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1. ABOUT ALIANIMA

Alianima is a non-profit organization that works closely with food industry leaders to identify and address key challenges faced by the animal production chain. We offer partnerships, consultancy and free technical support to companies committed to improving the living conditions of animals, helping to implement sustainable practices and improved animal welfare.

We have a specialized technical team, which bases all its actions and materials on scientific data. Our goal is to encourage an industry more attentive to and concerned about animal suffering, and to foster consumers with greater awareness regarding the origin of their food, promoting critical and conscious consumption.

Find out more about our work at alianima.org.







2. ABOUT ANIMAL WATCH

Animal Watch is a platform developed by Alianima, with the aim of increasing transparency regarding the public commitments of companies in the food and hospitality sectors in Brazil toward animal welfare, in order to facilitate their tracking by civil society and ensure that they are effectively fulfilled.

In addition, the platform provides informative content about Alianima's activities and the reality of the food production chain, highlighting the industry's role in promoting significant changes in the treatment of animals, aiming to encourage more critical and conscious consumption.

Find out more at observatorioanimal.com.br.







2.1 About Broiler Watch

For almost a decade, an international movement has been leading food corporations to adopt a policy on the welfare of broilers. Currently, more than 200 companies — including major restaurant chains, fast food brands, and retailers — operating in North America, Europe and Oceania, are committed to demanding minimum animal welfare standards from their suppliers, under an initiative called the Better Chicken Commitment¹ (BCC).

In 2023, an adaptation of the BCC was <u>launched</u> by third sector organizations, including Alianima, to fit the Brazilian poultry farming scenario. Although there are still no public commitments to chicken welfare in the country aligned with the BCC (at the time of publication of this report), it is essential to encourage discussion on the topic to catalyze the implementation of good practices by the industry.

Taking this into account, the first edition of the Broiler Watch, published by Alianima, aims to outline an overview of Brazilian industrial chicken meat production, list the main critical points of animal welfare in poultry farming, provide possible solutions and testimonies from industry players and experts. The aim of Broiler Watch is to provide a practical contribution so that animal welfare policies can be adopted by corporations and regulatory agencies in Brazil.

To learn more about the BCC, visit: betterchickencommitment.com





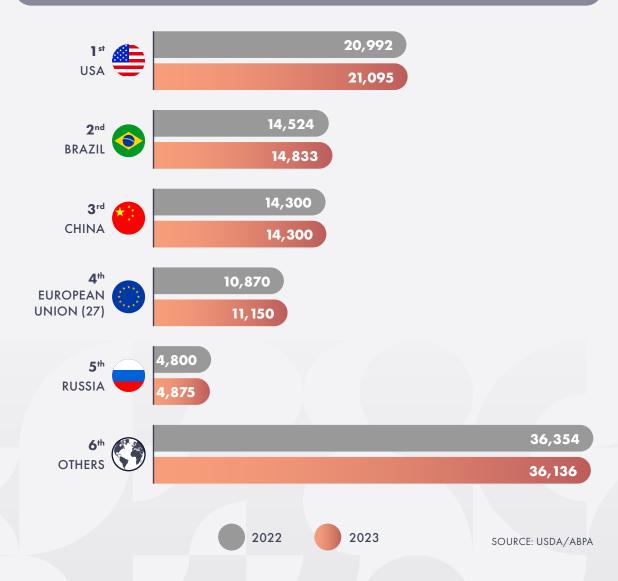


3. INTRODUCTION

3.1 Overview of broiler industry in Brazil

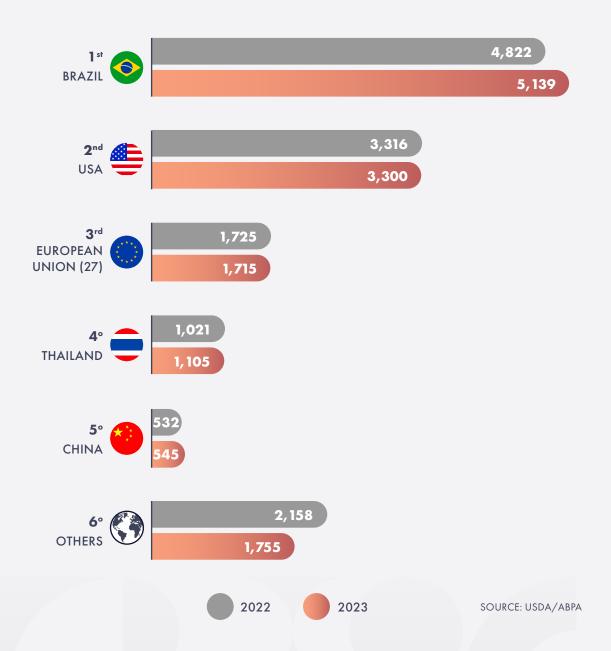
The chicken meat industry is one of the largest in the world and continues to expand, driven by growing demand. Since 2004, Brazil has been **the global leader in exports** and has recently reached **second place as a producer**, accounting for 37.9% of total exports and 14.5% of world production.

WORLD PRODUCTION OF CHICKEN MEAT (THOUSAND TONS)





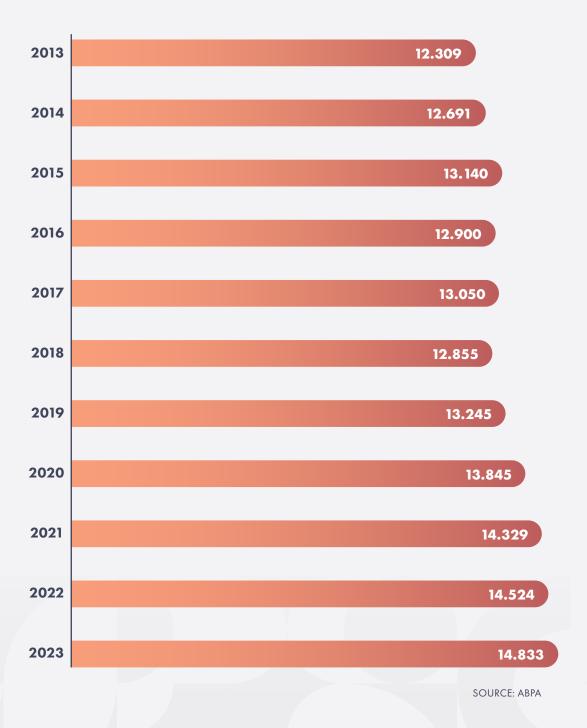
CHICKEN MEAT EXPORTS (THOUSAND TONS)



According to the latest annual report by the Brazilian Animal Protein Association (ABPA)², the country produced an impressive 14.8 million tons in 2023 (a growth of 2.1% compared to the previous year) and exported 34.6% to 150 countries. Meanwhile, per capita broiler consumption in Brazil reached 45.1 kg, making it the most consumed meat in the country.



