



ANIMAL WELFARE REPORT

2022 BASE YEAR



minerva
foods

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ABOUT THIS REPORT

Minerva Foods is pleased to present its first Animal Welfare Report, a document that communicates the advances made in Animal Well-Being at the Company. The information comprises the period between January 1 and December 31, 2022. In this Report, we organized information on a global scale in a clear, direct and summarized manner to provide even more transparency to our business. Furthermore, this Report aims to highlight the recurring engagement by senior management to implement good Animal Welfare practices across our value chain, as well as bringing transparency to our investors, customers, employees and suppliers.

The information provided results from a compilation of the Company's corporate data regarding operational activities, comprising suppliers, supply chain and production inputs.

Questions and suggestions related to this content can be made to our **communication channels**.

SCOPE

Minerva Foods (Minerva S.A.) is the largest beef exporter in South America. The Company produces and sells beef and lamb, processed foods and by-products, with a significant presence in Brazil, Australia, Argentina, Colombia, Paraguay and Uruguay, accessing markets in over 100 countries in five continents. It is a publicly traded Brazilian company with a global presence and has a market share of approximately 20% of the exports from South America.

Minerva Foods' animal supply and input chain ranges from the acquisition of animals for slaughter at its operating plants, to animal-based ingredients and raw material (meat) produced by suppliers, which are distributed or incorporated into its products, according to the business lines detailed below.

DESCRIPTION OF OPERATIONS CARRIED OUT BY MINERVA FOODS

CATTLE SLAUGHTER

Minerva Foods, as a leading exporter in South America, operates 8 slaughtering plants in Brazil, 5 in Argentina, 3 in Uruguay, 4 in Paraguay and 2 in Colombia, all referring to slaughter plants. In 2022, a total of 3,752,961 cattle were slaughtered at our plants.

INDUSTRIALIZED

With a raw material processing unit in Brazil and two in Argentina, Minerva Foods' private label products are developed and produced from fresh, cooked, roasted and grilled poultry, pork and beef. All suppliers of inputs, ingredients, raw materials and services operate according to our Animal Welfare policies.



MINERVA INGREDIENTS

This division is responsible for producing and selling by-products resulting from cattle slaughter and deboning processes (tallow for biodiesel, by-products for the pet food line, meat and bone meal, and blood). It uses raw materials derived from Minerva Foods' slaughter and deboning industrial plants in Brazil.

MINERVA CASINGS

This division produces and sells natural casings intended for the manufacturing of sausages. All raw materials originate from Minerva Foods' slaughtering and processing facilities in Brazil, Paraguay, Uruguay, Colombia and Argentina.

MINERVA LEATHER

Minerva Foods' leather division has operating plants in over 35 countries, selling leather from the operations in Brazil, Paraguay, Uruguay and Colombia.

DISTRIBUTION CENTERS

Minerva Foods has 14 distribution centers for packaged and frozen products of its private label and other brands², being 11 centers in Brazil, 1 in Paraguay, 1 in Argentina and 1 in Chile.

MINERVA ENERGIA

It is dedicated to monitoring the company's energy consumption, balancing its short- and long-term positions and managing energy purchase contracts on the free and regulated markets. It also offers its business partners structured and customized products to directly and indirectly reduce energy costs.

MINERVA BIODISEL

Converts bovine tallow into renewable energy bearing the Social Biofuel Seal and is part of the National Biodiesel Program (PNPB), which links its production to commercialization through the auctions of the National Petroleum Agency (ANP) and certified by the RenovaBio Program.

MYCARBON

Subsidiary focused on the commercialization of carbon credits, as well as products and services linked to the transition to a low-carbon economy aimed at combating climate change.

MINERVA FOODS SHOP

Flagshipstore located in the city of Barretos, SP Brazil, designed to showcase Minerva's signature products and other brands products with an emphasis on the end consumer.

“Own-brand products correspond to products that have the Minerva brand in their packaging and products of other brands are products from partner brands sold to consumers in our stores or to other companies. The mapping of animal welfare practices covers all products produced and marketed by the Company”.



All of Minerva Foods' operations and business structures are based on responsible Animal Welfare governance practices. The Company's operations use different animal species, as shown in Table 1.

