfrig Group’s Seara Alimentos. The company has a treatment system that improves wastewater from industrial processes and returns it to the environment. The introduction of the project reduced the purchase of potable water and the environmental impact from the release of effluents.

Environmental awareness is also among the priorities of Tyson do Brasil. Among several initiatives it has exclusive treatment of industrial residues from chicken processing. In its process fat is separated from water and reduced by means of chemical processes. Decantation pools are used to treat these residues, thus helping assure that the water can be reused. This procedure has been acknowledged by the environmental protection agencies, which awarded the São José unit the Fritz Müller Environmental Preservation Prize. The company also recycles much of its garbage, and its packaging is totally recyclable.

One of Brazil’s major industrial conglomerates, Cooperativa Central Aurora Alimentos, is a world benchmark in meat processing technology. Among the company’s actions to promote sustainable poultry production is the flat fermentation of litter which consists of the use of black tarpaulin completely covering the litter without disturbing it. This technique has several advantages, according to the company, including reducing the use of wood shavings, mitigating health risks, and above all enhancing the environment by reducing gas emissions.

Companies in this industry are increasingly investing in environmental management and carrying out environmental management activities.
A truly ecological country

Brazil ranks first among countries with protected areas

It is not only in its poultry industry that Brazil respects the environment. This respect for the environment gains in importance when one considers that Brazil is the fifth largest country in the world. 8,514.877 km² in area, it ranks only behind Russia, Canada, China and the United States.

Strictly protected areas come to 28% of Brazil’s territory, making the country a leader in the world conservation ranking, according to the International Union for Conservation of Nature (IUCN), taking into consideration countries over 2,000 km² in area.

In terms of protected areas, China has 16.6% and the United States 14.8%, these being the second and third ranked countries. In the case of Canada, lying seventh in the ranking, protected areas, according to IUNC, account for 8%.

Brazil’s environmental policy is one of the strictest in the world, and rests on three pillars: the setting up of Environmental Conservation Areas; the creation of reserves for its indigenous peoples; and the constitution of Legal Reserves and Permanent Preservation Areas on rural properties.

In Brazil these protected areas are located not only in the Amazon but in other nature heritage regions of the country such as the Atlantic rainforest and Pantanal wetlands.

Apart from Federal Government designated Protected Areas, there are also regions with conservation units set up by state and municipal governments.

A significant proportion of Brazil’s protected areas—above all in the Amazon—is indigenous land.

Figures provided by ICONE (the Institute for International Trade Negotiations—Instituto de Estudos do Comércio e Negociações Internacionais), mentioning a study carried out by the University of São Paulo (USP), show that out of the 850 million hectares of Brazil, 537 million hectares, or 63%, are covered by natural vegetation.

One of the major areas where conservation activities are carried out is the Amazon Biome—a region where no poultry companies operate. Poultry-raising is concentrated mainly in Brazil’s southern states.

Some companies have units in the Midwest of Brazil, but this is still very far from the borders of the Amazon, one of the planet’s most important environmental areas.
An industry in constant sustainable growth

The world’s largest chicken meat exporter, Brazil can become its second-largest producer

The share of Brazil’s chicken meat exports has followed a rising trajectory since 2004, when the country became the world’s largest exporter of the product. The poultry industry ended 2011 with 13,058,000 tonnes, up 6.8% over 2010 and an all-time record.

This performance enabled Brazil, the world’s third-largest chicken meat producer, to further close the gap on China, ranking second to the United States. According to projections by the United States Department of Agriculture (USDA), China’s production of chicken came to 13.2 million tonnes in 2011, as opposed to the 16,757,000 tonnes of the United States.

The gap separating Brazil and China thus shrank from 320,000 tonnes in 2010 to 142,000 tonnes in 2011. The industry expects Brazil shortly to take second position in the world chicken producers ranking.

“The performance of the poultry industry in 2011 is the result of a genuine revolution in the Brazilian poultry industry in recent decades”, affirms UBABEF’s executive president, Francisco Turra.

Brazil’s poultry exports (chicken, turkey, duck, goose and the meats of other birds, plus eggs and genetic material) came to US$ 8.853 billion, up 19.7% over the previous year, yet another unprecedented gain for the industry. In volume, poultry exports totaled 4,118,000 tonnes, a growth of 2.3%.

