



Photo: Patrice Alsteen / Available at Flickr

# Pig Watch

2020

REALIZATION:

ALI •  
ANI  
MA •



OBSERVATÓRIO  
ANIMAL

# Index

**1**

## INTRODUCTION

About Alianima

page 3

About Animal Watch

page 4

An overview of Brazilian pork industry

page 5

**2**

## RESULTS

About the report

page 9

Methodology

page 10

Gestation Crates

page 11

Mutilation

page 14

Use of antibiotics

page 17

**3**

## CHALLENGES IN THE SECTOR

page 19

**4**

## CONCLUSION

page 21

**5**

## BIBLIOGRAPHY

page 23



# **1.** Introduction



---

# About Alianima



Alianima is a non-profit organization that works with animal and environmental protection, promoting synergy between both causes. Our main activity is the implementation of policies that promote animal welfare in the Brazilian food production chain.

We organize actions and educational projects to increase awareness in civil society about ethical feeding that respects the way of life of all sentient beings and guarantees an environmental balance. Through a cooperative and continuous relationship with leaders in the food industry, we seek to understand the main challenges that each sector faces.

In this way, we develop partnerships, consultancies and technical support free of charge for those companies that truly understand the importance of implementing animal welfare policies in their operations.

We believe in collaboration and practical solutions, developing relationships based on trust and mutual benefit, rewarded by progress that promotes better living conditions for billions of animals in the food production chain.

---

# About Animal Watch

## A PLATFORM TO CONNECT ANIMAL WELFARE WITH CONSUMERS.

Over the past years, technological advances in information access, combined with growing concerns on health, climate change and animal abuse have allowed and instigated a desire for more knowledge about the origins of food and the ethical and sustainable values applied by the industry.

Public commitments to animal welfare by some companies have led to significant changes across the supply chain, particularly because these commitments were published with clear deadlines to complete their implementation.

In this context, Animal Watch platform, created by Alianima, aims to:

- Measure and monitor the transition process of companies that are adapting to new welfare policies for laying hens and pigs by means of annual reports “Pig Watch” and “Egg Watch”;
- Encourage new animal welfare policies in sectors not yet covered, such as the broiler and fish industry;
- Present data regarding companies transition process;

- Promote national events with the food industry and the academic sector, to encourage the implementation of animal welfare policies in the main Brazilian livestock industries;
- Inform society about the reality in the food production chain and show how the industry is capable of embracing significant changes in the treatment of animals;
- Provide updates on the industry’s best practices in animal welfare;
- Encourage critical and conscious consumption.



Photo: Leah Keller / Available at Pexels

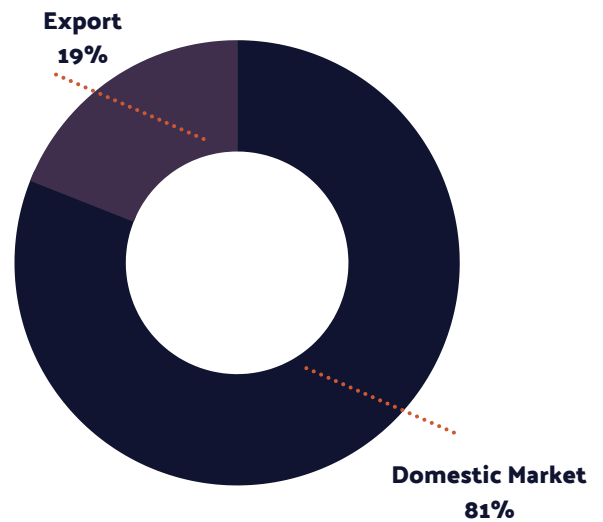
# An overview of Brazilian pig industry

As the 4th largest producer of pork in the world and the 4th largest exporter, Brazil is a player of great importance in the global pork industry.

Pig farming is especially prominent in the Brazilian states in the South and Southeast, with areas where pork production is the main economic activity. In addition, the popularity of pork on the domestic market cannot be denied: the consumption of pork by Brazilians was around 15.3 kg per capita in 2019, according to data provided by the Brazilian Association of Animal Protein (ABPA).

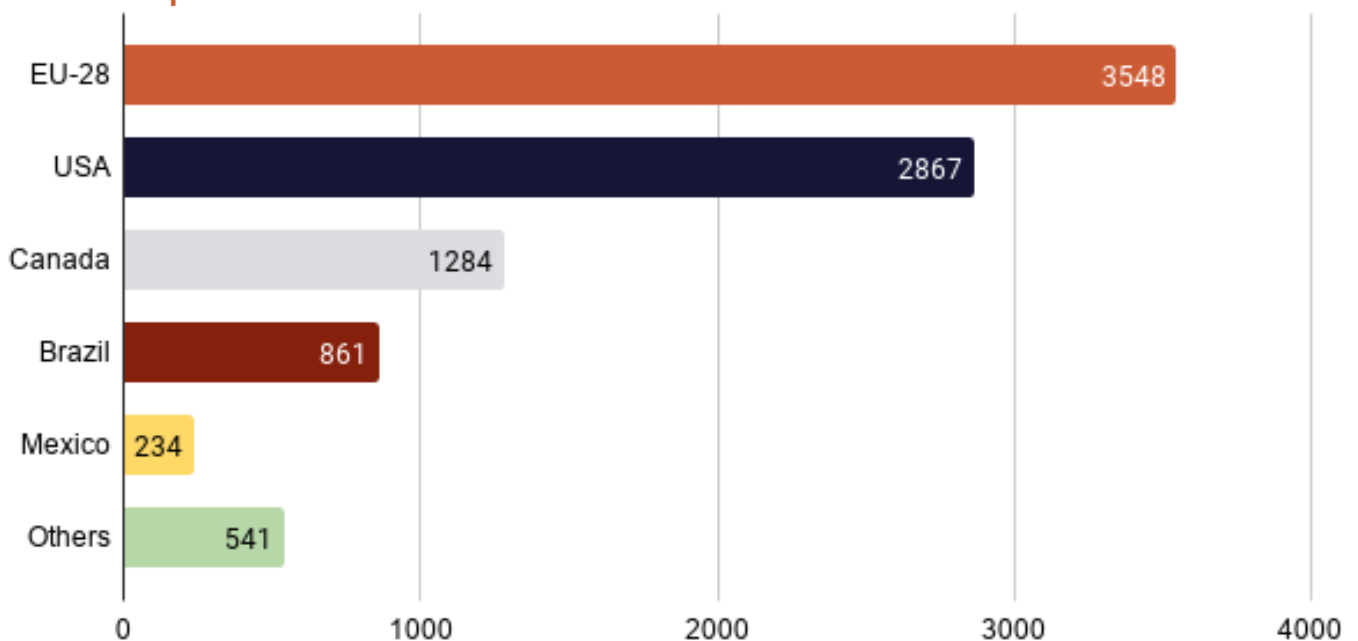
Of all national pork production, 81% supplies the domestic market and 19% is destined for export.

