

INDEX

ABOUT ALIANIMA
ABOUT ANIMAL WATCH04
INTRODUCTION
ABOUT PIG WATCH09
METHODOLOGY10
RESULTS
Gestation Housing12
Piglet Handling 18
Use of Antimicrobials 22
CONCLUSION24
CONTACT25
REFERENCES
REALIZATION27



ABOUT ALIANIMA



Alianima is a non-profit organization that works in the field of animal and environmental protection, promoting synergy between both causes through the implementation of animal welfare policies in the Brazilian food chain.

We promote educational actions and projects to increase public awareness about ethical consumption that respects the way of life of all sentient beings and enables environmental balance.

Through a cooperative and continuous relationship with food industry leaders, we aim to understand the main difficulties faced by different sectors. We develop partnerships and provide free consultancy and technical support to those companies that understand the importance of implementing farm animal welfare policies in their operations.

We believe in collaborative work and a practical solutions-led approach. Therefore, we develop relationships based on trust, mutual benefit and recognition for progress in policies that promote better living conditions for billions of animals used in factory farming every year. In addition, we monitor and publish the main achievements of the sector regarding farm animal welfare.

ABOUT ANIMAL WATCH



Over the last years, technological advances in information access and growing concerns about health, climate change and animal abuse have increased the demand for more information about the source of our food, as well as the ethical and sustainable values applied in the industry.

Public commitments to animal welfare by more than 140 companies in the food and hospitality sector in Brazil have resulted in significant changes across the entire supply chain, especially due to the deadlines to complete the implementation.

Animal Watch is an online platform created by Alianima in order to give visibility to farm animal welfare public commitments (currently for laying hens and pigs). The platform aims to facilitate the monitoring of the transition process by civil society, therefore stimulating fulfillment of these commitments.

In addition, the website offers content and news on the topic of farm animals in order to inform people about the reality of animal agriculture. It also shows how the industry is capable of promoting significant changes in the treatment of animals and encourages a more critical and conscious consumption.

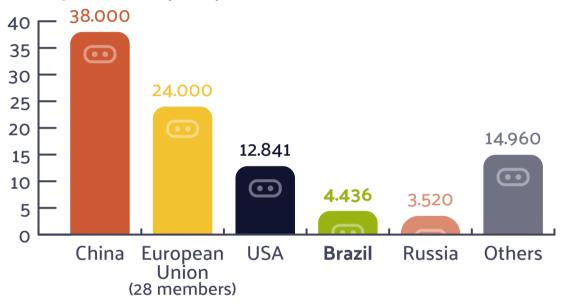


INTRODUCTION

Overview of pig farming in Brazil

By the end of 2020, Brazil continued to hold the 4th place in the ranking of largest pork producers and exporters in the world. The country produces around 4.4 million tons of pork (Graph 1), an annual growth of 11.4%, and exports more than one million tons (Graph 2). This makes the country a major player among global pork producers.

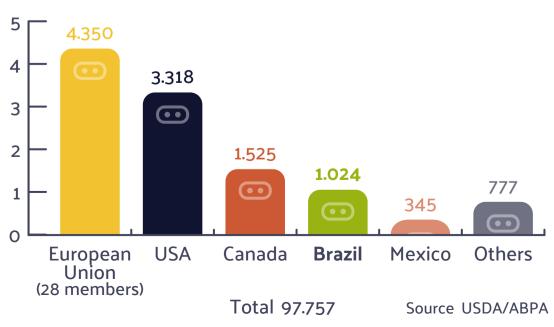
Graph 1 Global pork production in 2020 (thousand tons)



Total 97.757

Source USDA/ABPA

Graph 2 Global pork exports in 2020 (thousand tons)



Pork production is concentrated in the southern and southeastern states of Brazil, and it is the main economic activity in some cities. Pork meat is very popular in Brazil, with a yearly consumption of around 16 kg per person in 2020 (an increase of 4.6% compared to the previous year) according to data from the Brazilian Association of Animal Protein (ABPA).

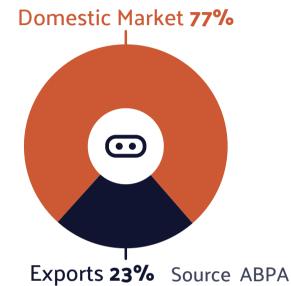
Of all Brazilian production, 77% supplies the domestic market, while 23% is exported (Graph 3).