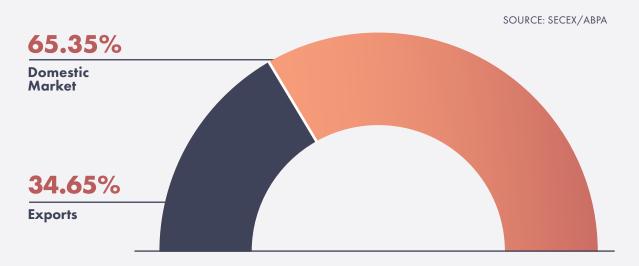
BRAZILIAN CHICKEN MEAT PRODUCTION (MILLION TONS)







DESTINATION OF BRAZILIAN BROILER PRODUCTION IN 2023

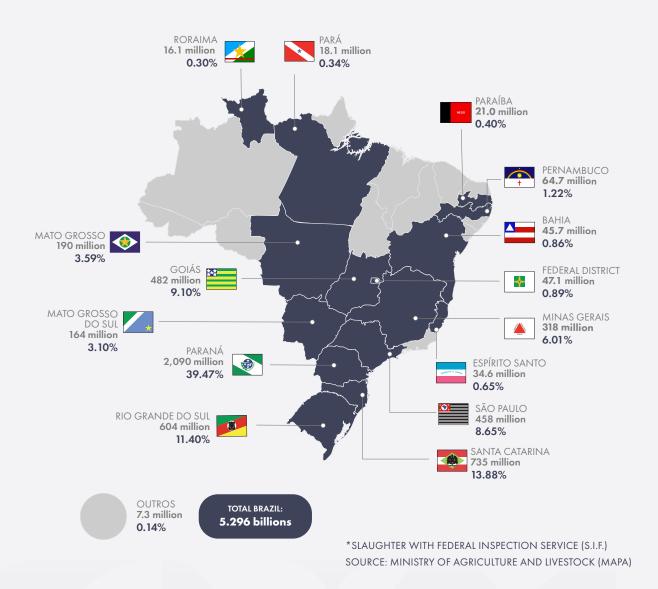


Within Brazil's borders, the state of Paraná is emerging as a powerhouse in broiler production. In 2023, it contributed significantly to the national slaughter, totaling 2.1 billion broilers and accounting for 39.5% of the national total. Santa Catarina and Rio Grande do Sul followed, contributing 13.9% and 11.4%, respectively.





BROILER SLAUGHTER BY FEDERATIVE UNIT IN 2023 (MILLIONS OF HEADS)

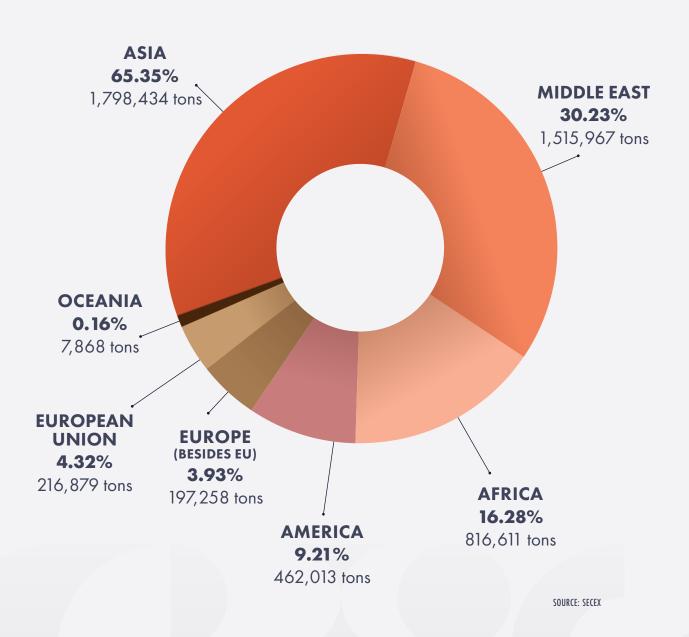


With around a third of all national production destined for export, it's essential to note the main destinations for Brazilian chicken meat: Asia leads with 35.9%, followed by the Middle East with 30.2%. Brazil is the largest exporter of Halal broiler1 in the world, selling more than 2.2 million tons to over 30 countries, which is equivalent to 42.8% of total exports.

¹ Halal is an Arabic term meaning "lawful", "permitted". For chicken meat to be eligible for the Halal market, a set of production and slaughter practices that follow the precepts of Islam must be followed.



BRAZILIAN CHICKEN MEAT EXPORTS BY REGION IN 2023





According to this year's WATT Poultry ranking, the largest broiler producing companies in Brazil are:

Company	Heads Produced Annually (millions)
Seara (JBS Aves)	2,044.0
BRF	1,670.0
Cooperative Lar	336.4
Aurora Foods	321.0
Copacol	217.0
C Vale - Agro-industrial Cooperative	159.6
São Salvador Foods	127.0
Pif Paf Foods	100.0
GTFoods	98.0
Coopavel	60.7
Flamboiã Foods	40.0
Diplomata	35.0
Mauricea Foods	30.0
Agrosul Foods	10.0

SOURCE: RANKING WATTPOULTRY LATIN AMERICAN TOP COMPANIES, 2024





Combined, these companies accounted for approximately 99% of Brazil's broiler production in 2023. Given their scale, it is crucial for them to stay at the forefront of global trends, especially in terms of animal welfare. There is a growing pressure for companies to adopt more ethical and sustainable practices, and it is essential that they lead by example. By implementing higher animal welfare standards, these companies can not only meet public expectations but also enhance their image as industry leaders capable of anticipating and responding to market changes. Exemplary decisions made by industry giants can positively influence the entire sector.





4. CRITICAL POINTS OF BROILER WELFARE AND POSSIBLE ALTERNATIVES

In the face of high global demand for chicken meat, there are increasing ethical concerns regarding the treatment of animals in large-scale production and slaughter that cannot be ignored. Billions of broilers endure conditions that can drastically compromise their health and overall quality of life.

