Globalisation

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HOW CAN WE STOP THE IMPORT OF FOOD PRODUCED USING BANNED PRACTICES IN EUROPE?

A EUROPEAN REGULATION TO PROTECT THE ENVIRONMENT AND OUR FARMERS

FONDATION NICOLAS HULOT
THINK TANK

Institut Veblen
pour les réformes économiques

interbev
INTERPROFESSION BÉTAIL & VIANDE

a word
from the Editors

The food on our plates and the sustainability of our agriculture are highly political issues. The debate happening across many European societies about the future of farming models is useful and necessary, where not tainted by caricature.

After all, what is at stake is, quite simply, the quality of our food, the futures of hundreds of thousands of women and men, a certain idea of social and territorial justice, and our ability to build a resilient and sustainable society. The farmers who feed us, often in difficult economic conditions, are decisive players in the ecological and social transition that we are calling for. The debate is not always easy, and our three organisations may sometimes have differences of opinion, but it is possible because the main thing is this: European societies have confidence in the reliability of European agriculture and the European Union has the means to make its own decisions about its food model.

However, this same European Union is now devaluing the legacy of reliability that it has built up since the mad cow crisis: the rules on traceability, the animal welfare standards and the ban on toxic substances, all implemented by the EU in the wake of the various public health and environmental scandals of the last thirty years. The EU has reacted well. While much progress remains to be made, this framework of confidence must not be undermined, and these remaining reforms are doomed to failure if the import issue is not tackled head on.

The steady increase—encouraged with the subsequent trade agreements—of imports of food produced using substances or practices that are prohibited in the European Union is jeopardising the European framework that protects our health and provides reliable information to consumers. And what are these practices? Prohibited pesticides, meat and bone meal, antibiotics used as growth promoters, unfair competition, pollution on the other side of the world, opacity and animal suffering.

How can we accept such unfavourable treatment of European crop and livestock farmers? How can we justify to European consumers that traceability stops at Europe's borders? How can we tolerate the fact that European citizens' demands for more sustainable, more local and more animal-friendly production is being slowed down to such an extent by the almost blind pursuit of a trade policy that continues to put environmental, territorial and health issues to one side?

While the picture we paint is not a happy one, our three organisations do not wish to foster any sense of inevitability. On the contrary, this report is all about proposing a reform of the European rules that is both achievable and credible. It is achievable because we are proposing a "turnkey" legal reform that requires, above all, courage and political will to obtain a legislative agreement and enforce its application. Credible, because we took care to test the compatibility of our proposal with the rules and even with the philosophy of the World Trade Organization. Contrary to what some observers would have us believe, achieving ecological and social coherence is compatible with the idea of trade and multilateralism. And while the battle may be long, it is nonetheless urgent to start fighting it immediately. While putting on hold, meanwhile, all agreements under negotiation or ratification.

To all those who think that the solution to this problem would be to lower our production standards, using short-sighted arguments about competitiveness, we collectively reply that this would be a serious mistake. At a time of environmental crises, choosing less ecology-based options would condemn us all. On the contrary, we support a collective vision of economic, social and ecological progress for our crop and livestock farming and are determined to safeguard the qualities of our family-based and grass-fed farming model.

We are putting our proposal in the hands of European citizens and leaders, including first and foremost the French government which, for the first half of 2022, will assume the rotating presidency of the European Union. This is a rare opportunity to encourage consistency between words and deeds on a continental scale.

ALAIN GRANJEAN,
PRESIDENT OF THE FNH

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PRESIDENT OF INTERBEV

DOMINIQUE MÉDA,
PRESIDENT OF THE VEBLEN INSTITUTE

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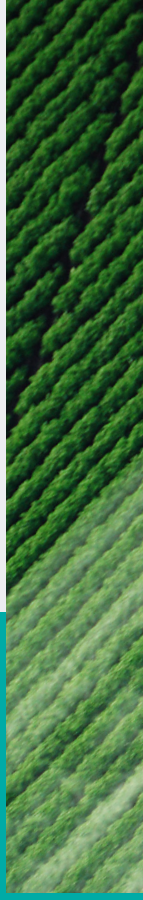