The Brazilian pork industry consists integrated mostly of producers. followed by processing companies and export companies.

Banning gestation crates, in addition to other pig welfare policies, is also a way for Brazil to remain competitive on the international market. Their use has been restricted in the European Union (up to 28 days after insemination) since 2013 and banned in New Zealand, Switzerland, Sweden, Norway and the United Kingdom.

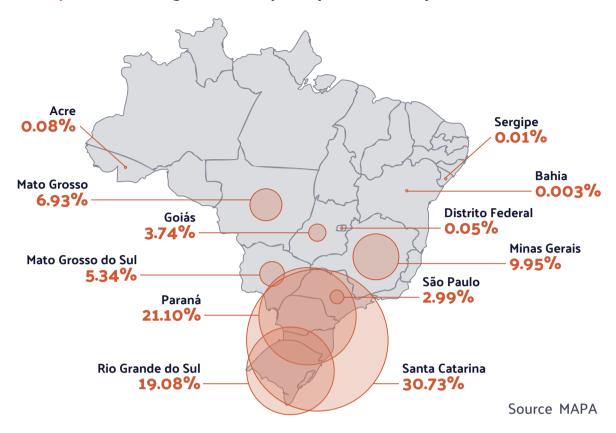
In the United States, the 3rd largest producer and 2nd largest exporter of pork worldwide, the states of Arizona, California, Colorado, Florida, Maine, Massachusetts. Michigan. Oregon and Rhode Island are also adapting to a future without gestation crates. Thus, the implementation of animal welfare standards by the Brazilian pork industry is also a reflection of requirements imposed by the global market.

Graph 3 Destination of Brazilian Pork Production in 2020

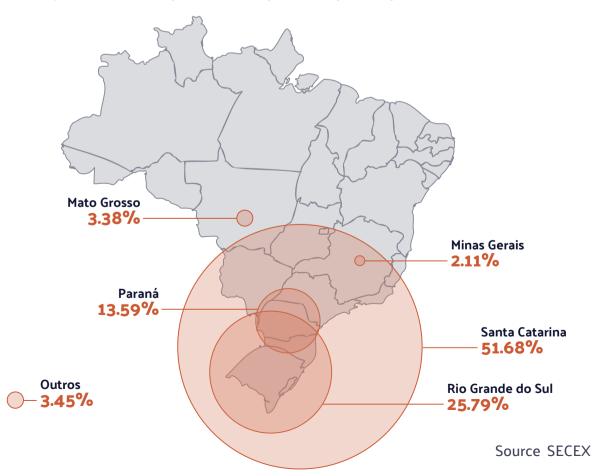


Among the 40 main pork producers in the world four are Brazilian: BRF (Sadia and Perdigão), JBS (Seara), Aurora Alimentos and Frimesa. BRF. ranked 10th, is one of the largest food companies in the world. JBS, ranked 20th, is one of the most globalized Brazilian companies, with production units spread across 15 countries on 5 continents. Ranking 24th and 37th, respectively, are Aurora Alimentos, 3rd largest industrial conglomerate in the Brazilian meat sector, and Frimesa. Both are cooperatives from the south of the country. In Brazil, the main pork producing states (Map 1) and their share in exports (Map 2) are as follows:

Map 1 Percentage of total pork production per state in 2020



Map 2 Percentage of total pork exports per state in 2020



•••••

The first Brazilian regulation by the Ministry of Agriculture (MAPA), published on December 16th 2020, has been a major and positive change in pig farming in the country. The so-called Normative Instruction No. 113 (IN 113), entered into effect this year to introduce good management practices and animal welfare in industrial pig farming. The main guidelines of the text state that:

- Farms that use gestation crates have until 01/01/2045 to adapt their facilities to group housing;
- The use of electric shock sticks and aggressive handling of pigs is prohibited;
- Farms that currently wean piglets up to an average age of 21 days have until 01/01/2045 to adapt their facilities to an average of 24 days or more;
- Pigs must have access to environmental enrichment in order to stimulate curiosity and activity, and reduce abnormal or aggressive behavior;
- Farms have until 01/01/2030 to use painkillers in each and every surgical castration, regardless of the animal's age;

- Tail docking should be avoided; however it remains tolerated when referring only to the final third of the tail and is done in a way that minimizes any pain or further complications for the animal;
- Ear notching becomes prohibited from 01/01/2030;
- Teeth clipping is prohibited and grinding will only be carried out when necessary.