"Livestock production chains are becoming (or may already be) very vulnerable to criticism due to their failure to consider animal welfare, in addition to potential negative impacts on the environment and communities. These criticisms are usually supported by strong arguments that are difficult to refute, which harms the image of livestock production as a whole, and that of broilers in particular. The economic impact of the damage to the image is often intangible, but it should not be ignored that the number of people opting for vegan and vegetarian diets has been growing and that this growth is mainly among young people. Therefore, it is essential that managers working in the broiler production chain place the issue of "animal welfare" on the agenda, seeking to adapt their production strategies to this market demand, recognizing animals as sentient beings. It is also up to scientists to offer viable solutions to the problems identified."

Prof. Mateus Paranhos, PhD

Animal Scientist and Researcher - Etco Group, UNESP/Jaboticabal



According to several scientific studies^{3,4}, referenced throughout this report, it is possible to elect the main critical points of broiler welfare today:

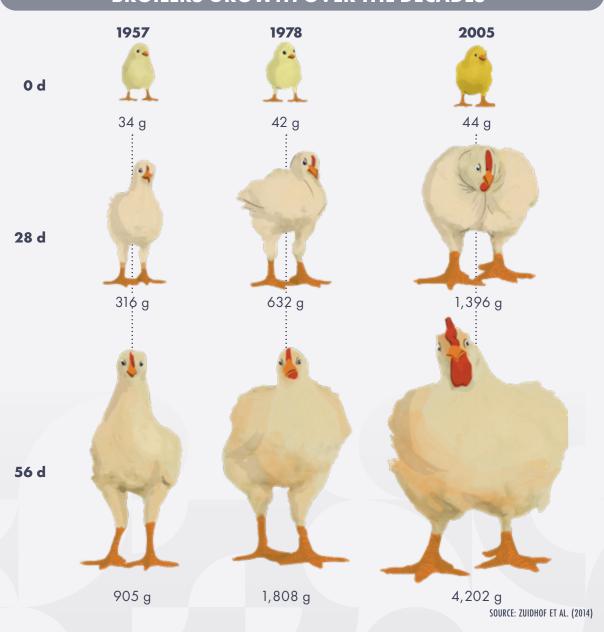




ACCELERATED GROWTH:

Since the mid-20th century, the industry has been selecting specific characteristics to develop genetic lines with higher performance, such as rapid muscle growth. In order to produce more meat in less time and at lower costs, broilers now reach their final slaughter weight of around 3 kg in an average of just 42 days, at a growth rate that is four times faster than those of less selected lines.

BROILERS GROWTH OVER THE DECADES⁵





This rapid growth rate results in several health problems for broilers^{6,7}:

- Cardiovascular diseases, including sudden cardiac death syndrome and pulmonary hypertension syndrome⁸ (ascites);
- Scoliosis;
- Deformities and injuries to the feet, such as tibial dyschondroplasia, crooked toes, necrosis of the femoral head and tendon degeneration.

Parts such as the breast and thighs, which are highly valued by the market, grow disproportionately to the rest of the body, causing physical imbalances and making it difficult for the animals to move around and even feed and hydrate. These conditions cause broilers to spend more time sitting on the floor, also generating frustration and chronic stres⁹.





Due to these problems, experts recommend10 adopting genetic lines that demonstrate better animal welfare results, particularly those with slower growth rates.

The BCC requires that the criteria set by the <u>Royal Society for the Prevention</u> <u>of Cruelty to Animals (RSPCA)</u>, the <u>Global Animal Partnership (GAP)</u>, or any other equivalent standard validated by the BCC Brazil commission must be met.

The RSPCA protocol uses a range of animal welfare criteria to test whether breeds are suitable for broiler production. It does not define slow growth per se, but includes growth rate as one of the parameters, and sets a limit of an average growth rate of 60g per day for indoor systems, and 52g for free-range systems.

GAP is one of the largest animal welfare food labeling programs in North America. Its Better Chicken Project was a collaborative effort initiated to establish a research-based framework for reinventing the modern broiler. It involved a collaboration of scientists, poultry companies, producers, buyers, and animal welfare advocates to evaluate different genetic lines. The result was a protocol that GAP now uses to test breeds in accredited research facilities to determine whether they are eligible for certification.

"In the long term, it's important to review selection criteria to correct past mistakes that have caused suffering to animals and losses to producers, in particular, problems associated with the rapid growth rate of broilers, which include: cardiovascular diseases (which result in sudden death syndrome and ascites) and leg disorders and bone deformities (which cause weakness, lameness and low locomotor activity, which increases the risk of skin lesions due to long periods of sitting or lying in contact with damp litter)."

Prof. Mateus Paranhos, PhD

Animal Scientist and Researcher - Etco Group, UNESP/Jaboticabal







HIGH STOCKING DENSITY

The terrestrial species most bred for human consumption are conventionally confined in overcrowded sheds, negatively impacting their **physical comfort and the expression of**

their natural behavioral repertoire, such as group socialization with the establishment of a hierarchy, locomotion, opening and flapping wings, and exploration of the environment¹¹.

High stocking density also contributes to the **agglomeration of individuals around the feeders**, making it difficult for others to access food, and accelerates the deterioration of the litter, which consequently affects the health of the broilers. The lack of locomotion associated with this inferior quality litter predisposes the animals to **contact dermatitis**, **especially on the feet** (**pododermatitis**)¹².

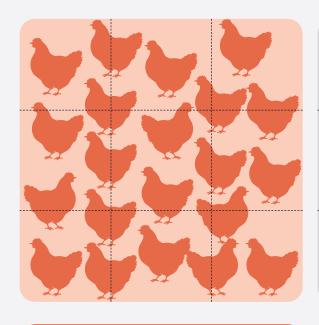


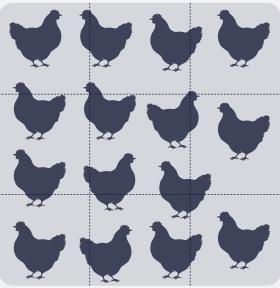
Based on experiments analyzing broiler welfare, researchers recommend that the stocking density¹³ inside the shed at the end of the fattening period should not exceed **30 kg/m²**. Animals should never be housed in cages or multilevel systems, including breeders. Additionally, partial catching (thinning) should be avoided; if it is necessary to perform thinning, it should be limited to once per batch.



High stocking density

Low stocking density





42 kg/m²

30 kg/m²

"The main challenges faced by poultry farming worldwide are related to high stocking densities and the accelerated growth rate of chickens. These factors result in poor and unhealthy environments, which prevent broilers from expressing their natural behaviors."