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ALWAYS MORE MEAT IMPORTS
ALWAYS LESS COMPLIANT WITH EU NORMS

Current and potential trade flows created by agreements currently being ratified

PRACTICES FORBIDDEN IN EUROPE, TOLERATED BY OUR AMERICAN PARTNERS:

- Use of meat and bone meal on the feeding of animals
- Use of antibiotics as growth promoters of ruminants
- Non-mandatory individual traceability non obligatoire des animaux from birth of the animal to slaughter
- Transport time not limited to 8 hours without breaks
- No or very few rules on animal welfare

Source : FNH • INTERBEV • Institut Veblen

report in brief

In 2019, at the opening of the International Agricultural Show, Emmanuel Macron recalled the need to guarantee the "food, environmental and industrial sovereignty" of the European continent. **Yet, between 2005 and 2019, the EU's agricultural and food imports increased by almost 28%.** Behind this figure lies a second reality: by importing agricultural products from farms that pay less attention to traceability and standards, or that are grown using pesticides banned in the European Union, the EU is not fulfilling its environmental and public health commitments and is leaving European crop and livestock farmers at the mercy of unfair competition.

The joint report by the Nicolas Hulot Foundation Think Tank, Interbev and the Veblen Institute aims to analyse the consequences of Europe's inaction in this area, focusing in on two subjects: pesticides and farming methods. How do pesticides that are banned in Europe end up on our plates? How can European companies have the right to export them? How can European beef farming be condemned to this level of unfair competition? And above all, what regulatory solutions should be put in place to finally protect European consumers and farmers?

This report points out the deleterious dichotomy of norms between European standards and the products it imports.

First of all, with regard to the use of pesticides. The European legislation applicable to pesticides results in a difference in the treatment of food produced in the EU compared with imported food, leading to a lowering of EU health and environmental standards. So, for example, the theoretically very strict criteria of the Pesticides Regulation are sometimes not properly applied within the EU. The Maximum Residue Limit (MRL) Regulation, on the other hand, demonstrates many limitations: crops produced outside the EU are allowed to have been treated with substances not authorised in the EU provided that the imported foods respect the established MRLs... which can be revised upwards on request. In response to this difference in treatment, European farmers can, in return, demand derogations for the use of dangerous products within the EU, which may have harmful consequences for the environment and health. In addition, checks show that residues of substances, including unauthorised substances, are frequently found in imported foods. The report also looks at a textbook example, that of the lentil. Thanks to its low price, the Canadian lentil is ultra competitive and represents more than a third of domestic consumption. Why? In addition to political will, Canadian producers are allowed to use products and substances that are banned—or prohibited for certain uses—in Europe.

Next, the report turns to livestock farming. While Europe has adopted numerous regulations on animal feed, animal welfare and traceability, to date only the regulation banning the use of growth hormones applies to imported animal products. Nothing is happening, in concrete terms, with respect to the use of antibiotics, meat and bone meal, animal welfare (animal transport times in particular) or traceability, thereby exposing European consumers to increased health risks and farmers to ever greater distortion of competition, while in France they are already experiencing an unprecedented income crisis.

In fact, the EU is exposing itself to new health scandals that could destabilise the entire sector by accepting imports of products from animals that are not adequately traceable.

In an age when agricultural products are no longer exempt from globalisation, and despite the ambitious commitments that Europe has made, it is becoming illusory to hope to meet the EU's high environmental, health and ethical imperatives by means of standards that apply only to domestic products. The proliferation of free trade agreements such as the CETA and the imminent agreement between the EU and MERCOSUR aggravates the problem still further by reducing customs duties and certain controls.

In view of these observations, the FNH, Interbev and the Veblen Institute are making a proposal: the adoption of a European regulation on mirror measures to ensure that European production standards also apply to imported products. In this respect, the French Presidency of the European Union in the first half of 2022 is a major political opportunity.

This regulation would enable the non-discriminatory application of protective standards to imported products. So how do we go about it?