TABLE 1 – TYPES OF PROTEIN IN MINERVA FOODS' OPERATIONS AND THEIR REPRESENTATIVENESS IN THE GLOBAL VALUE CHAIN

SPECIES	SLAUGHTER	PRODUCT PROCESSING	INGREDIENTS	DISTRIBUTION AND RESALE	% OF TOTAL CHAIN	TON	COUNTRIES
Beef Cattle	X	X	X	X	98%	1.017.488	Brazil, Argentina, Colombia, Paraguay, Uruguay
Dairy Cattle			X		0,0004%	5	Argentina
Broiler Chickens		X		X	0,79%	8.237	Brazil, Argentina
Laying Hens			X		0,0002%	3	Argentina
Pigs		X		X	0,57%	5.961	Brazil, Argentina
Sheep				X	0,06%	592	Australia
Fish*				X	0,49%	5.126	Brazil, Argentina, Uruguay
Non-animal Products				X	0,0003%	4	Brazil, Argentina

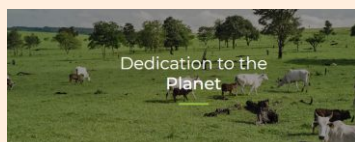
Farm: the cattle finishing stage; Slaughter: the killing of animals for human consumption; Product Processing: purchase of raw materials from suppliers to manufacture portioned and cooked dishes; Ingredients: purchase of ingredients from suppliers for the formulation of private labels or other brands; Distribution and Resale: the logistics of finished product inventory, storage, transportation and delivery of private label and third-party brands to customers.

The distribution of fish is for the following species: *Pangasius*, *Merluccius*, *Oreochromis niloticus*, *Gadus morhua*, *Pollachius virens* e *Gadus chalcogrammus* Palla.

It should be noted that calves, rabbits, ducks, geese and seafood are not part of Minerva Foods' supply chain. In addition, all of the Company's salmon and cod raw materials come from wild caught on the high seas, through legal and regulated activities.

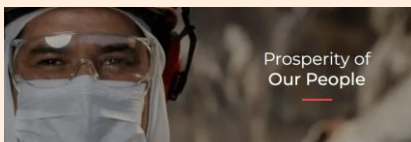
ANIMAL WELFARE GOVERNANCE

The Company is focused on Animal Welfare, which is integrated into its Sustainability actions, namely:



Dedication to the
Planet

Commitment with environmental responsibility from start to finish in the livestock chain.



Prosperity of
Our People

Caring for people inside and outside the Company's operations and the respect for Human Rights and social development actions are included in this commitment.



Product Quality and
Respect for Life

Ensuring the highest standards of food quality, safety and Animal Welfare during all handling stages.

These are the foundations of the Company's activities and help promote the recurring engagement of its employees to implement improvements and good Animal Welfare practices at all Minerva Foods' plants globally.

Minerva Foods' Sustainability actions are linked with the SDGs and guide the Company towards essential and management aspects

Minerva Foods' understands that Animal Welfare is the guiding principle of ethical and sustainable cattle production and is committed to the humane treatment of animals, in addition to ensuring that this theme is among the priorities of its global agenda, respecting demands from clients, consumers, society and the precepts of valuing life. The Company believes that recurring improvements bring consequences not only for production and market indicators, but also directly influence its work environment and the human-animal relationship.

In 2022, in line with its actions, the Company reinforced the importance of mobilizing dialogues with its stakeholders and the sectors involved to promote Animal Welfare in the production chain. To achieve this, the Company revised its [Animal Welfare Policy](#), which includes all animal species used within its value chain. The Company also reinforced this commitment as part of the Minerva Foods Organizational Culture Evolution Program and included the theme as one of the key materiality topics in its Investor and Sustainability Reports. The Animal Welfare theme was highlighted as very relevant by the audiences who participated in the survey – investors, customers, sector and civil society organizations, and employees of the South American operations.

The Company also improved its Business Partner Code of Conducts by including ethics, integrity and sustainability guidelines, and also reinforced issues related to Animal Welfare that must be applied across the chain. These actions translate into daily behaviors and attitudes and are backed by a global purpose. Therefore, the Company aims to promote ongoing engagement to implement improvements and good Animal Welfare practices at all its plants globally, for all the products in its supply chain, in addition to fostering practical knowledge of Animal Welfare to its customers, employees and suppliers.