## Destination of Brazilian Pork



Source: ABPA, 2019

## Global Export 2019 (thousand tons)



Source: USDA | Foreign Agricultural Service

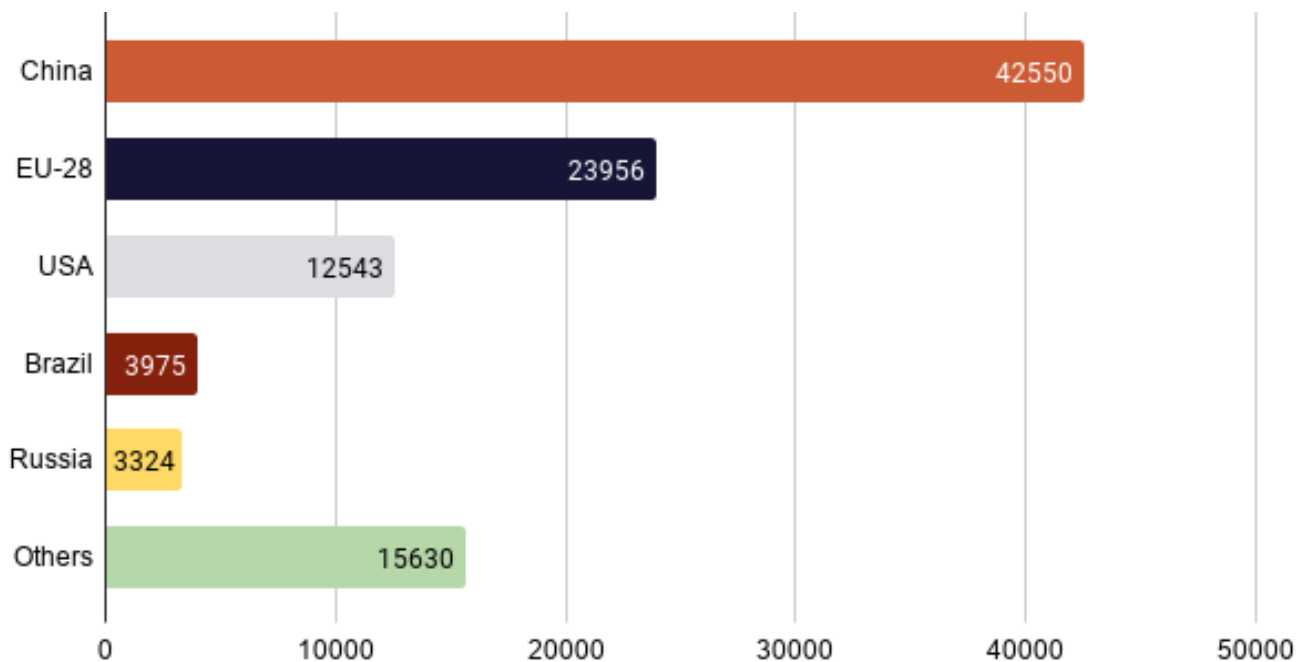
The Brazilian pork industry is mostly composed by integrated producers, followed by beneficiary companies and exporting companies.

By abolishing gestation crates, in addition to expanding the range of other welfare practices for these animals, the pork industry can remain competitive on the international stage, given that the use of these crates is already restricted (by 28 days after insemination) in the European Union since 2013 and has been banned altogether in New Zealand, Switzerland and Norway.

In the United States, the second largest exporter of pork in the world, states like Arizona, California, Colorado, Florida, Maine, Michigan, Ohio, Oregon and Rhode Island are moving to phase out gestation crates. In this way, the adaptation to standards of animal welfare by the Brazilian pork industry would reflect the demands of the main global buyers.



## Global Production 2019 (thousand tons)

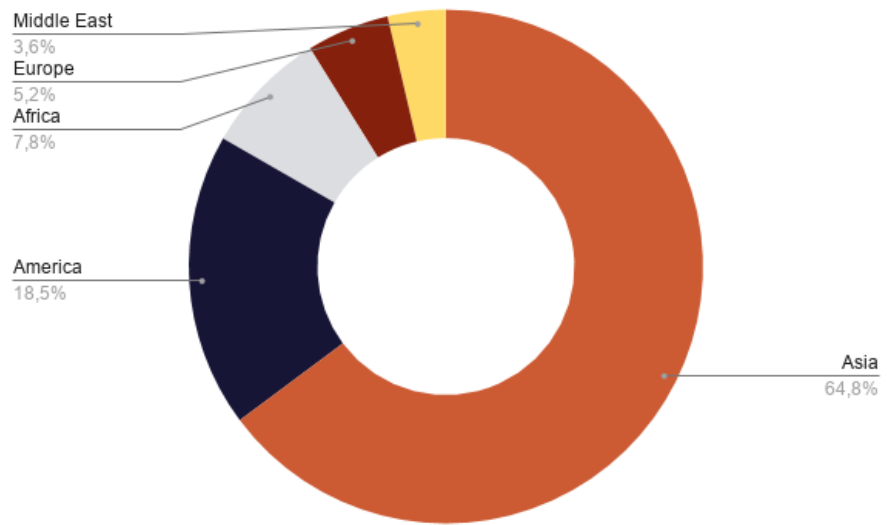


Source: USDA | Foreign Agricultural Service

Brazil has 3 companies among the 40 largest pork producing companies in the world: JBS (Seara), BRF (Sadia and Perdigão) and Aurora Alimentos, with JBS being second in the global ranking and also operating in the United States and Australia. BRF is 13th and Aurora Alimentos 27th. In South America, JBS and BRF are leading producers.