With regard to pesticides, the report recommends:

- Banning the placing on the European market of foods treated with substances not approved in the EU
- Removing the option to grant derogations allowing the use of these substances in Europe
- Prohibiting the production, storage and circulation of these substances in Europe and consequently the export to third countries, following the example of the similar ban adopted by the French EGALIM law
- Strengthening controls on food placed on the market within the EU
- Providing for specific and dissuasive sanction procedures in the event of proven infringements, both within the EU and in third countries.

With regard to livestock farming, at least the following mirror measures need to be imposed:

- A ban on the placing on the market of products derived from animals treated with veterinary products or fed with feed not authorised by European regulations, or non-compliant with the identification and traceability requirements imposed by these regulations
- A ban on the placing on the market of products derived from animals which are not certified as having benefited from certain minimum animal welfare conditions, particularly with regard to transport
- Strengthened controls in the main exporting countries
- Immediate suspension of imports in the case of proven violations, particularly from non-compliant establishments.

Finally, the report highlights a major point: the rules of the World Trade Organization (WTO) do not constitute insurmountable obstacles to the implementation of all the mirror measures envisaged.

While it is true that the EU's trading partners are quick to argue that certain EU standards would constitute barriers to trade, the legal options for countering these arguments should not be underestimated. The legal analysis presented in this report shows that the exceptions provided for by the SPS Agreement and Article XX of the WTO permit the adoption of such a regulation by the EU, and that in the event of a WTO dispute, the EU should win.

Finally, with this report, our three organisations would like to emphasize the fact that increasing imports of agricultural products and the unacceptable distortion of competition created should not encourage the public authorities, as some are proposing, to level down European standards, based on the hope of winning the battle for competitiveness. At a time of ecological and social crises, lowering environmental and health regulations would be an act of madness that would set us on a course for disaster.

GLOBALISATION : FORBIDDEN PESTICIDES LEGALLY PRESENT IN OUR PLATES

LEEKS
CHLOROTHALONIL
Fungicide

ORANGES
TOMATOES · LEMONS
PROPICONAZOLE
Fungicide

LENTILS
METRIBUZIN
Herbicide

Groundwater contamination
Endocrine disruptors
Pollutes groundwater fauna and flora
Toxic for the environment and fertility

Source : FNH • INTERBEV • Institut Veblen

background

The world is now at a tipping point: after decades of increasing agricultural productivity at all costs, at the expense of biodiversity, climate, animal welfare and the incomes of farmers, the model urgently needs to be changed.

- While greenhouse gas (GHG) emissions spiral out of control, IPBES scientists point to chemical inputs as a major contributor to biodiversity loss.[1]
- Between 2005 and 2019, **the EU28's agricultural and food imports increased by almost 28%,** from €52 billion to €66.5 billion.[2] A prospective report by the European Parliament agrees: the increase in imports by 2030—mainly due to new free trade agreements—is forecast at between +€38.8 billion and +€44 billion.[3] The report also highlights the particular vulnerability of the beef sector.
- The negative impacts are also social in nature. According to the French Institute for Statistics' (INSEE) figures from 2020 for 2017, 20% of farmers in France were unable to earn an income.[4] And as far as French cattle farmers are concerned, in 2020, their income was estimated at €8,000 per year, less than €700 euros per month.[5] **Faced with these difficulties, France is losing 2,000 cattle farmers each year.**[6]
- However, France says it wants to preserve its family-based and grass-fed "farming model", with 60 cows on 60 hectares on average, a feed ration composed of 80% grass and herd feed self-sufficiency of 90%.[7] Europe intends to adopt ambitious policies with the Green Deal and the Farm to Fork strategy. However, no effort is being made to move from words to deeds: **by increasing the number of free trade agreements, the European market is opening up to global competition with environmental, traceability and animal welfare standards that are often much less stringent than European standards.**
- European governments are jeopardising our most virtuous production models, encouraging a race to the bottom. Of course, a small-scale grazing model has a higher immediate economic cost than the industrial systems of the American continent: it must therefore be supported by strong public policies.
- One of the fundamental challenges of the 21st century is to address these different issues: ensuring food security for a population that could exceed 11 billion people by 2100, while preserving natural resources and combating climate change and biodiversity loss. And reconciling these different imperatives also requires addressing the social challenge of fair remuneration for farmers in Europe and in the European Union's (EU) trading partners. **Building the agricultural and food system of tomorrow involves more than simply imposing more demanding environmental and traceability standards. To avoid these standards being unfair and ineffective, they must be imposed on products entering the European market.**

investigation

on these standards challenged by the difference in the treatment between European and imported foodstuffs