Although the IN 113 is considered an advance in terms of animal welfare. some implementation periods are too long, such as gestation housing and improvements in the handling of piglets. The largest pork producing corporations and cooperatives in Brazil have already committed to banning gestation crates between 2025 and 2029, meaning that the regulation can be interpreted as a 20 year delay in this case. It is essential that companies keep their commitments, instead of adapting their deadlines according to the Normative Instruction. Otherwise. it would not be a corporate initiative in animal welfare, but just compliance with the law.

ABOUT PIG WATCH

The Pig Watch is an annual report by Alianima to monitor the transition of companies with public commitments to ban gestation crates.

The publication of these results aims to create a transparent relationship between the food industry and the final consumer, in addition to identifying difficulties behind the scenes of the industry. In this way, for each of the included companies we can identify the main issues that undermine a successful transition within the set time frame and support them with our technical resources and expertise in animal welfare.

This report is intended not only for the sustainability departments of companies in the sector, but is also directed to conscious consumers, concerned with the origin of their food and the well-being of pigs in factory farming.

Since its first edition in 2020, the Pig Watch Report relied on the participation of the majority of the contacted companies and has received a lot of attention from the press. By analyzing the responses of the participating companies, we found significant progress when it comes to housing sows in group pens during gestation.



We emphasize the importance of the industry being proactive and transparent throughout this transition process.

This second edition addresses other issues related to animal welfare in a little more depth, such as the handling of piglets and the non-therapeutic use of antimicrobials. We aim to update last year's report with a comparative analysis of previous data, creating an accurate overview of the progress in Brazilian pig farming in terms of sustainability and animal welfare.

METHODOLOGY

For this survey we prepared two types of questionnaires. One for companies directly involved in pig farming, that is producers and processors (suppliers), and another for companies that buy pork from the first group, such as restaurants and retailers (customers). Unlike last year's edition, in which one single questionnaire was used, the current survey aims to adapt the questions according to the sector.

All companies operating in Brazil that by the first half of 2021 had publicly announced their commitment to abolish gestation crates were contacted by email to participate in the Pig Watch Report. Below is the list of these companies in alphabetical order and divided by sector, as previously characterized:

Suppliers











Customers

















The questionnaire directed at suppliers included the following points of evaluation and monitoring:

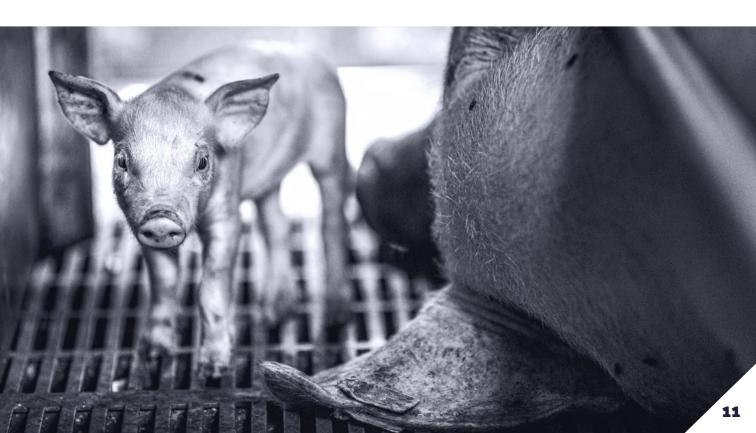
- Proportion of sows already housed in group pens during the gestation;
- Period of housing in individual crates for sows between the end of farrowing and the beginning of gestation;
- Implementation of best practices for piglets handling (end of surgical castration without anesthesia, teeth clipping/grinding, tail docking and ear notching);
- Use of antimicrobials for non-therapeutic purposes (preventive and growth promotion use);
- Challenges faced by companies in the process of banning gestation crates, improving piglet handling and reducing the use of antibiotics.

The customer questionnaire addressed the following points:

- Percentage of pork used annually coming from suppliers that do not house sows in individual crates during gestation;
- Willingness of companies to demand other animal welfare practices from their suppliers;
- Challenges faced by companies in the transition to pork free from gestation crates.

The questionnaires were sent in September 2021 and the companies had one month to submit their answers. Companies that did not respond to the questionnaire were categorized with the status "no response".