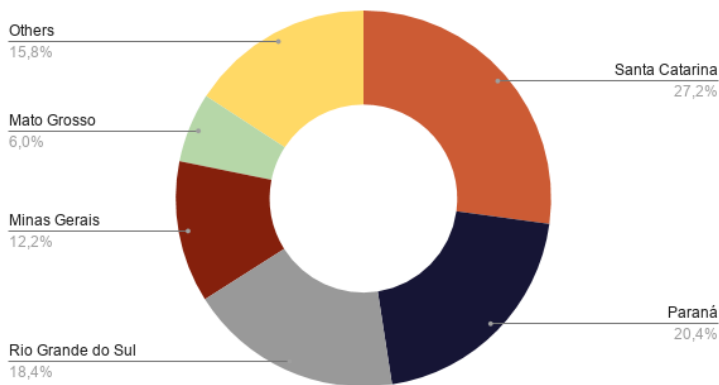
In Brazil, most pork producing companies are located in the following states:

### Destination of Brazilian pork exports by region:



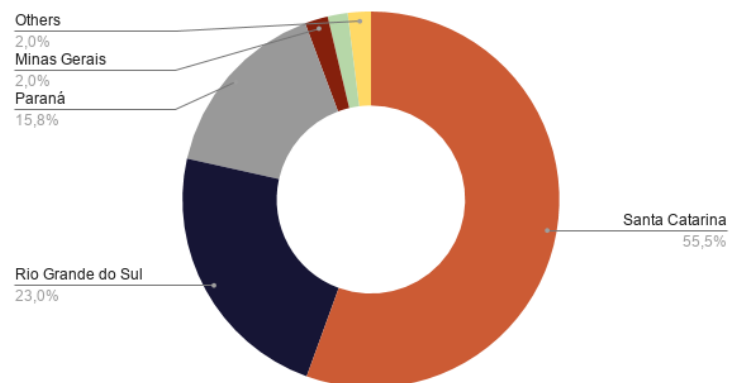
Source: SECEX, 2019

### Distribution of Brazilian pork producing states in 2019:



Source: MAPA, Agrostat, 2019

### Distribution of Brazilian pork exporting states in 2019:



Source: MAPA, Agrostat, 2019

The companies JBS, BRF and Aurora have a huge presence in the pork export of these states, according to the data of the Federal Inspection Service (SIF), responsible to secure quality of animal based products, both for domestic and foreign markets.





# 2. Results



---

# About the Pig Watch report

Pig Watch is an annual report presented by Alianima, monitoring the progress of companies in the Brazilian pork industry that made public commitments to ban gestation crates. This edition of 2020 is of crucial importance in the context of the Covid-19 pandemic that caused a moment of uncertainty and heated debate on the need for transparency and responsibility of the food industry.

By presenting the results of this report, we create transparency between the food industry and the final consumer, while identifying the difficulties founded behind the scenes of the industry. This allows us to identify the main issues that are undermining the successful transition of the committed companies within the given timeframe. Through our expertise in animal welfare, Alianima supports these companies with technical resources and strategic analyses.

This report is not only intended for the sustainability departments of companies in the sector, but is also addressed to consumers that are concerned with both the origin of their food and the welfare of pigs in the production chain.

The 2020 Pig Watch report evaluated all 10 (ten) companies in the sector that have publicly committed to abolish gestation crates.

In addition to monitoring the transition away from gestation crates, the Pig Watch report includes a focus on the improvements in the treatment of piglets. In this first edition, we had a response rate of 60%, among which were the companies JBS and BRF, 2nd and 13th respectively on the global ranking of pork producing companies.

The responses of these companies allow a broader view on pig welfare in the Brazilian context and indicate that this topic seems to be evolving with constant improvements.



**“we create transparency between the food industry and the final consumer”**

Photo Mutinka | Available at Pixabay

---

# Methodology

This report approached all companies operating in Brazil that committed to abolishing gestation crates within a set timeframe. The companies can be divided in two categories: (a) Industry (which includes pork producers and processors) and (b) Restaurants.

A questionnaire was sent to these companies in order to measure the progress in the entire supply chain. The questionnaire included questions related to the following items of assessment and monitoring:

- Percentage of breeding sows housed in group pens during the gestation phase;
- Period of housing breeding sows in individual crates recommended by each company;
- Implementation of best practices in the process of raising piglets, such as immuno-castration and banning teeth clipping, tail docking and ear notching;
- The use of antibiotics for non-therapeutic purposes;
- Difficulties faced by companies to proceed with this transition.

All respondents were aware of the transparency standards of the Pig Watch report in relation to the themes of collective gestation and improvements in piglets raising. The results were later presented on the Animal Watch platform.

The questionnaire was sent in September 2020, the responses received in October 2020, with the results compiled in November 2020.

The companies' responses have been instrumental in understanding the progress of the transition on a national level and will be presented in the following sections of the report. The companies that did not answer the questionnaire were categorized as "did not answer", as can be seen in the data below, as well as on the Animal Watch website.



Photo: Maeder | Available at Pexels

## Results

# Gestation Crates

One of the practices most criticized by studies on animal welfare is the housing of breeding sows during the gestation phase. For decades, the conventional system consisted of keeping them separated in individual crates of extremely limited dimensions, allowing almost no movement. In addition to physical discomfort, the sows are unable to interact with one another, explore the environment, or build a nest before giving birth.

As if that was not enough, health issues, such as feet injuries, urinary infections, muscle atrophy and behavioral disorders are frequent due to the lack of physical activity. The gestation crate method was adopted because it facilitates the management and control of feeding, the detection of heat and insemination and inspection. In addition, these crates prevent fights between the sows, occupy less space and require less labor.

The proposed alternative is to house the sows in group pens. Although new challenges will arise with this alternative, numerous scientific studies confirmed that it is possible to maintain productivity and health levels equal or superior compared to individual crates and that physical exercise during gestation improves the performance of farrowing. As previously mentioned, several countries have already banned individual crates or are in the process of a definitive transition towards group pens, demonstrating that this is a transformation that is strongly embraced globally.



Photo: Oikeutta eläimille! | Available at Flickr

The next step is to determine the best way to house the sows in groups. A group system would cause structural challenges when it comes to floor design, leading to possible locomotor problems, and increased fights that occur naturally to establish hierarchy. Such fights are temporary, but if there is a shortage of resources, such as food, water and space, these conflicts can continue leading to reduced animal welfare.

An important aspect that has been widely discussed is the duration of the period that sows are kept in the crates after insemination.

Unfortunately, the European Union, usually a pioneer when it comes to improvements of the welfare of farm animals, still allows four weeks in the crates. Several scientific studies indicate that transferring sows to group pens immediately after insemination may even improve productivity, as it establishes a hierarchy in the group early on, reducing the risk of embryonic resorption by stress.

Consequently, Alianima encourages the adoption of not only the group pens, but also of this system. The Brazilian Ministry of Agriculture (MAPA) however, insists on an unnecessary long period to conclude this transition towards collective pens, allowing a sow to be kept in individual crates for up to 35 days after insemination. This reflects the slow pace of this urgent and necessary transition towards pig welfare in Brazil.

For this reason, Alianima, together with other organizations, wrote an open letter to the MAPA asking to consider and review these issues.