Paola Rueda

Veterinarian and Animal Scientist - Technical and Research Manager - Produtor do Bem Certification









POOR AND UNHEALTHY ENVIRONMENT

The conventional housing system for broilers offers **limited opportunity for the expression of their natural behavior**, especially scratching, foraging, perching and taking dirt/sand baths. Merely increasing the physical space in the shed is

insufficient to effectively disperse and stimulate activity among the broilers. The lack of resources in the environment not only causes **frustration but also leads to low activity levels in broilers**, which subsequently weakens their locomotor system and increases the incidence of skin and foot injuries.





"Currently, several improvements in broiler welfare can be feasible implemented, such as raising them in enriched environments that provide adequate space, lighting that meets basic needs, and areas with substrates and objects that facilitate the expression of natural behaviors, such as scratching and perching."



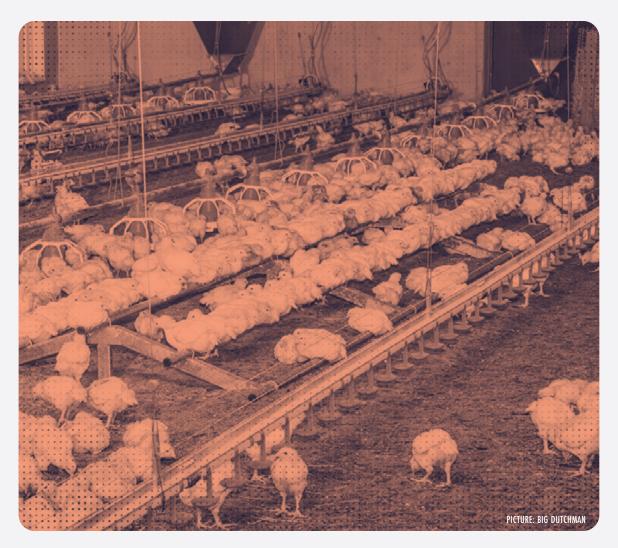
"It's essential to provide chickens with adequate conditions to exercise their natural behavior, gradually adapting the sheds and training personnel to observe the behavior of the birds, enabling them to identify signs of suffering or happiness in the animals."

Patricia Bernert

Agricultural Engineer - Sustainability Specialist - Seara (JBS)







Therefore, it is recommended that **for every 1,000 broilers, at least 2 meters of platform and/or perch length (useful area)** be provided, as well as **another type of environmental enrichment (such as pecking substrate),** distributed throughout the shed for all broilers to access, starting at 10 days of age. It is important that this provision begins at an early age for the animals, so that they learn to explore and enjoy environmental enrichment, increasing their activity levels until the end of the fattening period. The presence of perches and/or platforms promotes greater dispersion of the broilers throughout the shed¹⁴, and reduces the incidence of leg disorders and chest injuries¹⁵ (by reducing excessive contact with the floor/bedding). Straw bales can be used as perches/platforms by the chickens, in addition to pecking substrate, increasing activity, which reduces the time spent sitting¹⁶.





As mentioned in the previous item, the quality of the bedding is essential for the health and welfare of chickens. The substrate plays a role in absorbing waste, but if it's waterlogged or of poor quality, it increases the risk of disease transmission (viral, bacterial and mycoplasmal) and can affect the health of the animals (causing dermatitis and lesions on the feet, hocks, and chest), as well as affecting respiratory tract and eyes, due to the saturation of the air with carbon dioxide and ammonia (CO₂ and NH₃), gases resulting from the decomposition of accumulated waste. Very dry and dusty bedding material can also cause respiratory problems¹⁷.



It is therefore essential to provide **dry, soft, non-toxic bedding, at least 7.5 cm thick**¹⁸, which must cover the entire length of the floor of the shed to which the birds have access. At the same time, air quality must be monitored and controlled, keeping the **ammonia concentration below 20 ppm**¹⁹ **and the carbon dioxide concentration below 3000 ppm**²⁰, at the level of the chickens' heads.



"It is crucial to perform continuous monitoring of temperature, humidity, and gases, as well as to develop robust contingency plans, including the necessary backups."

Paola Rueda

Veterinarian and Animal Scientist - Technical and Research Manager Produtor do Bem Certification





Furthermore, the natural cycle of light and darkness is often altered in poultry farming for the purpose of controlling the weight of chickens. Long periods of high light are adopted by some farms to promote high feed intake, increasing the growth rate²¹. This practice can be harmful because **it interferes with the animals' rest**, and in the event of a power outage, the sudden and unusual darkness can cause **panic**, **crowding**, **and the subsequent death** of many individuals. The absence of a period of low light suppresses the secretion of serotonin and melatonin²² (a neurotransmitter and hormone important for physiological and metabolic functions, as well as immunity and welfare²³).

On the other hand, some farms keep chickens in constant darkness to reduce their activity and consequently the loss of calories. Continuous very dark environments can be detrimental to the welfare of chickens, as they **increase cases of lameness and aggression among birds**²⁴. Although dark house systems provide better environmental control, potentially resulting in higher levels of animal welfare, several studies have found that broilers housed in this model of farming suffered more during pre-slaughter handling, even affecting the quality of the meat^{25,26,27,28} (PSE).





Therefore, it is recommended to provide at least 8 consecutive hours of light (minimum of 50 lux, including natural light) and at least 6 consecutive hours of darkness per day (below 1 lux).

"It is important and feasible to provide adequate space within the facility, allowing chickens to move freely, expressing their natural behavior; an enriched environment, providing scratching areas, perches and objects for the chickens to interact with; adequate lighting with a light cycle that allows periods of rest and activity; and ensuring that all chickens have easy access to food and water without excessive competition."

Fyama Lorenzetti

Veterinarian - Animal Welfare - Agriculture - BRF





PAINFUL AND INEFFECTIVE PRE-SLAUGHTER HANDLING:

At slaughterhouses, broilers are hung upside down by their legs from movable metal structures while they are still alive and conscious. This unnatural position causes **fear**, **stress and discomfort in the chickens**, **as well as pain** due to their own weight, especially if the handling is harsh29. When trying to readjust themselves, the birds flap their wings vigorously, which can result in **bruises**, **dislocations**, **and even fractures**.

The broilers' heads are then immersed in a vat of electrified water to induce immediate unconsciousness before bleeding occurs. However, this procedure is not always effective, as electrical parameters such as current, voltage and frequency are often improperly adjusted, preventing instant and effective unconsciousness. Thus, the chickens end up feeling not only **the electric shock, but also the pain** of the cut in their neck and the entire bleeding process until they reach unconsciousness due to hypovolemic shock and lack of oxygen to the central nervous system. Religious slaughter also raises welfare concerns, particularly if the chickens are not stunned before slaughter.