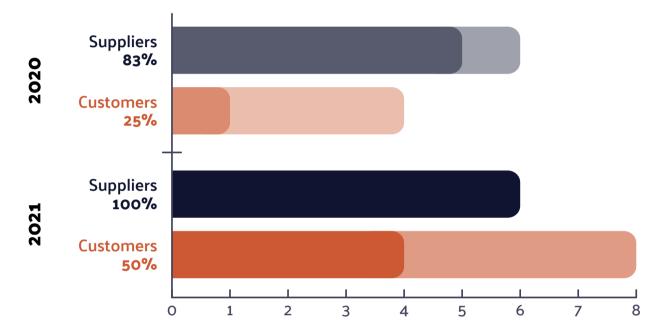
All the companies contacted were aware of the transparency clause in the Pig Watch Report, declaring their agreement with the disclosure of the results on the Animal Watch platform.



RESULTS

Graph 4 Distribution of participating companies per sector and year

Of the 14 contacted companies, 10 responded (71.4%): 6 from the group of suppliers (100%) and 4 from the group of customers (50.0%). The rate of response of this edition was higher than in the previous one, which had 6 responses out of 10 companies (60%): 5 from suppliers (83.3%) and only 1 from customers (25%) (Graph 4).



Gestation Housing

The main issue addressed in this report concerns the transition of the housing of sows during the gestation phase, from individual crates to group pens.

The crates are extremely limiting in their dimensions, allowing almost no movement. In addition to physical discomfort, animals cannot interact with each other, nor explore the environment or build a nest before giving birth, important natural behaviors that have already been proven by scientific research.



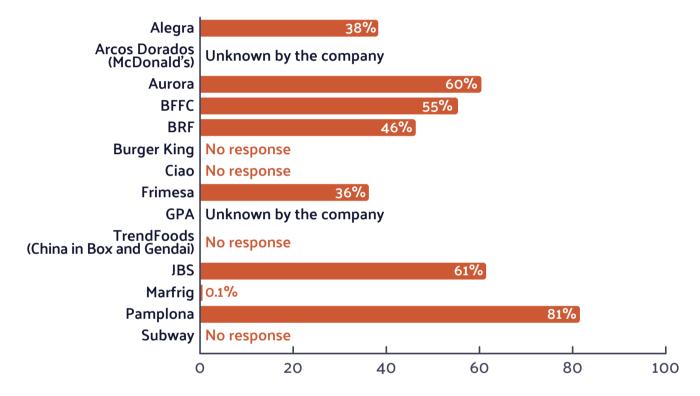
On top of that, health problems such as feet injuries (lameness), urinary infections, muscle atrophy and behavioral disorders are frequent due to the lack of physical activity.

Despite new challenges that come with the adoption of group pens, various scientific studies confirm that it is possible to maintain productivity

and health at equal or even higher levels when compared to individual crates. Also, physical exercise during pregnancy improves the performance during farrowing.

Companies that participated in the survey manifested their transition status, as can be seen in Graph 5 below.

Graph 5 Percentage of sows housed in group pens per company



Suppliers

For this report, companies from the supplier group were asked about the approximate total number of pigs (breeding sows) and the number housed in group pens. In this way, it was possible to develop an accurate overview of the proportion of animals included in the transition process of each company, as shown in Graph 6.

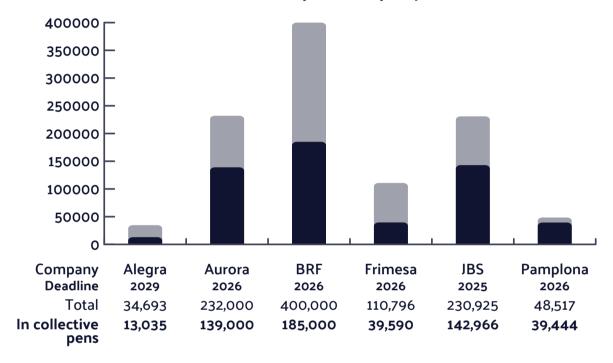
Regarding the annual progress, there was a minimum growth of three

percent points (JBS) and a maximum of eleven percent points (BRF). The latter deserves some positive attention, as it is the largest pork producer with approximately 400,000 breeding sows. Another point to be emphasized is that half of the companies - Aurora, JBS and Pamplona - have already completed more than 50% of the transition, with Pamplona already at 81% of the process completed (Graph 7).