## THE STATUS OF THE TRANSITION

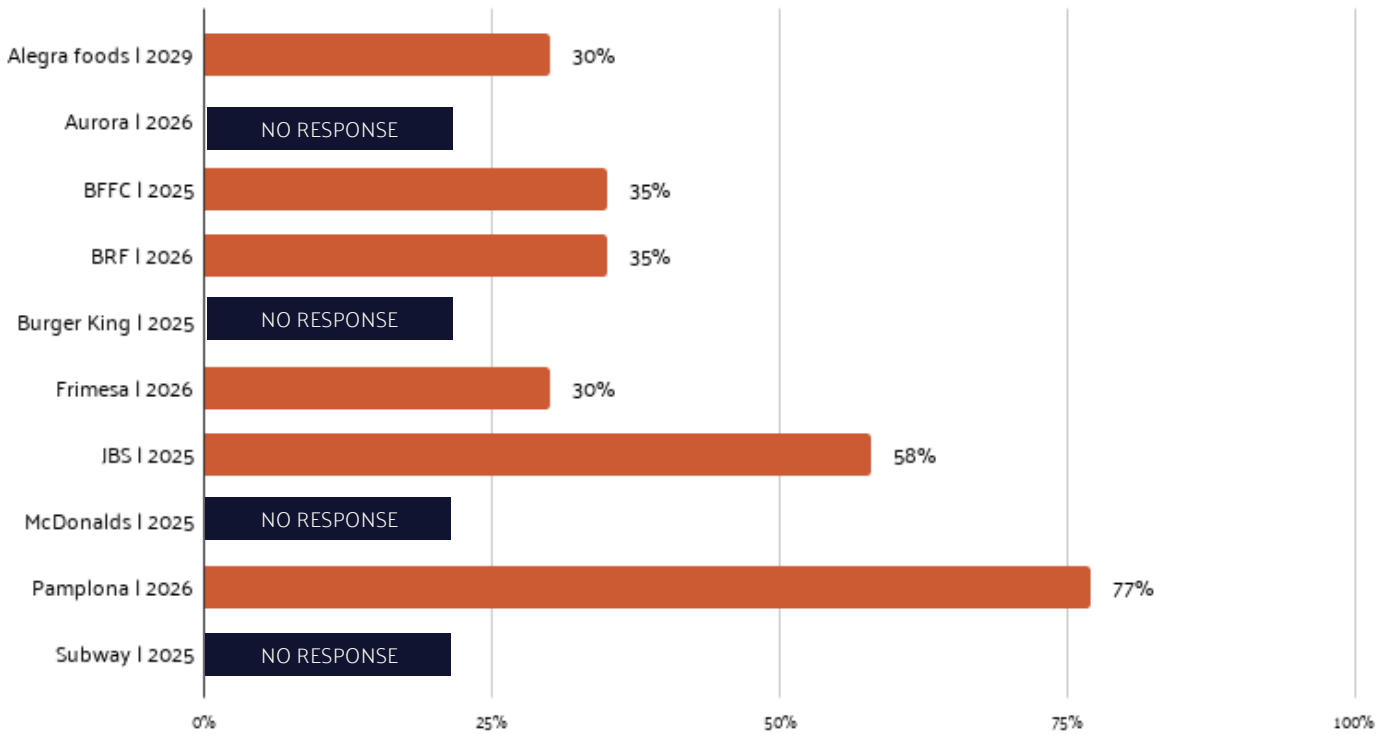
Our survey received a response from 60% of the companies that made public commitments to ban gestation cells. This response rate confirms the dedication of these companies to promote a transition within the published deadline, while showing commitment to transparency towards consumers that increasingly want to know the origin of the food they consume.

The graphic on the next page shows the percentage of breeding sows already housed in group pens during the gestation phase for each company. Next to the name of the company, there is the year in which the company aims to complete the full transition.



Photo: Matthias Zoomer | Available at Pexels

### Percentage of sows in group pens:

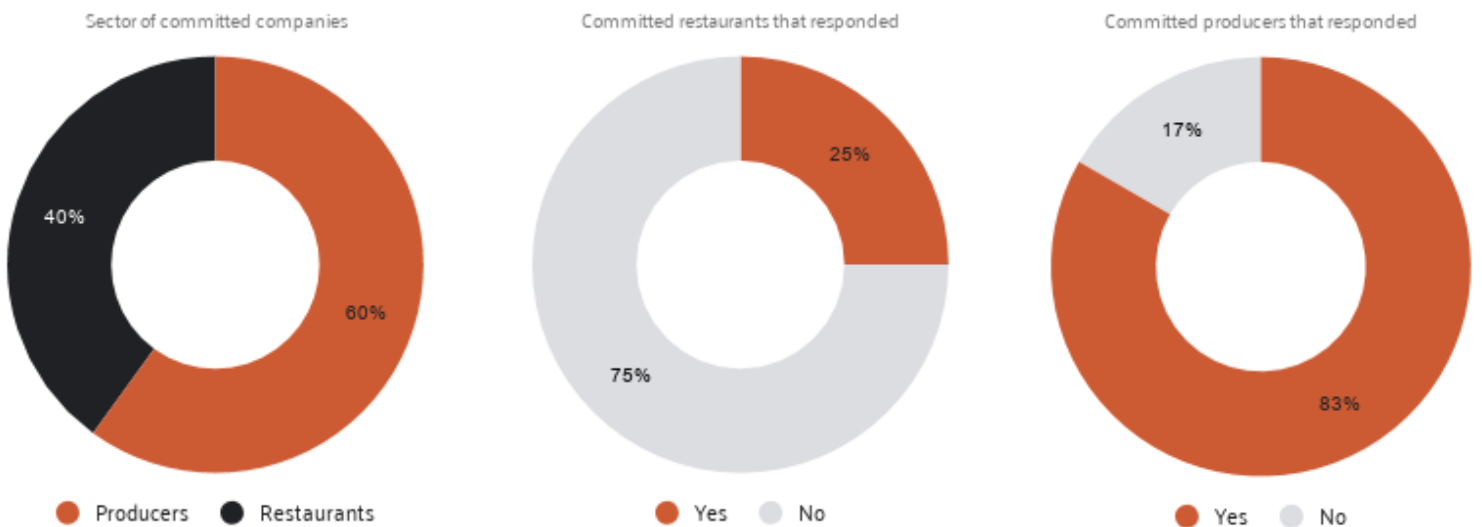


Source: Pig Watch, 2020

Unfortunately, companies that did not respond are marked by a lack of transparency and a lack of commitment to inform consumers about their transition.