Due to these problems, experts recommend the use of an effective stunning method, such as controlled atmosphere stunning³⁰ – using inert gas or a multiphase system – or electronarcosis with enhanced control of electrical parameters, avoiding pre-shocks and the inversion (hanging) of live and conscious broilers.

"It is during the process of preparing broilers for slaughter and during the slaughter itself that the greatest risks to their welfare may occur, even though this represents a relatively short period in the animal's life. This is when the relationship between welfare and productivity is most evident, as all the work carried out over several weeks in raising the animals can be lost in a single day."

Patricia Bernert

Agricultural Engineer - Sustainability Specialist - Seara (JBS)





"A crucial point is to improve the efficiency of the electrical stunning system. Currently, techniques such as the use of electroencephalography and precise adjustments in electrical parameters allow for more effective stunning of animals. (...) Therefore, one of the first steps should be to improve stunning and to conduct ongoing research into effective methods that can be applied to the reality of Brazilian poultry farming, aiming at improving bird welfare."

Paola Rueda

Veterinarian and Animal Scientist - Technical and Research Manager Produtor do Bem Certification





INAPPROPRIATE USE OF ANTIMICROBIALS

When animals are housed in close proximity and at high stocking density, the spread of diseases is facilitated, and immunity can be reduced due to stress. As a result, antimicrobials, especially antibiotics, are frequently used not only to treat

disease but also as preventive measures and growth promoters. The misuse of antimicrobials contributes to **the growing threat of superbugs**, creating global concern among healthcare professionals, researchers and health authorities. This antimicrobial resistance poses a serious risk to the health and welfare of animals and the global human population, highlighting the importance of the One Health approach³¹.

Therefore, it is urgent to ban the non-therapeutic, preventive use of antimicrobials and to explore alternatives, such as essential oils, nutraceuticals and minerals. In addition, improvements in handling, biosafety, environmental management, genetics and, consequently, animal welfare are also extremely important to promote better immunity, mitigating the need for antimicrobial use³².



"Some challenges faced by poultry farming clearly highlight the importance of allowing broilers to express natural behaviors that are essential for their physical health and mental welfare. This brings benefits such as improving broiler immunity, thereby reducing infection pressure in poultry houses and the unnecessary use of antimicrobials (prophylactically or as growth promoters) (...) which contributes to the development of resistant and multidrug-resistant bacteria, a concern for both the poultry sector and human health."

Paola Rueda

Veterinarian and Animal Scientist - Technical and Research Manager Produtor do Bem Certification



"It's essential to consider replacing antimicrobials used for prophylactic purposes and as growth promoters, considering the possibility of replacing them with probiotics and prebiotics."

Prof. Mateus Paranhos, PHD

Animal Scientist and Researcher - Etco Group, UNESP/Jaboticabal





5. LEGISLATION

Regarding the welfare of broilers, it is observed that legislation or regulations available, whether at the national or international level, are still quite limited.

INTERNATIONAL REGULATION

The **European Union** (EU) has regulations that apply to all its Member States:

- <u>Directive 2007/43/EC</u> establishes minimum rules for the protection of broilers, such as **stocking density up to 33 kg/m²** (which may be increased to 39 kg/m² if specific and strict animal welfare conditions are met), employee training, maximum fasting time of 12 hours, **litter quality, lighting** (minimum of 20 lux during periods of lighting and minimum of 4 consecutive hours of darkness) and isolation of sick or injured animals.
- Regulation (EC) 1099/2009 also required of countries that export meat to the EU, addresses the protection of animals at slaughter, such as electrical parameters for adequate electronarcosis, criteria for stunning by controlled atmosphere with CO2 with or without inert gases, and verification of signs of correct stunning.
- Regulation (EU) 2019/6 implements the prohibition on the use of certain antimicrobial medicinal products in animals or in products of animal origin exported by third countries to the EU.
- Regulation (EC) 1/2005 on the protection of animals during transport and related operations. Specifically for chickens, this regulation requires the provision of food at least every 24 hours and water every 12 hours, in addition to specifying density standards for transport.



Canada also has mandatory requirements, accompanied by recommendations for good welfare practices for broilers, in the "Code of Practice for the Care and Handling of Hatching Eggs, Breeders, Hens and Turkeys", guidelines established by the National Farm Animal Care Council (NFACC). This Code includes requirements on air quality (maximum ammonia level of 25 ppm), litter quality, stocking density of up to 31 kg/m² (which can be increased to 38 kg/m² if specific and strict animal welfare conditions are met), and verification of signs of proper stunning and death of animals.

BRAZILIAN REGULATION

In Brazil, there is no specific regulatory or legislative framework for the welfare of broilers in commercial farming, which makes the consistent adoption of good practices across the industry at a national level more complex and challenging.





Below, we have compiled a brief history of standards related to the topic:

Decree No. 24,645 of July 1934 established **measures to protect animals and defined mistreatment**, including practices such as mechanical fattening of poultry, live-plucking, and the absence of a method of rapid slaughter to prevent prolonged suffering for any animal whose extermination is necessary, whether intended for consumption or not. The decree, however, was **revoked** in 1991, and current legislation is still limited and underdeveloped with regard to chicken welfare.

Animals are also addressed in a generic way in the **Agricultural Policy** (Law No. 8,171, of January 17, 1991), however, the law does not introduce advances or significant references to animal welfare, focusing instead on health, rational use of fauna, sanitary defense, traffic control and inspection, standardization and classification of animal products and products of animal origin.

In 2000, the Ministry of Agriculture and Livestock (MAPA) published Normative Instruction No. 3 on January 17, establishing technical regulations for stunning methods to ensure the humane slaughter of animals. Among the applicable requirements, the following stand out: slaughterhouse facilities and equipment must be designed to minimize the suffering and pain of the animals, and must include appropriate equipment for unloading from transport vehicles to prevent injury to the animals.

According to the Normative Instruction, animals should be taken to stunning equipment immediately after restraint. The stunning methods for humane slaughter of animals are classified as: **mechanical method** (penetrative percussion using captive bolt guns and non-penetrative percussion), **electrical method** (electronarcosis), and the **controlled atmosphere method**.



Regarding poultry, the Normative Instruction also establishes that automated bleeding requires operator supervision in case the equipment fails, to prevent the animal from being scalded without being properly killed during bleeding.