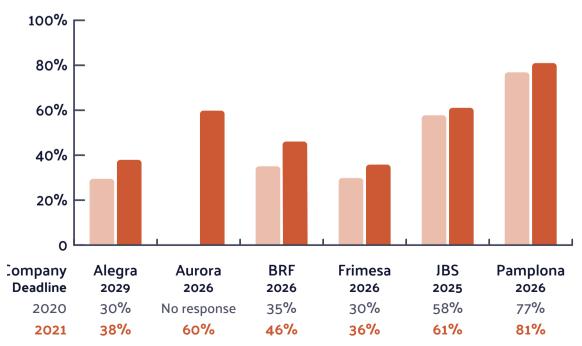
encouraging companies advances. to respect the deadlines set in their respective public commitments (between 2025 and 2029), irrespective of the IN 113 that came into effect extension of animal suffering.

It is important to recognize these earlier this year requiring completion only by 2045. Monitoring the transition of these largest pork producers shows us that IN 113 deadline is unnecessary and outdated when granting the

Graph 6 Number of sows housed in collective pens out of total per company



Graph 7 Percentage of sows housed in collective pens per company and year



Another important aspect that has been widely discussed is the period for which sows are kept in the crates after insemination. There are several scientific studies indicating that transferring the sows to group pens soon after insemination (before embryo implantation) does not harm productivity, and may even promote improvements. It early establishes the group's hierarchy (remaining more stable throughout gestation), which reduces the risk of embryonic reabsorption due to stress (lower estrus return and abortion rates). In this way, crates can be eliminated entirely during gestation resulting in longer periods in more adequate housing for the breeding sows.

The survey also questioned the period in gestation crates adopted by each company. As can be seen in Table 1, all companies adopted more than one option, probably to evaluate the impact of these different protocols. Only half of the companies is using the "before embryo implantation" system (Alegra Foods, JBS and Pamplona). Fortunately, two-thirds of suppliers have plans or goals to reduce the currently adopted period. Pamplona, for example, stated that in all of its newly planned projects the "before embryo implantation" system will be adopted.

Once again, IN 113 has a delaying impact on this urgent and necessary transition for pig welfare by allowing up to 35 days in individual crates after insemination.

Table 1 Periods adopted for housing sows in gestation crates per company

Days in individual crate ► Company ▼	Up to 7 (before embryo implantation)	Up to 28	Up to 35	42	Intention to reduce?
Alegra Foods	•		•		No
Aurora			•	•	Yes
BRF		•			No
Frimesa			•	•	Yes
JBS	•	•	•		Yes
Pamplona	•		•		Yes

Challenges

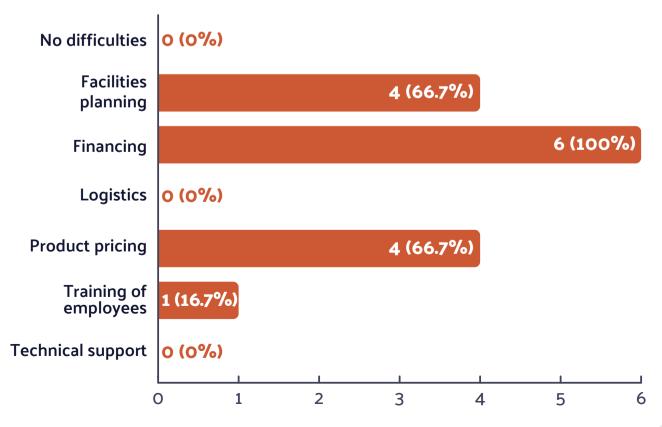
To better understand the situation. the Pig Watch Report also asked experience whether companies difficulties in the transition to group housing. All participants mentioned at least one issue, as shown in Graph 8. Financial challenges were reported as an obstacle by 100% of the respondents, with one specifying the low financial viability for small producers. Others referred to high production costs due to high prices of the mainly imported inputs, which increased even more during the COVID-19 pandemic.

In the 2020 edition of the report, financing was also the most reported difficulty, indicating that this is not (only) an initial difficulty but a structural challenge in the production chain.

"The transition to group pens is the biggest structural and behavioral change that pig farming has undergone in recent years. Moreover, these adaptations have to be made while the farm continues to operate normally."