Minerva Foods is also a signatory member of the [GRSB](#) - Global Roundtable for Sustainable Beef, a multi-sector initiative with representatives from the entire chain and beef production and consumption regions worldwide. The group encourages the improvement of sustainable beef production, through collaborative actions among its members and by promoting the best environmental, land use and Animal Welfare practices. It also sets clear targets for the reduction of livestock mortality by 2030.

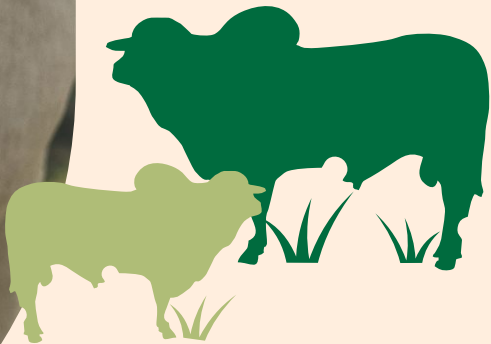
WORKING METHOD

Minerva Foods uses the 5 domains model as a foundation for managing the Animal Welfare theme, and also recognizes animals as sentient beings. (Figure 1). This model was chosen because it enables a more integrated view of the process and offers globally accepted guidelines, which consider the physiological, behavioral and mental states of the animals. For more information on the five domains, [click here](#).

The 5 domains model for Animal Welfare is committed to producing ethical and quality food with food safety standards and is used in all stages of animal handling, from rural properties to meat-packing plants, in addition to serving as a way of evaluating and classifying suppliers in the supply chain.

Physical / Functional Domains	Survival Factors	1. Nutrition	Food and water restriction: Low quality	Sufficient and balanced food and water, and varied diet
		2. Environment	Uncomfortable environment or with unpleasant physical characteristics	Comfortable and pleasant physical environment
		3. Health	Illness, injuries and/or functional challenges	Healthy, suitable and uninjured
	Presentation	4. Behavior	Restrictions on behavioral expressions	Able to express rewarding behavior
Domain of affective experiences	Mental State	5. Feelings	Thirst; hunger; pain; anger; frustration; anxiety; exhaustion; nausea...	Satiety; physical comfort; calm; strength; pleasure in eating and drinking...
		Welfare	POOR OR BAD	RICH OR GOOD

Figure 1. Five Domains Model for Animal Welfare



The Company's Animal Welfare requirements go far beyond complying with the standards and legislation of the countries where it operates. Minerva Foods adopts a unique well-being concept in its processes, ensuring the humane treatment of animals through regularly audited internal rules and procedures.

MANAGEMENT

In 2020, Minerva Foods created a corporate area that is dedicated exclusively to Animal Welfare. This corporate team is responsible for monitoring the ongoing evolution of Animal Welfare indicators and participates in committee agendas, client services, audit monitoring and in expanding certifications, training, monitoring and controlling of the supply chain, as well as in creating standard processes, policies and programs for the area.

The operating plants also count on employees that are exclusively dedicated to the theme, all of whom have degrees in zootechnics, veterinary medicine or biology and receive ongoing trainings to perform their functions, which include: the development of training activities, implementation of management and structure improvements, monitoring and management of indicators and development of strategies to offer appropriate animal treatment according to the Company's [Animal Welfare Program](#) and criteria established by legislation and its clients. The stages controlled by Animal Welfare specialists cover farming, transportation and industrial operations.

The Company also has an active multidisciplinary Animal Welfare Committee, comprising of representatives from the Logistics, Livestock Purchase, Quality, Sustainability and Communication areas. This committee establishes corporate guidelines and maintains the area constantly updated in relation to global market and consumer trends, and also plans investments, prioritizes actions and defines short-, medium- and long-term strategies, taking demands to the Company's senior management for approvals.

In 2022, the area was allocated under a global corporate management and joined the S&OP (Sales and Operations Planning) Board, expanding its corporate management and decision-making powers at the Company with this restructuring, as illustrated in the organizational chart shown in Figure 2. With this format, Minerva Foods maintains strict routines related to the theme in its operating plants and in the control efforts of its supply chain.