Normative Instruction No. 56, issued on November 6, 2008, outlines general procedures to promote **best welfare practices for animals of economic interest** (REBEM), including production systems and transport. The text offers preliminary guidelines on good practices, emphasizing careful handling, a basic understanding of animal behavior, and the need for facilities that provide protection, rest, and overall welfare. It also stresses the importance of proper handling and transportation practices and the maintenance of a clean, hygienic breeding environment.





In 2017, on the 65th anniversary of **Decree No. 30,691 of 1952**, **Decree No. 9,013** was issued, which instituted the new **Regulation for Industrial and Sanitary Inspection of Products of Animal Origin** (RIISPOA). Despite its general nature and focus on inspection and sanitary inspection, the text defines slaughter species, including poultry, and mentions points of attention with animal welfare, such as:

- (art. 12, VIII) The inspection and sanitary supervision of products of animal origin include evaluating the welfare of animals intended for slaughter;
- **(art. 43, I)** Meat processing establishments must also have facilities and equipment for receiving and accommodating animals, to ensure compliance with animal welfare requirements;
- **(art. 88)** Establishments must implement measures to prevent animal abuse and actions supporting animal protection and welfare, from initial handling to processing.
- **(art. 103)** It is prohibited to slaughter animals that have not been fasted or given water, while respecting the specific needs of each species and any emergency situations that may impact animal welfare.;
- **(art. 496, VIII)** Violation, which is disobeying or failing to observe the precepts of welfare and complementary standards relating to products of animal origin.





The decree addresses animal welfare in a general way, lacking specific parameters. Since then, four amendments have been made to the new RIISPOA: **Decree No. 9,069/2017, Decree No. 9,621/2018, Decree No. 10,419/2020, and Decree No. 10,468/2020** - the last introducing substantial revisions that modified the original March 2017 text. These changes aimed to streamline inspection services through risk analysis, assign responsibility to establishments via self-control programs, and align with the Economic Freedom Law. For example, the DIPOA's prior approval requirement for labels describing primary production qualities, like "free-range chicken," "free-range eggs," or "cage-free eggs," was removed. However, no animal welfare aspects were updated or detailed.

The following year, MAPA published <u>Ordinance No. 365</u>, of <u>July 16</u>, 2021, approving the technical regulation for pre-slaughter handling and humane slaughter and stunning methods authorized by MAPA, repealing **IN No. 3/2000**. For poultry, the administrative act describes the conditions required for pre-slaughter handling, such as:

- Maximum fasting period of 12 hours;
- Shortest possible time in the slaughterhouse waiting area;
- Unloading, with transport in boxes, cages and modules, must be conducted carefully, avoiding inversion or tilting of their position and ensuring animals are not stacked.





The text brings obligations to the poultry slaughter line, such as:

- Lift chickens by their feet only when hanging;
- Control lighting in the area designated for hanging;
- Provide a support barrier along the entire length of the bird's body during hanging before stunning;
- Ensure that birds remain hanging on hooks for as little time as possible before stunning, not exceeding 60 seconds for broilers and hens;
- Ensure that chickens are not submerged in the stunning tank in the event of an operational problem.

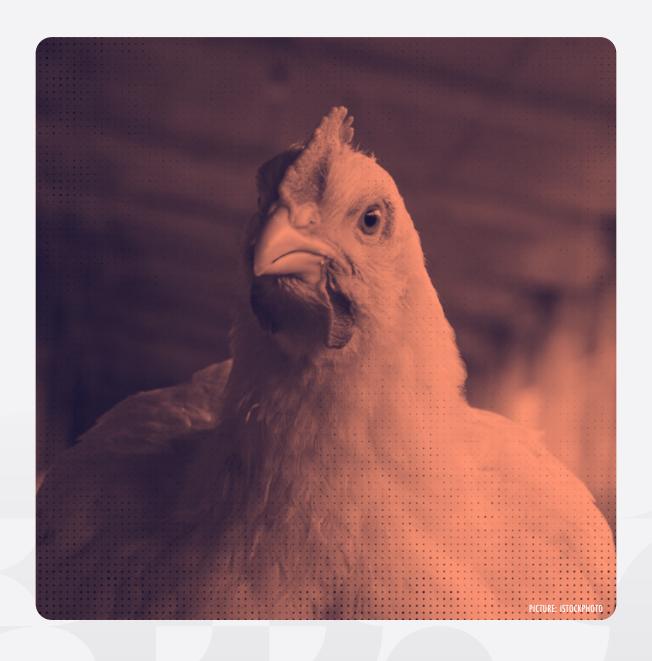
The Ordinance also discusses the approved stunning methods with their respective requirements and verification of signs of correct stunning in animals. Broiler immersion equipment is permitted if it guarantees effective stunning of all animals.

After its publication, the Ordinance underwent considerable changes, with emphasis on the deadlines for adaptation. In the case of poultry slaughter, more time was requested, since it's necessary to plan the facilities well to ensure compliance with the aspects of the slaughter line, such as the maximum time allowed with the animals hanging on the hooks before stunning (60 seconds for broilers and hens). For establishments that began operations on or after August 2, 2021, the deadline for adaptation was **January 31, 2024**, and until January 31, 2025, for other establishments. The other established rules had a deadline for adaptation of **August 1, 2023** (Ordinances **No. 740, of January 24, 2023** and **No. 864, of July 31, 2023**).

Despite the setbacks in adapting, the publication of Ordinance 365/2021 MAPA/SDA represents a significant advance around animal welfare. However, there are particularities that have not progressed satisfactorily, such as the problematization of **the handling of hanging live and conscious birds**, and the effectiveness of electronarcosis in an immersion tank.



Specifically regarding broilers, in Brazil there is no regulation that can be compared to **Normative Instruction 113**, **of December 16**, **2020**, which specifically deals with good animal handling and welfare practices on pig farms. The lack of such regulation emerges as a central need to think about techniques that promote the welfare of broilers. It is crucial to move beyond general and superficial regulations, incorporating best practices from the housing environment of the broilers, as well as other specific aspects of management and environmental control.