- BRF

Graph 8 Difficulties identified by companies in the transition to collective gestation



Customers

Restaurants and retailers were asked about the percentage of pork coming from suppliers housing sows in group pens during gestation. In Table 2 it is possible to notice the urgent need of client companies to seek more information about the transition process of their suppliers. Among them, BFFC (Bob's) deserves to be highlighted, not only for moni-

toring and sharing its transition status, but also for the progress of 20 percent points in the last year. Another point of attention is the deadline (2022) set by Arcos Dorados in 2014 to improve pig welfare. Given that the company reported that it does not have current information about its suppliers, it is unlikely that it will reach the goal by next year.

Table 2 Percentage of pork from suppliers housing sows in collective pens per company and year

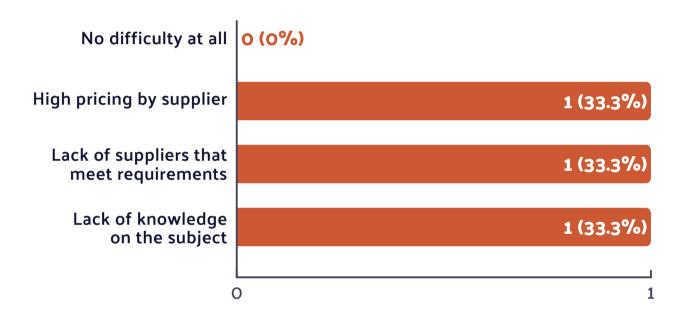
Company	Deadline	2020 2021		
Arcos Dorados (McDonald's)	2022	No response	Unknown by the company	
BFFC	2025	35%	55%	
Burger King	2025	Not a single response		
Ciao	2025	Not included	No response	
GPA	2028	Not included	Unknown by the company	
TrendFoods (China in Box e Gendai)	2025	Not included	No response	
Marfrig	2026	Not included	0,1%	
Subway	2025	Not a single response		

Challenges

transition to group housing, half of the companies claimed to face problems (as shown in Graph 9), including high pricing of products by suppliers, lack of

When asked about difficulties in the suppliers that meet the requirements, lack of knowledge on the subject and difficulties with traceability in the chain.

Graph 9 Difficulties identified by companies in the transition to gestation crate free products





Piglet Handling

In addition to the issue of sow housing during gestation, this report also raised aspects related to the handling of piglets: surgical castration, tail docking, teeth clipping/ grinding and ear notching. These are common procedures in pig farming, performed without any pain control medication.

Suppliers

Pork suppliers were asked to clarify adoption of immunocastration and their position on implementing the end of procedures without pain animal welfare practices, such as the control (Table 3).

Table 3 Companies intentions to ban painful procedures on piglets

Practice to be banned ► Company ▼	Surgical castration without pain control	Teeth clipping/ grinding	Tail docking	Ear notching
Alegra Foods	✓	~	×	~
Aurora	✓	~	×	~
BRF	~	~	×	~
Frimesa	~	~	~	~
JBS	~	~	•	
Pamplona	•	•	×	~

- ✓ Already banned or intends to ban within set deadline
- Already banned or intends to ban, but without set deadline
- X Has not banned and does not intend to

According to the responses, JBS no longer performs surgical castration without pain control, while other companies are still intending to ban this practice, just as in the case of teeth clipping/grinding and ear notching.

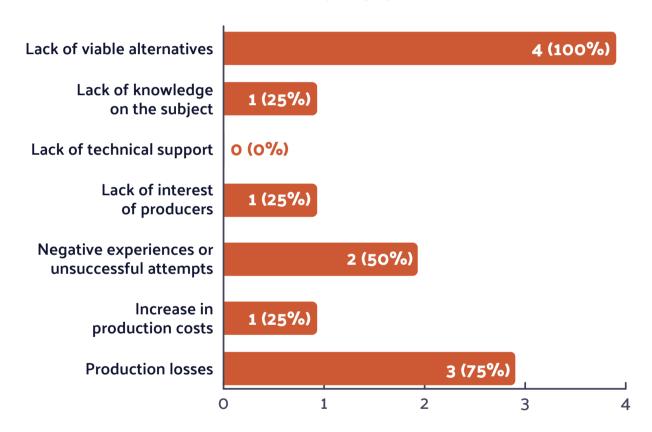
On the other hand, the ban of tail docking was the less promising, with

only 1/3 of the companies intending to ban this procedure. As justifications, the lack of viable alternatives, lack of knowledge on the subject, lack of interest on the side of producers, negative experiences or unsuccessful attempts, increase in production costs and production losses were listed (Graph 10).