Figure 2. Hierarchical structure of the Animal Welfare area at Minerva Foods

To comply with the guidelines of the Animal Welfare Policy, which is based on strict control of zero tolerance for abuse, neglect or mistreatment of animals, the Company also applies the Minerva Foods Consequence Policy to all its employees, who are subject to punishment in case of non-compliance. The Consequence Policy covers punitive measures that can be taken by the Company for situations of non-compliance with essential rules for the business, ranging from mild (verbal warning) to serious measures such as termination of employment contracts. The Animal Welfare theme one of the mandatory factors in the Consequence Policy.

Within the farm scope, the Company also has management tools to verify compliance with its Animal Welfare Policy and monitors specific infrastructure and management indicators, communicating directly with livestock farmers, through the 'Informative to the Farmer' form whenever irregularities are identified. If irregularities become a recurring matter, technical visits are carried out and a report is sent with the main improvement actions to be taken.

Furthermore, Minerva Foods also maintains the [Trust Program \(Programa Laço de Confiança\)](#), which seeks to strengthen the relationship with livestock farmers, encouraging the adoption of good livestock practices and contributing to the sustainable development of the chain.

COMMUNICATION

Aiming to disseminate knowledge and culture on Animal Welfare, Minerva Foods created an internal communication channel to promote actions and practices for Animal Welfare. This channel was disclosed on a monthly basis to employees through mailings, WhatsApp and TVs monitors at the plants to promote engagement by all relevant audiences.

In addition, awareness on the theme was expanded beyond the Company, with the sharing of [technical articles](#) for livestock farmers and participation in events, speeches and congresses, such as the [Movimento Pecuária Responsável](#), [3ª Semana de Ciência e Tecnologia Agropecuária](#) and the [V Encuentro Internacional de Investigadores en Bienestar Animal in Uruguay](#). Minerva Foods also collaborated with the elaboration and launch of the book 'Bovinos do Brasil – Inovação, Sustentabilidade e Mercado' and with the elaboration of the [International Animal Welfare Protocol](#).



INFRASTRUCTURE AND TECHNOLOGY

To ensure that the Company's plants are constantly in good operating conditions, Minerva Foods has a specific project that identifies critical points, called **Trajetos do Boi**, in partnership with the Engineering and Corporate Maintenance areas. The objective is to seek recurring improvements of the industry's structures, such as landing ramps, gates, chutes, holding pens and stunning boxes, in addition to a constant verification of its entire truck fleet. When irregularities are identified, the location and/or transportation truck are immediately banned until the non-compliance item is addressed.

All holding pens at the Company's plants have access to high-quality water in sufficient quantity, a sprinkler system for thermal comfort of the animals and some plants (80.95% of the total) have shelters and/or galvanized roofs to provide shade for the animals, while other plants offer natural shading.

Holding pens are adequately structured with non-slip floors and are washed between batches of cattle. The Company also complies with recommended stocking densities, allowing the animals to lie down, get up, move around and have access to food when the waiting time exceeds the number of hours established by local legislation.

GLOBAL ANIMAL WELFARE INDICATORS

To ensure the best Animal Welfare practices, Minerva Foods implements management tools at each of its plants, at the properties of its suppliers, in transportation activities and in the supply chain. The main indicators are related to:

01 CERTIFICATIONS

Minerva Foods' plants in Brazil, Paraguay, Uruguay, Colombia and at the Rosario unit in Argentina are certified in Animal Welfare, according to the **NAMI** (North American Meat Institute) protocol and by accredited auditors **PAACO** (Professional Auditor Animal Certification Organization). Therefore, Minerva has more than 95% of its industrial cattle plants certified in Animal Welfare. In 2022, average compliance with audit requirements at all certified plants reached 99.9%, increasing criticality by 0.5% from 2021, when the index was 99.4%.

In Australia, although the operations were recently acquired, the Company has two plants certified by the **AAWCS** (Australian Livestock Processing Industry Animal Welfare Certification System) protocol, with a 100% approval rating.

Some of Minerva Foods' suppliers in Uruguay are certified by **GAP** (Global Animal Partnership), which has one of the largest Animal Welfare programs in North America. The GAP certification is obtained by supplier farms through a third-party audit that verifies local Animal Welfare conditions. Once the appropriate management process for the protocol have been implemented on the farms, third-party audits verify compliance and prepare a report, which is then

submitted for approval by the regulatory organization before certification is granted. This process guarantees strict compliance with the protocol. In 2022, more than 14,000 animals originated from GAP certified farms in Uruguay, accounting for 3.32% of the animals purchased in Uruguay.