Ordinance	Subject	Amendments
Decree No. 24,645, of July 1934	Establishes protection measures for animals	Revoked in 1991
Law No. 8, 171 of January 17, 1991	Agricultural Policy	Amended by Law No. 10,298 of October 30, 2001, Law No. 10,327 of December 12, 2001, Law No. 10,228 of May 29, 2001, Law No. 10,246 of July 2, 2001, Law No. 13,901 of 2019, among others
Normative Instruction No. 3, of January 17, 2000	Technical regulation of stunning methods for the humane slaughter of farm animals	Revoked by Ordinance No. 365, of July 16, 2021
Normative Instruction No. 56, of November 6, 2008	Establish general procedures for the Recommendations of Good Welfare Practices for Animals of Production and Economic Interest (REBEM), encompassing production systems and transportation.	
Decree No. 9,013 of March 29, 2017	Industrial and sanitary inspection of animal-origin products	Amended by <u>Decree No. 10,468 of</u> 2020 and De <u>cree No. 9,069 of 2017</u>
Resolution No. 1,236/2018 CFMV	Defines and characterizes cruelty, abuse, and mistreatment of vertebrate animals; establishes guidelines for the conduct of veterinarians and animal scientists; and provides additional measures.	
Resolution No. 791/2020 CONTRAN	Transport of animals for produc- tion, economic interest, sport, leisure and exhibition purposes	
Ordinance No. 365, of July 16, 2021	Technical Regulation for Pre- slaughter Handling and Humane Slaughter and stunning meth- ods authorized by the Ministry of Agriculture, Livestock, and Supply	Amended by SDA Ordinance No. 631, of July 27, 2022, SDA Ordinance No. 740, of January 24, 2023 e SDA Ordinance No. 864, of July 31, 2023



6. ALIANIMA'S SCOPE

In Brazil, there are still few third sector organizations active in promoting good welfare practices for broilers. However, as the country is one of the world's largest producers and exporters of broiler, Alianima began its activities on the topic in 2020, becoming a member of the Open Wing Alliance (OWA), and counting on its technical team to base its materials and campaigns on technical-scientific data and experience in the field.

BOOKLETS AND BCC ADAPTATION FOR BRAZIL

To disseminate information on this subject to different audiences, Alianima published booklets on chicken welfare and antimicrobial resistance.





In addition, to establish minimum standards aligned with the global movement that would be required for broiler farming, BCC Brasil was launched.





"Improvements in welfare tend to reduce mortality, reduce spending on medicines, optimize poultry performance at slaughter, increase energy efficiency and reduce water consumption, among other benefits."

Paola Rueda

Veterinarian and Animal Scientist - Technical and Research Manager Produtor do Bem Certification



CORPORATE RELATIONS

Once BCC Brasil was launched, Alianima began engaging with major corporate representatives in the broiler sector, aiming to secure commitments to animal welfare that encompass all points outlined in the same document.

To date, more than <u>200 companies</u> have committed to implementing or requiring their suppliers to adhere to the BCC requirements across North America, Europe, and Oceania. Many of them are multinationals with operations in Brazil, including Starbucks, Subway, Burger King, and Nestlé.

Click here to check the commitment language

"Adopting an animal welfare policy for broilers is beneficial not only for the animals, but also for producers, consumers and society as a whole. Welfare practices are an integral part of a sustainable, ethical and economically viable production system."

Fyama Lorenzetti

Veterinarian - Animal Welfare – Agriculture - BRF





"Industrial poultry farming is dynamic and constantly evolving, so ensuring animal welfare practices combined with sustainability is essential for the long-term success and sustainability of the business."

Patricia Bernert

Agricultural Engineer - Sustainability Specialist - Seara (JBS)



"Public commitments to clear action plans, accompanied by control, monitoring and reporting of data and goals achieved, are essential to demonstrate transparency and generate trust within both industry and civil society."

Paola Rueda

Veterinarian and Animal Scientist - Technical and Research Manager Produtor do Bem Certification





LECTURES AND TRAINING

Alianima has also given lectures at universities and provided training for companies in the sector. The goal is to encourage discussions and research in the academic-scientific area, assist in the training of professionals who prioritize animal welfare, and clarify this topic for the food and retail industries.



DIALOGUE WITH CERTIFIERS AND STAKEHOLDERS

By enabling direct communication with consumers through seals on labels and advocating high standards of animal welfare in audits, Alianima seeks to strengthen ties with certification bodies. Many companies seek certification to add ethical value to their products, since it involves a third-party assessment, which is essential to drive changes in animal production, while there is no federal regulation.



Since there is still no commercial availability of genetic lines with more natural growth in Brazil, we have also been talking to the main genetics companies operating in the country, to understand how to make access viable for producers. Likewise, there are no satisfactory alternatives for stunning poultry that are effective, immediate and accepted by different markets, in addition to the fact that the controlled atmosphere method still requires very high investments. Therefore, Alianima has also approached equipment companies, so that these alternatives can be developed.



"Through certification bodies, consumers can be sure that the information on product labels is reliable. (...) Through a robust certification system, it's essential to demonstrate companies' commitment and verify its effective implementation in the field and in industry."

Paola Rueda

Veterinarian and Animal Scientist - Technical and Research Manager Produtor do Bem Certification





PUBLIC POLICIES

In addition to demonstrating the importance of regulating good animal welfare practices as a public issue and directing rural credit lines to innovative initiatives and investments in this topic, Alianima also engages in dialogue with members of parliament and representatives of the federal executive branch, such as the Ministry of Agriculture and Livestock - MAPA, the Ministry of the Environment and Climate Change - MMA, the Ministry of Health - MS and the Ministry of Justice and Public Security - MJSP (National Consumer Secretariat), with the aim of demonstrating the urgency and transversality of the issue in different areas, such as public health, consumer rights and environmental quality. In addition, meetings of the Poultry and Swine Sector Chamber, within the scope of MAPA, are monitored for updates on the main issues, initiatives and actions of the production sector.

Access to information and data is a challenge for developing effective policies and regulations, and Alianima is working in this direction, both to ensure transparency of industry practices for consumers and to use production figures to understand the reality of the country. The creation of regulatory acts that establish good practices for the handling and welfare of commercial poultry farming is a priority, but the dialogue has focused on ensuring broad participation by civil society and the scientific community, in addition to establishing oversight and accountability for the sector.





7. PROSPECTS FOR BROILER CHICKEN FARMING

The Broiler Watch was attended by several stakeholders who are directly or indirectly linked to poultry farming in Brazil. In addition to giving their opinions on the importance of the industry adopting an animal welfare policy and what improvements are feasible to be implemented today, Alianima also asked about how they see poultry farming in the coming years.

"Over the next ten years, poultry farming will undergo even more significant transformations in terms of animal welfare, with a growing focus on ethics, sustainability and social responsibility. The search for more humane and conscious practices regarding animals will be a priority for the sector, aiming to guarantee product quality, consumer satisfaction and respect for the living beings involved in the production chain."