Foreign sales of chicken meat, the largest portion of Brazil’s poultry exports, also set a new record: they came to 3.942 million tonnes, up 3.2% over 2010. Foreign exchange revenues came to US$ 8.253 billion, likewise up 21.2% over the previous year.

Other outstanding products among Brazil’s poultry exports are: turkey meat, totaling 141,200 tonnes, and a foreign exchange income of US$ 444.6 million; duck, goose and other birds, accounting for shipments of 1,640 tonnes and a foreign exchange income of US$ 6.99 million; fresh and processed eggs, coming to 16,600 tonnes and exchange revenues of US$ 28.2 million; and genetic material (breeders) with a volume of 1,200 tonnes and US$ 38 million in revenues, while hatching eggs shipped 14,200 tonnes and totaled US$ 81.9 million.

This performance shows the importance of agribusiness in
Brazil’s GDP. 2011 closed with R$ 4.14 trillion and the share of agricultural goods was 22% or R$ 918 billion. Brazil’s total performance in exports for 2011 closed at US$ 256 billion, with agribusiness accounting for US$ 94.5 billion and the poultry industry weighing in with US$ 8.85 billion.

UBABEF, even though Brazil is consolidating its leading position among world chicken exporters, is constantly striving to increase shipped volumes to current customers and to open up new markets. To this end it is supported by the Federal Government, through the Ministry of Agriculture, Livestock and Food Supply, the Ministry of Development, Industry and Foreign Trade, and the Ministry of International Relations.

Relations with diplomatic representatives of foreign countries, both current purchasers or prospective clients of our chicken, as well as with Brazil’s ambassadors to other nations, are strategies employed by UBABEF to broaden the scope of purchasing countries. Another initiative is carried out in partnership with Apex-Brasil – Brazilian Trade and Investment Promotion Agency, and includes trade promoting activities targeting the world’s most important trade fairs such as Gulfood Dubai (United Arab Emirates), SIAL Paris (France) and Anuga (Germany).

To disseminate the quality, health and sustainability of Brazilian chicken meat, and meet the expansion goals of the industry, UBABEF held meetings and hearings with representatives of government and the private sector in 2011. Its representatives took part in countless lectures, international events, international missions, and domestic fairs and congresses and hearings with Brazilian and foreign ministers and authorities, as well as a vast array of other activities.

Throughout 2011 Brazil welcomed countless veterinary missions and representatives from countries interested in seeing the Brazilian poultry industry at first hand. For example, Russia, Venezuela, the Philippines and Malaysia. On these occasions, veterinarians visited Brazilian slaughterhouses to carry out audits on establishments to verify compliance with sanitary standards. In addition to these audits, Islamic countries also assessed our compliance with their religious precepts. It must be pointed out that foods to be exported to these countries must be prepared in obedience to the Halal system, a process in which Brazil possesses a long tradition. Today most Brazilians slaughterhouses are certified to meet this requirement.

Recognition of Brazil’s poultry industry in the international market is the result of intense efforts by the entire industry, but agribusiness companies’ state-of-the-art technology and the technical expertise of farms should be added to this. Workers in this industry today are aided in their tasks by a vast number of machines and items of equipment making Brazil’s product the best in the world.

Furthermore, the Brazilian poultry industry does not only export chicken meat and eggs to the world market, but also exports machinery and equipment. This is an expanding market whose importance to the growth and quality of the industry is as yet unrecognised by consumers at large.

In Brazil, speaking exclusively of the poultry industry, we can highlight exports of machinery to clean and select eggs, as well as incubators. These products are sold to such countries as: Argentina, Belgium, the United States, Canada, Hong Kong and Mexico.