Seven of Minerva Foods' plants have specific international certifications for the production of organic beef, two of which were certified in 2022. All plants in Paraguay, Uruguay, and one plant in Argentina are also certified under the organic protocol. At these plants, animals are guaranteed to be free from antibiotics, growth hormones and animal feed supplemented with animal products, in addition to meeting the highest standards of Animal Welfare. Certified plants are subject to stringent traceability controls under regulations 834/2007 and 889/2008 of the European Community and the National Organic Program (**NOP**) of the United States.

TABLE 2. PERCENTAGE OF VOLUME PURCHASED ACCORDING TO DIFFERENT INTERNATIONALLY RECOGNIZED ANIMAL WELFARE CERTIFICATIONS

CERTIFICATION	COUNTRY	ANIMALS PURCHASED	% TOTAL VOLUME
Organic	Brazil	74.966	4,36%
Organic	Paraguay	113.100	13,55%
Organic	Argentina*	0	0
Organic	Uruguay	132.910	29,64%
Global Animal Partnership (GAP)	Uruguay	14.904	3,32%
North American Meat Institute (NAMI)	Brazil	1.719.792	100%
North American Meat Institute (NAMI)	Uruguay	448.354	100%
North American Meat Institute (NAMI)	Paraguay	834.532	100%
North American Meat Institute (NAMI)	Colombia	292.116	100%
North American Meat Institute (NAMI)	Argentina	424.640	92,68%
Australian Livestock Processing Industry Animal Welfare Certification System (AAWCS)	Australia	462.678	72,81%

*No purchases of organic animals were registered in Argentina in 2022, despite the certification of the Rosario plant.

02 COMPLIANCE MATRIX AND INTERNAL AUDITS

Minerva Foods carries out internal audits and daily control routines for several key indicators (KPI's) regarding Animal Welfare in its own slaughter plants, in which it monitors the progress, implementation, and guarantee of good practices. When irregularities are identified, an action plan is carried out to address the matter, followed by a proof of correction. Audits of operating plants are carried out by internal teams (second party audits) and independent auditors, as well as by domestic and international clients (third party audits/certification).

All these audits are guided by requirements of legislation in force, which indicates the Company's commitment in adopting best practices. The objective is to share experiences and promote engagement of the areas in relation to the established indicators and goals, thus benefiting the entire process. In 2022, all industrial plants in South America were evaluated by a second party, achieving a 96% compliance rate.

In line with Minerva Foods' Animal Welfare Program, the **ANIMAL WELFARE COMPLIANCE MATRIX is based on compliance with domestic legislation and international protocols. The tool was developed by the corporate team as a way of controlling not only cattle and sheep slaughtering activities, but also transportation and breeding processes. The plants carry out a daily self-assessment routine, using the matrix as a guiding protocol, and also undergo internal audits that follow these criteria.**



The results of the Animal Welfare Compliance Matrix are monitored and reported at monthly meetings held by the Company's senior management. This monitoring is used as a recurring diagnostic and management tool for Animal Welfare, ensuring best practices are implemented and identifying the need for corrective actions in routine processes.

The evolution of the indicators for each plant is addressed at weekly meetings held by the Corporate Animal Welfare area, which discusses action plans, verifies execution deadlines and prioritize investments according to the ranking of the plants based on their achievement of KPIs and pre-established goals. The Compliance Matrix is part of the Company's goals book and is linked to collective industry goals, which are also tied to bonuses.