According to BRF, "tail biting is a problem with many facets. As long as other factors are not successfully overcome, not performing the tail docking will generate more pain and discomfort to the animals. To protect animals, we are committed to carry out this procedure with the use of pain killers by 2025".

In agreement, Aurora explained that "banning tail docking could in fact result in decreasing animal welfare and in the rise of tail biting." And Pamplona declared to be evaluating viable alternatives. Both companies that said they wanted to ban tail docking reported facing problems with tail biting.

Graph 10 Reasons why companies do not intend to ban tail docking of piglets



Compared to the 2020 results, there is progress in banning tail docking, considering the fact that this was not included in the previous plans of any company. The same can be said about abolishing ear notching, which only three companies were planning to do so. Plans to abolish surgical castration without pain medication and teeth clipping were maintained by respondents.

The progress described above is in line with IN 113, which advocates the use of pain control for surgical castration from 2030 onwards; allows for grinding - not clipping - of teeth when needed; tolerates tail docking; and prohibits ear notching from 2030 onwards.

Customers

More objectively, the customer companies were asked if they already require or intend to require other animal welfare practices from their suppliers, such as banning mutilation in piglets (Table 4). The majority of respondents (75%) reported surgical castration without pain control to be banned from their supply chain and half named clipping/grinding teeth and ear notching. In contrast, only 25% of customers mentioned tail docking. in line with the response of suppliers. Once understanding the practices in pig farming and the intentions of the main suppliers, it is very important that the customer companies act accordingly and demand the same improvements. This will not only be directed towards the consumer, but also towards suppliers who have not vet committed to animal welfare policies.



Table 4 Companies intentions to demand animal welfare practices from its suppliers

Demanded practice ► Empresa ▼	Surgical castration with pain control or immunocastration	End of teeth clipping/ grinding	End of tail docking	End of ear notching
Arcos Dorados	×	×	×	×
BFFC	~	*	×	×
GPA	~	*	*	~
Marfrig	~	×	×	~

Use of Antimicrobials

The final topic addressed in the Pig Watch Report is the use of antimicrobials. For over 50 years, intensive livestock farming has used these drugs not only to treat diseases, but also as growth promoters. This non-therapeutic use is practiced with low doses in animal feed for short periods of time, aiming at improving cost-effectiveness in animal health and nutrition.

However, the practice is reckless as it accelerates the emergence of pathogens resistant to antimicrobials, making these drugs obsolete in the process and leaving us vulnerable against various diseases. Furthermore, around 70% of these drugs are also used to treat diseases in humans.

Suppliers

Thankfully, all responding companies said that they intend to reduce the use of antimicrobials (Table 5). Five out of six suppliers want to stop applying these drugs as growth promoters, while in the 2020 edition only three out of six had positioned themselves as such. However, most have not yet set a deadline for implementation and considering that adaptation requires a considerable period of time, it is urgent to set such goals. Moreover, the use of antimicrobials should be minimized and limited to the treatment of diagnosed diseases only, as it can lead to the rise of super bacteria. According to information provided by Pamplona, the company is in the phase of study and restructuring in order to reduce the use of preventive antibiotics.

Table 5 Companies intentions to ban non-therapeutic use of antimicrobials

Practice ►	Ban non-therapeutic use
Company ▼	of antimicrobials
Alegra Foods	Only as growth promoter; no deadline
Aurora	Only as growth promoter; no deadline
BRF	Only as growth promoter; deadline set
Frimesa	Yes; no deadline
JBS	Only as growth promoter; deadline set
Pamplona	Only as growth promoter; no deadline

Challenges

In order to reduce the use of antimicrobials in pig farming, the suppliers listed the following challenges: increased production costs, lower performance and increased mortality. As a result, they highlighted the importance of finding substitutes for both growth promoters and preventive drugs, without harming the performance of the animals.

According to BRF, "the main difficulty lies with the use of antibiotics to prevent diseases, as some infections recurrently affect animals at certain ages. For most cases, vaccine protocols are extremely effective (for example Circovirus type 2 – PCV-2). For others, the efficiency is partial or there are no vaccines available.

Another aspect is the lack of national regulation on biosafety in pigs, with only minimum requirements to be met on farms (such as the use of fences and sanitary barriers). This makes it difficult to implement these requirements, especially those related to structural requirements, as they would result in increasing need for investments in breeding facilities. Such increasing costs would reduce the company's competitiveness in comparison to others that do not require such biosafety adaptations from their partners. This may lead to sanitary problems throughout the pork production chain."