Luiz Fernando MüllerCommercial Coordinator - Fluxo Group

"We see poultry farming in ten years' time as a more advanced and conscious sector. We believe there will be a wider and more rigorous adoption of animal welfare practices, driven by both stricter regulations and consumer demands. Innovative technologies such as automation and digital monitoring can be used to monitor and promote chicken welfare more effectively.

Finally, ongoing scientific research will yield new insights into the behavioral and physiological needs of chickens, allowing the industry to adapt its practices even more precisely and ethically. The trend is for poultry farming to become increasingly sustainable, with a balanced focus between productivity and social and environmental responsibility."





"Broiler farming in 10 years' time will be marked by a stronger commitment to animal welfare, underpinned by technological advances, **stricter regulations** and a shift in consumer expectations, with considerable advances in animal welfare driven by factors such as technology and new scientific research.

The use of sensors, cameras and artificial intelligence to monitor broiler behavior, health and environment in real time is expected to become common-place. This will allow for a rapid response to any signs of stress or disease.

There will be a greater focus on selecting chicken breeds that are healthier, disease-resistant and less prone to welfare issues.

We also emphasize providing more space and environmental enrichment for the animals, allowing chickens to express their natural behaviors. Animal welfare research will continue to advance, providing new insights that will be rapidly integrated into husbandry practices.

There will be a growing focus on sustainable farming practices that not only improve animal welfare but also reduce environmental impact, such as: greater adoption of renewable and clean energy sources, to reduce greenhouse gas emissions."

Fyama Lorenzetti Veterinarian - Animal Welfare – Agriculture - BRF





"The demands of increasingly discerning consumers involve ethical and humanitarian issues, such as animal welfare. Chicken meat is one of the most consumed meats in the world. Production in less time and space characterizes the dynamism of industrial poultry farming and favors the economic accessibility of chicken meat, when compared to other meats. However, such an intense and efficient activity faces constant challenges, and industries need to balance issues of health, animal welfare and biodiversity, to make their processes, both in the field and in slaughterhouses, sustainable. This path is irreversible and poultry farming is constantly evolving."

Patricia Bernert

Agricultural Engineer - Sustainability Specialist - Seara (JBS)



"I am optimistic about the adoption of changes related to handling, involving small changes in stocking density (reduction), changes in the method of catching and in the steps involved in transporting chickens for slaughter. I also believe there is a possibility of reducing the use of antimicrobials."

Prof. Mateus Paranhos, PHD

Animal Scientist and Researcher - Etco Group, UNESP/Jaboticabal

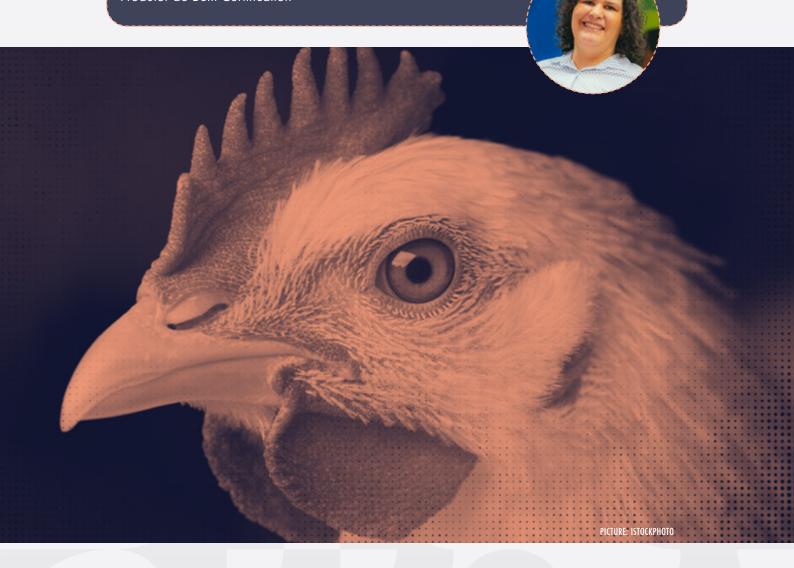




"In ten years, poultry farming will have been profoundly transformed. The welfare of poultry and their needs will be fundamental to meeting the strategic objectives of companies and will be in harmony with the economic and environmental sustainability of the business. Stocking density and growth rate will be more appropriate, promoting better health for both poultry and people. Responsible use of medicines will contribute to reducing the incidence of resistant bacteria. Finally, producers who adhere to these practices will be widely recognized and will be proud of carrying out ethical and responsible work."

Paola Rueda

Veterinarian and Animal Scientist - Technical and Research Manager Produtor do Bem Certification





8. CONCLUSIONS

The chicken meat industry consists of a highly robust and continuously growing production chain, especially in Brazil. Its high export rates denote a concern to meet the demands of different markets, including animal welfare and sustainability requirements and, concomitantly, religious precepts of slaughter.

The movement for better conditions for poultry has also been growing, especially in North America, Europe and Oceania, and is also showing signs of growth in Latin America, since many companies committed to the BCC are multinationals that also operate in the region. In addition, organizations such as Alianima have begun to work in this area in recent years to ensure corporations understand these new demands, so that they can delve deeper into alternatives, test the proposed conditions and anticipate the behavior of local consumers, who will increasingly demand animal welfare practices and transparency regarding the production of their food. An earlier, more receptive vision of the aforementioned changes makes it easier to diagnose and overcome challenges, such as adapting to genetic lines with more natural growth and developing appropriate pre-slaughter stunning methods that are accepted by different markets.

Alianima would like to thank representatives from Aurora, BRF and Seara (JBS), as well as Fluxo Group, the Produtor do Bem certification body and Professor Mateus Paranhos da Costa, from Etco Group (UNESP - Jaboticabal), for their valuable contributions to this report. It was possible to confirm that companies are aware of the importance of adopting a corporate animal welfare policy and what can be implemented today, while the scientific academy and certification bodies are willing to work collaboratively to this end.



The engagement and action of all actors in the chain, from producers, food, genetics and equipment companies, to the government, is essential so that advances are proposed, implemented and monitored, guaranteeing consumers better consumption conditions and promoting animal welfare.

We hope the Broiler Watch will shed light on the issue for these groups, encouraging companies to adopt a commitment such as the BCC Brasil, the creation of regulatory acts with minimum requirements by the government, and greater consumer criteria by civil society.





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10. CONTACT

Be part of this great movement in favor of animals!

If your farm or company would like to obtain additional information about our work or clarify specific questions related to animal welfare, please contact us through the following channels:











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REALIZATION





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