TABLE 3. KEY ANIMAL WELFARE INDICATORS IN 2022

Indicators	Brazil (cattle)	Argentina (cattle)	Colombia (cattle)	Paraguay (cattle)	Uruguay (cattle)
INDUSTRY					
% of animals not stunned ¹	99,97%	95,0%	100%	81,4%	90,6%
Stunning efficacy at first attempt	98,89%	99%	98%	99,67%	99,45%
Poorly stunned animals on the bleed rail	0,014%	0%	0%	0%	0%
Stunning to bleed interval	55 seconds	<60 seconds	Até 60 seconds	Até 60 seconds	41 seconds
Slips during unloading and in crowd pens and chutes	0,59%	1,1%	1%	2,55%	1,4%
Falls during unloading and in crowd pens and chutes	0,15%	0,5%	1%	1,18 %	0,5%
Animal vocalization in the crowd pen, lead-up chute and stunning box	0,36%	3%	0%	2,71%	<2%
Electric prod use during handling	4,48%	3%	0%	6,96%	15%
Bruised carcasses	15,63%	-	3%	0,01%	4,50%
Employees trained in Animal Welfare	220	36	366	155	70
Third-party workers trained in Animal Welfare	462	0	276	65	320
% compliance in second-party Animal Welfare audits	99,01%	99%	100%	100%	100%
% compliance in third-party Animal Welfare audits	99,60%	99,70%	100%	100%	100%
% mortality (transportation and industry)	0,001%	0,05	0%	0,21%	0%
% of emergency slaughters	0,04%	0,21%	3%	0,01%	0%
Surveillance cameras	128	2	16	49	13
Total investment in Animal Welfare (US\$)	\$ 611.035,29	\$ 1.973,47	\$ 130.000,00	\$ 95.329	\$ 44.738
TRANSPORTATION					
Average transportation time	5,98 hours	5,30 hours	4 hours	8 hours	3,7 hours
% animals transported on trips of up to 8 hours	90,31%	90%	95%	49,27%	97,70%
Average transportation distance	239,25 km	350 km	295 km	475 km	239 km
FARM					
% of confined animals ²	48,41%	24,77%	0%	37,96%	1,98%
% castrated animals	0,90%	1,7%	40%	14,1%	43,08%
% dehorned animals	2%	5%	75%	0%	16,4%

¹Operations in Australia are in the process of standardizing management indicators and implementing the systems used by Minerva Foods. For this reason, some indicators are not being reported. The operations in Australia only include sheep slaughtering. ²Only animals destined for the Kosher and Halal markets are not stunned before bleeding, due to a strictly religious requirement. ³It is worth mentioning that in Latin America, contrary to what is observed in the United States, where cattle are confined from weaning, confinement is a finishing method in which animals are confined at a stocking density of 16 to 20 m²/animal for 90 to 120 days, or only 8% to 10% of their lifetime. the breeding and backgrounding stages are entirely pasture-based. Semi-confinement and pasture confinement are growing and finishing strategies in which animals are feed in bins (1% to 2% of their live weight), but still have access to pasture, that is, they cannot be considered as CAFOs (Concentrated Animal Feeding Operation). The following modalities are used as confinement and semi-confinement pasture in Latin America: TIP (Intensive Pasture Finishing), in which the animals are confined at an average density of 10 to 20 AU (animal unit)/hectare during 90 to 120 days, RIP (intensive pasture breeding), where animals are confined at a density of 2 to 5 AU/hectare for up to 365 days and the rotated pasture finishing system, in which animals are confined at an average density of 5 to 10 AU/hectare during 90 to 120 days.

- In addition to the indicators of the Animal Welfare Compliance Matrix listed above, the Company carries out daily assessments on transport vehicles and quality of animal transportation on a sample of trucks. This assessment takes into consideration the type of vehicle, the quality and state of conservation of the truck's structure, the driver's skills and training, density, animal conditions and behavior upon arrival, and observations reported in the transportation draft. We also have a specific clause on Animal Welfare in contracts with carriers in which they respect Minerva Foods' Animal Welfare Policy. Non-compliance is subject to appropriate measures and contracts may be terminated.

- In 2022, 98.77% of Minerva Foods' truck fleet was in perfect maintenance conditions and over 91.64% of drivers had received, at least, a minimum amount of Animal Welfare training on an annual basis.

- Animal behavior is also observed in the holding pens to identify anomalies, such as sodomy or fights, where the mounted animal or the one initiating agonistic behavior is separated from the group. When we observe increased reactivity from the animals (high flight distance), handling is done with greater care, avoiding sudden movements, in addition to allocating these animals to more distant holding pens which are silent and do not have people circulating around them.

- Minerva Foods has contingency plans for emergency situations, described in its internal self-controls that are prepared by the corporate crisis management team, containing assertive guidelines for quick decision-making in special cases. The plans foresee adverse situations such as water and power outages, ammonia leakage, floods, fire, typhoon, earthquake, transport accidents with live cargo, and unexpected decrease in the number of employees (such as during the pandemic, for example), among others.