NÃO RESPONDEU

## RESPONDENTS



It is important to highlight the engagement of the producers in this survey, of which only one did not respond. As for the restaurants, the situation is the other way around, as we only received one answer.

## Results

# Mutilations

In the breeding process, one of the critical points of animal welfare is the mutilation of piglets. Surgical castration, tail docking, teeth clipping and the ear notching for the sake of individual identification. These are common procedures in pig farming, performed without any painkillers or anesthetics.

In a contradictory way, these practices are justified by an assumed improvement of the welfare of the pigs and a higher productivity. However, there is a strong objection from both the scientific community and civil society, as these practices inflict a lot of unnecessary pain and distress on piglets of only a few days old.

## SURGICAL CASTRATION

Male piglets are castrated in the first week of age in order to prevent a repulsive taste and odor that accumulates in the fat of male pigs when they reach sexual maturity, resulting from the hormone androstenone and a substance named skatole (a by-product of intestinal microbiota and metabolite of the amino acid tryptophan).

The castration, when performed without painkillers and anti-inflammatory medicines, causes physiological and behavioral changes due to acute and chronic pain, resulting from physical and emotional discomfort during and after the procedure.

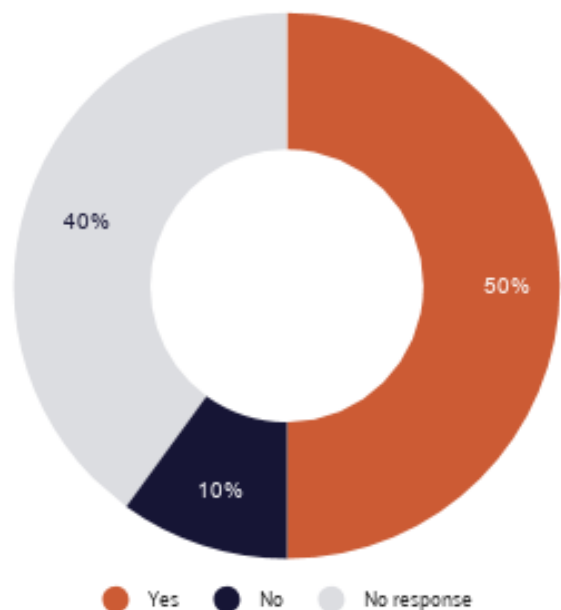
The castration is carried out in the first week of age, based on the idea that newborns are less sensitive than the older animals.

Scientific research however has found that the painful experience and the manifested behavior are the same among pigs submitted to castration without anesthesia at the age of 3, 10 and 17 days. Because of this, Alianima recommends replacing this procedure with alternatives, such as:

- non-castration, as many countries import pork without this requirement;
- immuno-castration: an injection (two doses) that stimulates the production of antibodies against the hormone GnRH, inhibiting the testicular function;
- sperm sexing, to prevent the birth of males piglets;
- the adoption of painkillers and anesthesia for surgical castration.

**All pork producers responded that they intend to implement or have already implemented surgical castration with anesthetics or immuno-castration, a very positive highlight.**

**Surgical castration with anesthesia or immuno-castration**



Source: Pig Watch, 2020

## TEETH CLIPPING

Piglets are born with eight teeth, which help them hold on to the mother’s teat while feeding. It is routine to clip (with pliers) or grind (with a file) these teeth in the first two days of age, reducing them to one third or half of their original size.

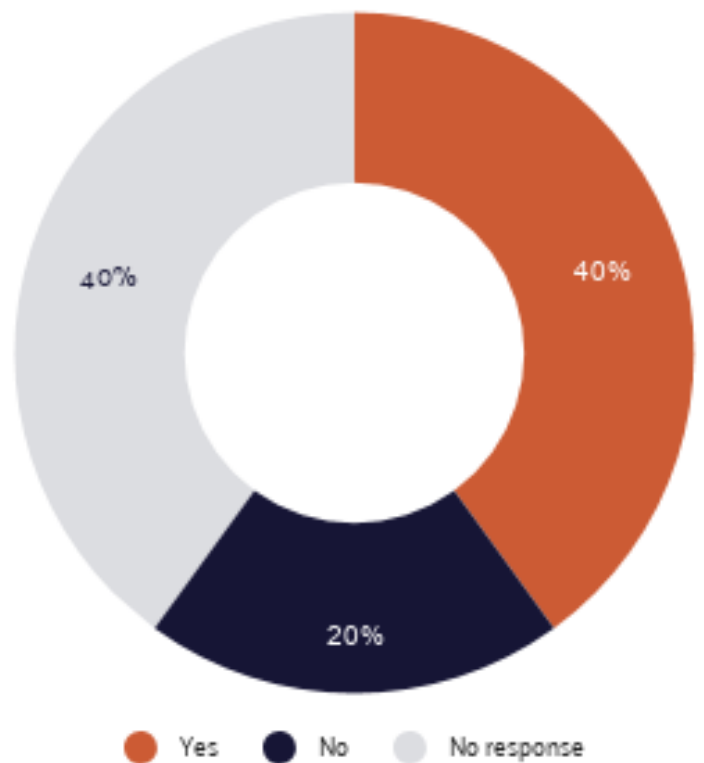
This procedure is performed in order to reduce the occurrence of injuries on the sow’s udders and on other piglets. The problem is that, regardless of the method used, the procedure causes pain and injury, from the exposure of the dentin (the sensitive part of a tooth), to tooth fractures, hemorrhages, infiltrations, abscesses and osteodentin formations.

An alternative would be to avoid mixing piglets among their siblings after 36 hours of age and to guarantee at least one teat per piglet. This reduces feeding disputes and, consequently, injuries of the udders.

Another measure is temperature controls, avoiding thermal stress for the sows. When the sows suffer from heat, they eat less feed and produce less milk, causing more bites on the udders by the piglets.

According to the responses, producers intend to implement or already have implemented a ban on teeth clipping. Only one of the respondents of the survey did not answer this question.

**Banning teeth clipping**



Source: Pig Watch, 2020

## TAIL DOCKING

Another contested practice of pig farming is cutting the final third of the piglets’ tail, the so-called tail docking. Less than 7 days old, the piglets are subjected to this procedure in order to prevent them from biting each other’s tails.

This behavior occurs due to the high number of animals confined in the same pen and the boredom resulting from an environment without stimulating resources.

An adjustment of the density of piglets in the pens and the use of environmental enrichment can mitigate this problem.

A tail bite causes injuries, which can get infected and worsen the level of welfare. However, tail docking, besides being painful, does not solve the underlying cause of the problem and does not avoid biting altogether.