Machinery and Equipment—another highlight
Eggs, an expanding market

Brazil’s production aims to provide guaranteed safety to consumers

Brazil, having consolidated its position as the world’s leading chicken meat exporter, is well on the way to being one of the largest producers and exporters of eggs, both fresh, and in the form of liquids or powder. In 2011, Brazil’s egg production came to 31.5 billion units (1.9 million tonnes). Brazilian exports of eggs totalled 16,600 tonnes in 2011. Africa, with 11,200 tonnes, and the Middle East, with 3,000 tonnes, were the main recipients. The major buyers were Angola, with 10,000 tonnes and the United Arab Emirates with 3,000 tonnes. Today, 70% of what is sold abroad is fresh eggs and the rest is industrialized in the form of liquids or powder.
“Brazilian egg exports have increased year on year, but we are sure that we can take a greater leap. After all, it is a foodstuff that contains all the proteins, and in the case of Brazil is directly linked to the quality and sanitary status of chicken meat, which is internationally acknowledged”, says Francisco Turra, executive president of UBABEF.

A strict sanitary and animal health surveillance system, top quality production standards with international certification, and biosecurity practices are present throughout the egg production chain to ensure safety for consumers of Brazilian eggs. All Brazilian exporting plants have introduced a Hazard Analysis and Critical Control Point System (HACCP), a program that aims to prevent potential problems in the food production process from occurring.

Brazil, as a result of its leadership in the world chicken meat market, has the strictest national programs for the control of residues and contaminants, and for the prevention of diseases such as Avian Influenza and Newcastle disease. The PNSA (National Poultry Health Program—Programa Nacional de Sanidade Avícola) has a network of modern laboratories, and the system creates preventive barriers and provides technical education and capacity building to ensure the quality of eggs produced in Brazil.

Not only are they highly nutritious and the ingredients of thousands of recipes, eggs are among the cheapest forms of animal protein. An egg contains 13 essential nutrients, in varying amounts, that are necessary for the organism’s healthy functioning, including biologically essential substances such as choline, selenium, vitamins A, B and E, folic acid, iron, and zinc. All this at only 75 calories.

Eggs are important for slimming diets, or for boosting muscle strength, enhancing the working of the brain, eye health and a great deal more. A large egg contains six grams of protein, nearly half of which is in the yolk. The American Heart Association recently corrected its recommendations on egg consumption; according to the entity today, there is no longer a specific recommendation of the number of yolks a person may eat per week.
Brazil's leadership in the international chicken meat market springs from investments in modern facilities, and biosecurity programs, as well as from its climate, the abundance and availability of cereals, and the most important factors—adaptation to world demand and competitive prices. One of the most important factors, however, enabling Brazil to achieve its current position is the result of investment to enhance the genetic material giving rise to our flocks. This segment of Brazil’s poultry industry generates profit, efficiency and versatility for growers today.

The excellent productivity of hatching eggs, the high performance of the birds, the ability to adapt to a range of consumers, the uniformity of batches, strict biosecurity programs, the quality of pure lineages, and excellent animal husbandry performance indices, as well as experience in exports, all bear witness to the quality of Brazil’s genetic material.

Control begins with breeders on farms and includes classification of the eggs from which broilers will hatch. The hatching eggs to be used in incubation are chosen on the basis of strict quality criteria after classification. Cracked, chipped or dirty eggs, or those with double yolks are rejected.

Furthermore, there are parameters and specifications...
for making up the boxes to transport this material. These guidelines aim to inform the “ideal” model to guarantee the safety of the product. Teams at the cargo terminals of airports are also instructed by a manual written by UBABEF, which shows how to correctly handle this type of cargo. These measures ensure constant precautions so that the produce reaches farms and incubators in perfect condition.

Biosecurity is a constant concern. All Brazilian genetic material exporters carry out hazard analyses and preventive programs and meet the strictest production standards. Strict criteria are laid down and imposed by the Ministry of Agriculture concerning the distance between layer hatcheries, grandparent hatcheries and commercial growing, all of which assures the sanitary quality of the lots. The access of people and materials to the facilities is restricted, and there are strict protocols for the handling of the animals, as a further guarantee of the quality and reliability of the product.