- Specific Animal Welfare indicators are also controlled in the Company's meat supply chain for product development and are materialized through the monitoring of the progress of its public commitments (see item 5 of the Global Animal Welfare Indicators).



03 TRAINING

Minerva Foods focuses on frequent technical Animal Welfare training sessions for its internal team and suppliers to disseminate knowledge about the main guidelines capable of ensuring the efficient implementation of its Animal Welfare Program. Training sessions are held every six months and aim to bring innovation and dynamism to the processes by promoting awareness on the theme.

This work is led by the units' Animal Welfare technicians and external consultants, who carry out specific training sessions for all industry professionals who deal directly with live cattle, as well as cattle truck drivers (Figure 3) and livestock handlers at farms (Figure 4). A total of 736 own employees and 1,091 outsourced workers (drivers, farm employees and livestock farmers) were trained on the theme in all the countries where the Company operates. In 2022, the number of employees trained increased by 33.9% compared to 2021. A breakdown by country is provided in Table 3.

Occasional trainings sessions are also offered for livestock farmers with recurring irregularities in Animal Welfare indicators, and the Company also promotes meetings, forums, events and annual lectures in which the Animal Welfare theme is approached as a focal point of discussion (Figure 3).

Animal Welfare is also addressed during the Integration training of new employees in the

industry, aimed at raising awareness and reinforcing the Company's relevance and ethical commitment.

Minerva Foods produces specific materials, called the BEA Kit, for all its Animal Welfare training sessions, which includes the Minerva Booklet, with instructions on good animal handling practices, a calendar with the list of the key medications and their waiting periods, legislation on the National Policy for the Control of Chemical Residues, and a Letter of Guarantee. To reach as many livestock farmers as possible, this material has also been sent by email or delivered through cattle truck drivers.

The corporate Quality, Cattle Purchase and Sustainability teams are also frequently trained in Animal Welfare by participating in lectures, workshops and national congresses. The Company also participates, through its corporate representatives, in academic lectures and activities related to the business (academic week, university events, etc.).



Figure 3. Animal Welfare training for industry employees and cattle drivers



Figure 4. Animal Welfare training for livestock handlers and farmers on supplier farms

04 INVESTMENTS

In 2022, Minerva Food invested over US\$883,000 (Table 3) in activities and actions aimed at Animal Welfare, such as improvement in infrastructure (installing non-slip floors, shades for holding pens), surveillance cameras to monitor BEA, training for employees and third parties, and the development of modern management tools with applications and software to handle 'big data'.



05 EVOLUTION OF PUBLIC COMMITMENTS

SUPPLY CHAIN MANAGEMENT

Supplier documents are maintained by "Declarations of Conformity to social, environmental, compliance and animal-welfare requirements", which was created and implemented in 2020 and establishes, among other terms, the need to comply with Minerva Foods' Animal Welfare Policy and any non-conformities can result in termination of the contract. This statement is filled out, signed and registered at a notary by all suppliers of raw materials and ingredients of animal origin during Minerva Foods' supplier registration process.



OUTLOOK

Minerva Foods is constantly advancing in animal welfare practices in its operations and, in fact, has an established governance on the theme, regardless of geography, in addition to short-, medium- and long-term work plans. The results of these practices are closely monitored through performance indicators.

Animal welfare progress is materialized through the Company's positioning in specific benchmarks, such as the **BBFAW** (Business Benchmark of Farm Animal Welfare). In 2021, the Company improved from Tier 5 to Tier 3 in the BBFAW benchmark, having maintained this position in 2022. BBFAW is a global reference in farm animal welfare management and enables investors, companies, NGOs and other interested parties to compare and monitor the progress of companies.

The advancements achieved by Minerva Foods confirm the effectiveness of the management model it has implemented, which will continue to be consolidated into its operational routines in the coming years, always focusing on continuous improvement. In this sense, the Company will remain attentive in terms of solutions, technologies, and processes that help to further expand the positive impacts of its actions. Minerva Foods has clear goals to be delivered to its stakeholders, which are materialized through commitments to animal welfare practices and its efforts will be concentrated in meeting the deadlines established for these goals.

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