Unfortunately, companies have shown no intention to banish the procedure of tail docking.

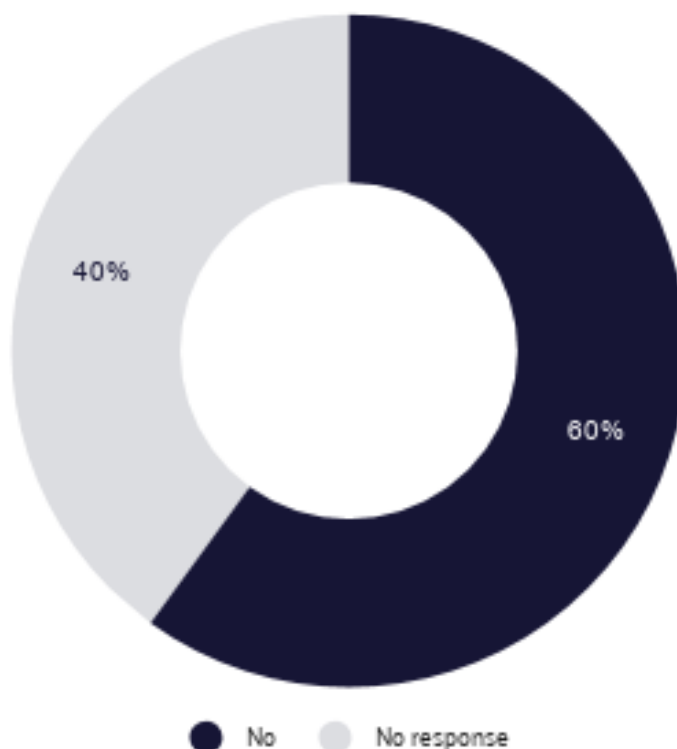
## Ear notching

In industrial livestock farming, farms need to identify each animal to allow individual and group control. There are different ways to identify an animal, such as earrings, tattoos and ear notching. The latter is an Australian method that consists of cutting, with pliers, the two ears of the pigs in a unique pattern, so that each animal has different marks.

The cut is performed without any type of anesthesia and when the piglet is still very young (at birth or up to 12 days of age). Compared to other forms of identification, notching leads to more severe wounds that take longer to heal (up to two weeks)..

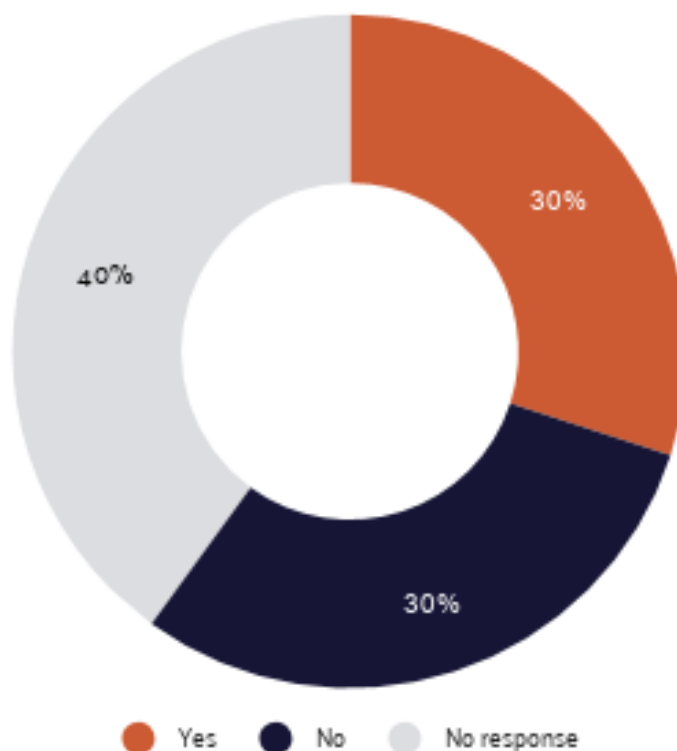
The adoption of less painful methods to identify animals is or will be implemented by more than half of the responding producers.

**Banning tail docking**



Source: Pig Watch, 2020

**Banning ear notching**



Source: Pig Watch, 2020

---

# One health: the use of antibiotics

The welfare of farm animals is not only related to sustainability, but also directly to human health. The concept of "One Health" reflects the inseparable union between Animal, Human and Environmental Health, as one interferes with the others. One of the focal points of One Health is mitigating the resistance of antimicrobials, to guarantee the effectiveness of the treatment of infectious diseases in animals, human and non-human.

To this end, it is necessary and urgent to establish better criteria and reduce the use of antibiotics in livestock, that for over 50 years are being used not only for the treatment of diseases, but also as growth promoters. This non-therapeutic use is carried out by applying low doses in animal feed for short periods of time, as this has a more desirable cost-benefit relation for the health and nutritional efficiency of the animal. However, such use is imprudent as it creates pathogens resistant to antimicrobials. In other words, it makes medicines become obsolete, disarming us against various diseases.

This is a global issue, but while the global average of antibiotics for each kilogram of animal is 172 mg, Brazil has an average of 358 mg/kg, being one of the largest consumers of antimicrobials in the global livestock sector.

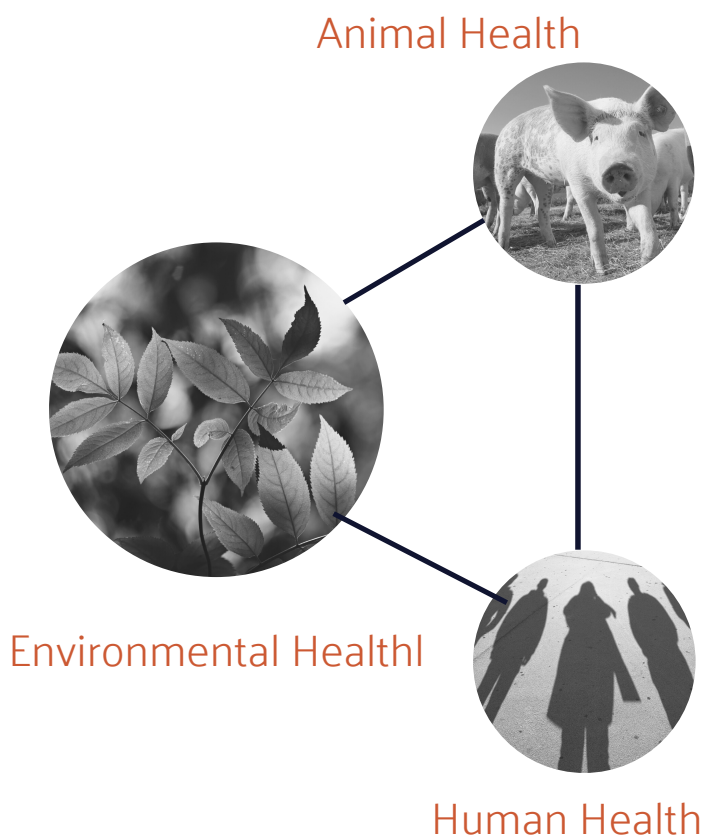
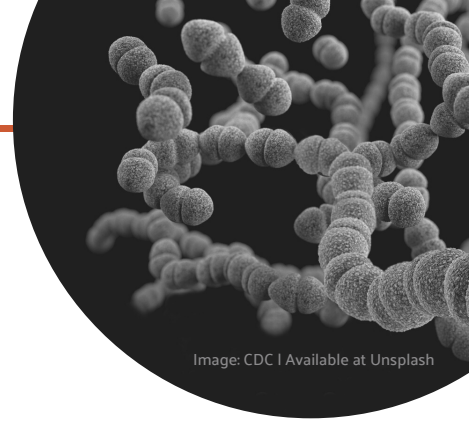