Customers

Of the four responding companies, three stated that they require or intend to require their suppliers to stop using antimicrobials for non-therapeutic purposes (Table 6). This statistic sparks optimism, as it shows that the problem is being understood, even though they are not in direct contact with pig farming. Corporate customers, whether restaurants or retailers. must become aware of their power as buyers. They can use such power to influence their suppliers by showing market demands around such requirements, as well as to clarify these concepts to their own consumers.

Table 6 Companies intentions to demand a ban on non-therapeutic use of antimicrobials from suppliers

Practice ►	Require a ban on	
Company ▼	non-therapeutic use of antimicrobials	
Arcos Dorados	*	
BFFC	*	
GPA	*	
Marfrig	×	



In this second edition of the Pig Watch Report, it was possible to compare the results with those of the previous year. In 2021, more companies committed to pig welfare policies were invited to participate in the study and more companies responded.

Despite the permissiveness of IN 113, both suppliers and customers continue to show their ambition in the transition process from individual crates to group pens for sows in gestation and other practices of animal welfare (i.e. piglet handling). As such, the proposed extension of the deadlines for the completion of this transition appears to be unnecessary. However, it is important to emphasize that customer companies must seek more information about their current transition status, both for the sake of transparency towards the consumer and for monitoring the progress towards their own set goals.

Regarding the use of antimicrobials, despite the existing objective of

banning their role as growth promoters, it is also necessary to reduce their use in the prevention of diseases in order to mitigate the impacts on One Health (human, animal and environmental health).

Finally, the main challenges brought up by the participants in the survey were the following: (1) difficulty in financing the implementation of the transition, (2) the abolition of tail docking for piglets, due to subsequent incidents of tail biting, and (3) the ban on the preventive use of antimicrobials, suggesting that alternatives should be investigated in order to end this dangerous practice and that painful procedure.

Alianima thanks the responding companies for their participation, not only for enabling a consistent study on the current state of pig farming with regards to animal welfare, but also for the transparency of their sustainability commitments towards consumers and civil society.



Be part of this great movement for the animals!

If your company wants to know more about our work or needs more specific explanation on animal welfare, please contact us through the channels below:

- 🚹 alianima.br
- o alianima.br
- info@alianima.org
- www.alianima.org
 www.observatorioanimal.com.br



REFERENCES

- 1. ASSOCIAÇÃO BRASILEIRA DE PROTEÍNA ANIMAL (ABPA). Relatório Anual 2021. Available at: https://abpa-br.org/wp-content/uploads/2021/04/ABPA_Relatorio_Anual_2021_web.pdf>. Accessed on: 8 nov 2021.
- 2. BRASIL. Instrução Normativa nº 113, de 16 de dezembro de 2020. Estabelece as boas práticas de manejo e bem-estar animal nas granjas de suínos de criação comercial. Diário Oficial da União. Ministério da Agricultura, Pecuária e Abastecimento/Secretaria de Defesa Agropecuária, 18 dez. 2020. Seção 1, p. 5. Available at: https://www.in.gov.br/en/web/dou/-/instrucao-normativa-n-113-de-16-de-dezembro-de-2020-294915279». Accessed on: 8 nov 2021.
- 3. FORBES. As 100 maiores empresas do agronegócio brasileiro em 2020. Forbes Agro, 82 ed., 21 mar. 2021. Available at: https://forbes.com.br/forbesagro/2021/03/as-100-maiores-empresas-do-agronegocio-brasilei-ro-em-2020/. Accessed on: 9 nov. 2021.
- **4.** GENESUS. World Mega Producer 2020. Available at: https://genesus.com/global-mega-producers/». Accessed on: 9 nov. 2021.
- 5. WELFARE ISSUE FOR PIGS. Compassion in world farming. Available at: https://www.ciwf.com/farmed-animals/pigs/welfare-issues/>. Accessed on: 12 nov. 2021

REALIZATION





This 2nd edition of the 2021 Pig Watch Report was carried out by Alianima, a non-profit non-governmental organization, with the support of donations by the Centerfor Effective Altruism, Humane America Animal Foundation and Open Philanthropy, a fund advised by the Silicon Valley Community Foundation.

Support







Partial or total reproduction of this publication is permitted, provided the source is cited and excluding any commercial purpose.