These precautions guaranteed Brazil a growth of 11.3% over 2010 in genetic material exports (layers), which came to US$ 38 million in 2011. The volume was 1,200 tonnes (+9.2%). International sales of hatching eggs totaled US$ 81.9 million, a rise of 11%, with shipments of 14,200 tonnes (+1.6%). Venezuela, Paraguay and the United Arab Emirates are among the major destinations.
This seal guarantees the quality of Brazilian chicken meat

Seal created by UBABEF and Apex-Brasil guarantees compliance with principles demanded by consumers throughout the world

UBABEF uses the Brazilian Chicken seal to emphasize the qualities of Brazil’s poultry industry. The initiative is part of a sectoral project within UBABEF supported by Apex-Brasil – Brazilian Trade and Investment Promotion Agency and aiming to highlight and publicize the values of the Brazilian Chicken Brand, as well as link it to products exported by UBABEF associate companies and other participants in the project.

The criteria for use of the seal, drawn up by a specialized consultancy firm on the basis of guidelines provided by UBABEF, will enable products bearing this seal to provide a guarantee that they comply with principles demanded by consumers throughout the world.

The principles of quality, biosecurity, and sustainability, as well as respect for the environment, for workers, integrated growers and for consumers, alongside the observance of best farming and manufacturing practices, stand out among the conditions demanded of exporting companies wishing to be allowed to use the seal. Commitment to animal welfare, social responsibility, and compliance with legislation are further important principles in this process.

Provided it complies with the prerequisites demanded by the entity, an exporting company can place the Brazilian Chicken seal and other institutional and advertising labels on its packaging as a differentiator in origin and quality. Allied to this, the partnership between UBABEF and Apex-Brasil, known as the Sectoral Project, promotes dissemination of the properties and qualities of products bearing the brand in international importing markets, as well as enhancing its visibility for potential customers of Brazilian chicken meat.

Ricardo Santin, Markets Director of UBABEF, states that the Brazilian Chicken seal was created in order to ratify and guarantee the quality that consumers all around the world are used to. “This initiative is yet another action by UBABEF and Apex-Brasil to consolidate the image and concept of Brazilian chicken in the 150-plus markets to which we export”, he says.

While raising awareness among consumers of the importance of buying products that are produced sustainably as well as being of excellent quality, the seal provides a guarantee and contributes to responsible consumption.
The Brazilian Poultry Association (UBABEF) gathers the main companies in the poultry production chain. Currently, on the export side, these companies are responsible for 97% of the total Brazilian exports of poultry meat and eggs. UBABEF works for the continuous development of the industry, to access new markets and assure the quality of one of the leading exporter of poultry products in the world.
THE BRAZILIAN POULTRY INDUSTRY:
A FULLY SUSTAINABLE ACTIVITY

BRAZIL IS THE WORLD’S THIRD-LARGEST PRODUCER AND LEADING EXPORTER OF POULTRY MEAT.

THE BRAZILIAN POULTRY INDUSTRY IS FULLY SUSTAINABLE, AND ITS SANITARY STATUS IS ASSURED.

BRAZILIAN CHICKEN MEAT IS PRODUCED IN HARMONIOUS INTEGRATION BETWEEN POULTRY GROWERS AND SLAUGHTERHOUSES, PREVENTING A RURAL EXODUS.

IN THE ENVIRONMENTAL SPHERE IT STANDS OUT FOR ITS RESPECT FOR THE AMAZON BIOME AND FOR A PRODUCTION TECHNOLOGY THAT USES RENEWABLE NATURAL RESOURCES, WHILE KEEPING CO2 EMISSIONS BELOW THOSE OF COLDER COUNTRIES.

IN THE SOCIAL ARENA, POULTRY INDUSTRY IS THE MAJOR SOURCE OF INCOME AND EMPLOYMENT FOR 3.5 MILLION PEOPLE IN A NUMBER OF REGIONS OF BRAZIL.

THANKS TO THIS SUSTAINABLE POULTRY INDUSTRY, BRAZIL WILL CONTINUE TO PROVIDE AN IMPORTANT SOURCE OF ANIMAL PROTEIN TO CONSUMERS ALL AROUND OUR PLANET.

The Brazilian Chicken project, a partnership between UBABEF and Apex-Brasil, aims to publicize the qualities of Brazilian poultry industry overseas, emphasizing its commitment to quality, biosecurity, sustainability and respect for consumers. Find out more at www.brazilianchicken.com.br/english