Photo: Public Domain Images | Available at Pixabay

Recognizing that this is a very serious issue, the World Health Organization (WHO) recommends that this practice should be stopped and the European Union has banned the use of growth promoters in pig farming since 2006.

In 2018, the Brazilian Ministry of Health launched the National Action Plan for the Prevention and Control of Antimicrobial Resistance in the Scope of One Health.

# Alternatives to the use of antibiotics for non-therapeutic purposes



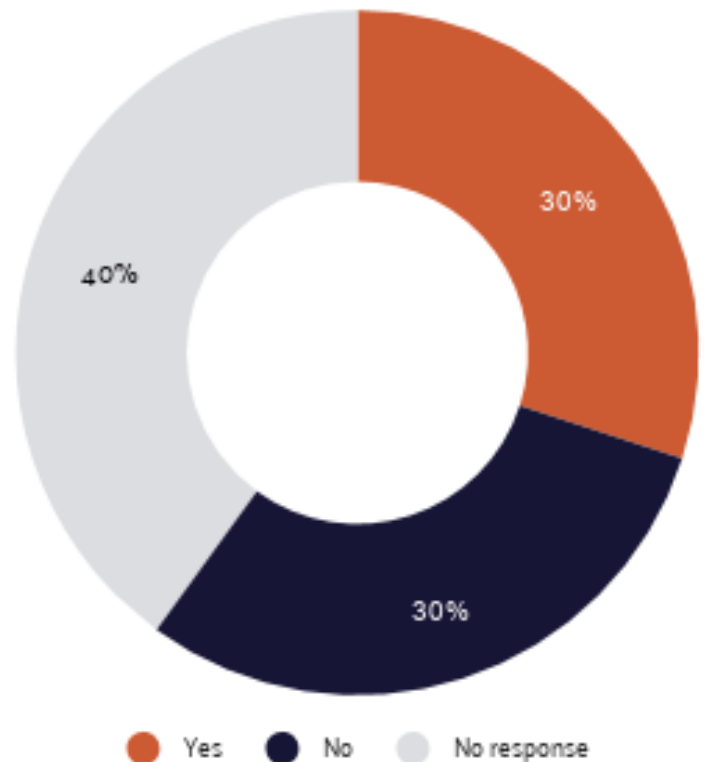
Alianima calls for the end of the use of antibiotics for non-therapeutic purposes in livestock industries. As alternatives to the use of antibiotics for prophylactic and growth-promoting purposes, the scientific community suggests the following practices:

- Management adjustment
  1. reduce density (number of animals per area)
  2. increase the weaning age to 21-28 days
  3. avoid mixing animals (production flow "all in all out")
  4. control temperature and humidity (high thermal amplitudes favor Streptococcus suis, while low amplitudes may avoid the use of amoxicillin)

- Adjusting the cleaning and disinfection program of the facilities;
- Adjusting the vaccination and acclimatization program;
- Nutritional adjustments, medication shocks and eubiotics (pre and probiotics, organic acids and essential oils - in water and feed)
  1. minimize anti-nutritional factors in the post-weaning period, such as reducing the proportion of soy-based feed to reduce the incidence of diarrhea;
  2. use of nutraceuticals (such as plasma);
  3. windows between medication shocks.

Regarding our corporate survey, more than half of the responding producers stated that they intend to stop the use of antibiotics for non-therapeutic purposes.

## Banning the use of antibiotics for non-therapeutic purposes



Source: Pig Watch, 2020



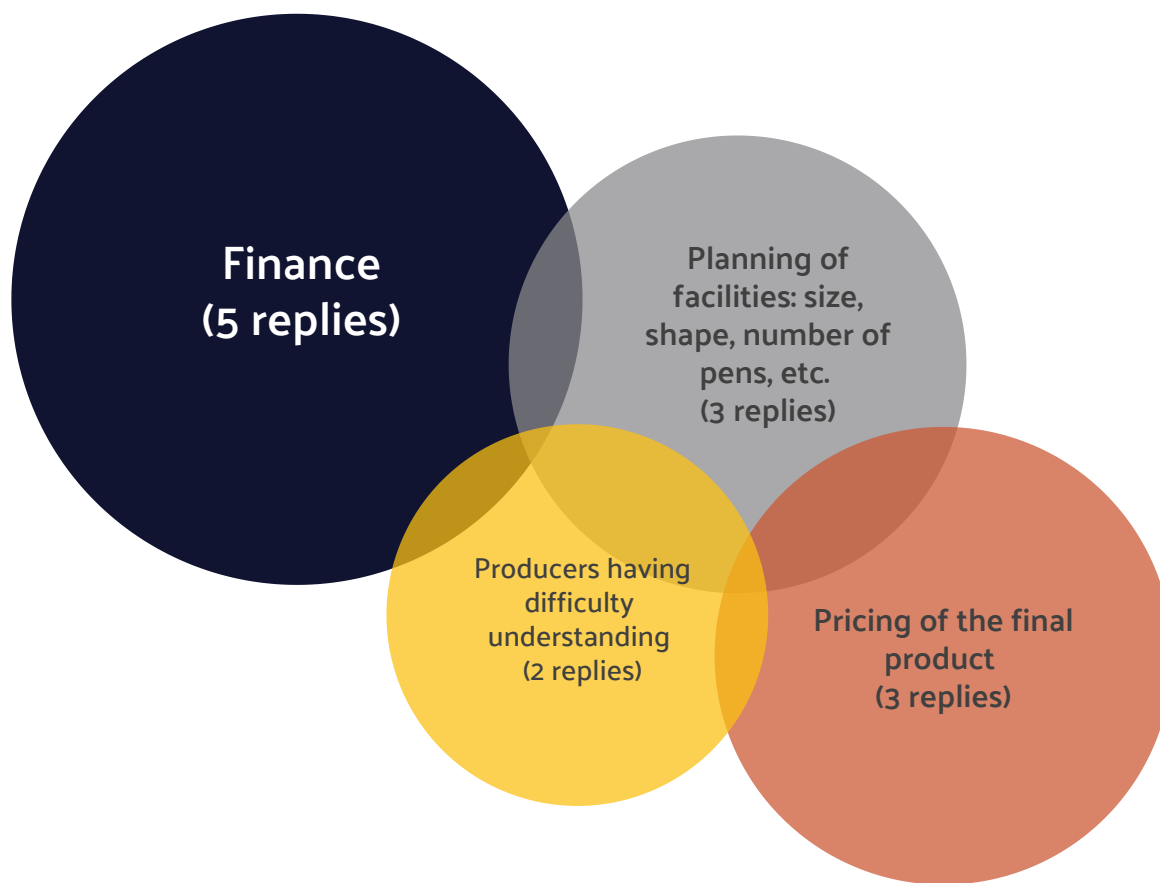
# **3. Challenges of the sector**



# Challenges of the industry

Public commitments are one of the ways in which companies can demonstrate that the adoption of animal welfare in their productive models is part of their strategies.

Beyond these commitments, it is extremely important to understand what the challenges are that the companies face on this trajectory of implementing change within a given timeframe. In order to understand this better, companies identified their main challenges in this process:



For companies, the access to finance is the main difficulty in the transition to group housing or other animal welfare practices.

Photo: John Lambert | Available at Pexels

# 4 Conclusion

---

# Conclusion



Photo: Public Domain Image | Available at Pixabay

Considering the relevance of the issue and the difficulties of the Brazilian context, including the economic crisis and the lack of legislation and technical-scientific support to ensure effective implementation of animal welfare policies in food production, the engagement and transparency of the industry becomes the greatest ally in promoting changes.

Over the last five years, there has been a significant improvement of the scenario, where the consumer is increasingly aware and demanding, the industry is more willing to pay attention to animal suffering, and more organizations are offering information and support so that the transformation occurs in a fair and consistent manner.

We thank the companies for not only responding to our survey, but also for having been open to dialogue and exchanging experiences.

**COMPANIES COMMITTED TO ANIMAL WELFARE ARE ALSO RESPONSIBLE FOR PROVIDING TRANSPARENCY TO THE FINAL CONSUMER. THE EFFORT OF THE NON-PROFIT SECTOR EMPHASIZING THIS POINT IS NOT ONLY URGENT, IT IS FUNDAMENTAL.**

---

# Realization



This report was made by Alianima, a non-profit non-governmental organization, with the support of donations made by the organizations Center for Effective Altruism and Open Philanthropy Project Fund, a fund advised by the Silicon Valley Foundation.

# Support







# **5.** Bibliography



# Bibliography:

ASSOCIAÇÃO BRASILEIRA DE PROTEÍNA ANIMAL (ABPA). Brazilian Pork, 2016. Overview. Available at: <<http://www.brazilianpork.com.br/pt/pork-industry/overview>>. Acesso em: November 2020.

BRASIL. Ministério da Agricultura, Pecuária e Abastecimento. Serviço de Inspeção Federal (SIF), 2020. Disponível em: <<https://www.gov.br/agricultura/pt-br/assuntos/inspecao/produtos-animal/sif>>. Access in: November 2020.

BRASIL. Ministério da Saúde. Agência Nacional de Vigilância Sanitária. Plano de Ação Nacional de Prevenção e Controle da Resistência aos Antimicrobianos no Âmbito da Saúde Única. 2018. Available at: <[https://www.gov.br/agricultura/pt-br/assuntos/insumos-agropecuarios/insumos-pecuarios/programas-especiais/resistencia-antimicrobianos/arquivos/copy\\_of\\_PANBRdez2018.pdf](https://www.gov.br/agricultura/pt-br/assuntos/insumos-agropecuarios/insumos-pecuarios/programas-especiais/resistencia-antimicrobianos/arquivos/copy_of_PANBRdez2018.pdf)>. Access in: November 2020.

DUTRA, M.C. Uso de antimicrobianos em suinocultura no Brasil: análise crítica e impacto sobre marcadores epidemiológicos de resistência. Tese (Doutorado em Ciências) - Faculdade de Medicina Veterinária e Zootecnia, Universidade de São Paulo. São Paulo, 92 p. 2017.

EMPRESA BRASILEIRA DE PESQUISA AGROPECUÁRIA (EMBRAPA). Embrapa Suínos e Aves, 2020. Estatísticas Brasil Suínos. Available at: <<https://www.embrapa.br/suinos-e-aves/cias/estatisticas/suinos/brasil>>. Access in: November 2020.

EUROPEAN COMMISSION. Press Corner, 2005. Ban on antibiotics as growth promoters in animal feed enters into effect. Available at: <[https://ec.europa.eu/commission/presscorner/detail/en/IP\\_05\\_1687](https://ec.europa.eu/commission/presscorner/detail/en/IP_05_1687)>. Access in: November 2020.

EUROPEAN COMMISSION. Press Corner, 2012. Questions and Answers on the upcoming ban on individual sow stalls. Available at: <[https://ec.europa.eu/commission/presscorner/detail/en/MEMO\\_12\\_280](https://ec.europa.eu/commission/presscorner/detail/en/MEMO_12_280)>. Access in: November 2020.

STANDARDS for Confining Farm Animals - Initiative Statute. Vig Archive, 2008. Available at: <<http://vigarchive.sos.ca.gov/2008/general/title-sum/prop2-title-sum.htm>>. Access in: November 2020.

WATTAG NET. The world's leading pig producers and processors.2019. Available at: <[https://www.wattagnet.com/directories/79-the-world-s-leading-pig-producers-and-processors/top\\_companies\\_table](https://www.wattagnet.com/directories/79-the-world-s-leading-pig-producers-and-processors/top_companies_table)> Access in: November 2020.

WORLD HEALTH ORGANIZATION (WHO). Antimicrobial Resistance, 2017. WHO guidelines on use of medically important antimicrobials in food-producing animals. Available at: <<https://www.who.int/antimicrobial-resistance/en/>>. Access in: November 2020.