PESTICIDES BANNED FROM OUR PLATES

The European legislation applicable to pesticides[8] results in a difference in the treatment of food produced in the EU compared with imported food, leading to a lowering of EU health and environmental standards. As Sophie Devienne, professor at AgroParisTech and member of the French Academy of Agriculture, explains, the lentil is a textbook example of this.

A QUESTIONABLE EUROPEAN LEGISLATIVE FRAMEWORK

In the EU, the placing on the market of pesticides[9] is mainly governed by the Pesticides Regulation[10] which is explicitly based on the precautionary principle[11] *in order to ensure that active substances or products placed on the market do not adversely affect human or animal health or the environment* [12].

The Pesticides Regulation determines the procedure and criteria for EU authorisation of active substances contained in pesticides while a 2005 Regulation lays down rules on **maximum residue limits** ("MRLs") of pesticides in food (the "MRL Regulation").

The Pesticides Regulation

Under the Pesticides Regulation, pesticides are subject to a two-tiered approval process:

1. **Active substances,** i.e. the chemical elements and their compounds as they occur naturally or as produced by manufacturing, **are approved at EU level.**
2. **Pesticide products containing these active substances are then authorised by Member States.**

In respect of active substances, in order to be approved they must, firstly, not meet any of the **cut-off criteria** that correspond to **hazards** to human health or the environment considered so serious that the substance is deemed not to be approved (without even a risk assessment being performed)[13]. These cut-off criteria are justified in various ways:

- **by the potential effects of the substance on human health:** If the substance is mutagenic, carcinogenic or toxic to reproduction, or has endocrine disrupting properties that may be harmful to humans[14];
- **by the potential effects of the substance on the environment:** if the substance is a *persistent organic pollutant* ("POP"), is *persistent, bioaccumulative and toxic* (PBT) or *very persistent and very bioaccumulative* (vPvB)[15].

Then, if the active substance does not meet any of these cut-off criteria, in order to be approved, the assessment conducted by the European Food Safety Authority ("EFSA") must show that the substance meets the conditions listed in Article 4 of the Pesticides Regulation. In particular, the residues of products containing the substance must not have any harmful effects on human health, *including vulnerable groups*[16], or on animal health, or have any *unacceptable effect on the environment*. In addition, the active substance must result in a ***negligible exposure of honeybees***[17].

In accordance with all these criteria, about 530 active substances were approved in the EU in early 2021, while about 900 substances were not approved[18].

It should be noted, however, that these **theoretically very strict criteria are sometimes poorly applied in the EU,** particularly when it comes to assessing risks to bees and evaluating the "cocktail effect" of pesticides, and due to the length of the substance re-evaluation process.

- **On the first point,** in a 2020 report, the European Court of Auditors noted that *current EU legislation on pesticides has been unable to offer adequate measures to protect wild pollinators. The legislation currently in force includes safeguards to protect honeybees, but* ***risk assessments are still based on guidance which is outdated and poorly aligned with legal requirements and the latest scientific knowledge.***[19]
- **On the second point,** the Commission acknowledges that there is still no relevant assessment framework for analysing the cumulative (or "cocktail") effects of active substances:

  Developing a methodology for cumulative risk assessment covering simultaneous exposure to multiple chemicals (the 'cocktail effect') turned out to be much more complex than initially expected and is still on-going. (...) Work is currently ongoing to further develop the methodology and perform cumulative assessments for other groups of substances, and to eventually use it for regulatory decision-making (e.g. MRL setting and approval of active substances). (...). ***Therefore it will only be possible at a later stage to appreciate the impact of cumulative risk assessment on the protection of human health*** [20].

  This flaw in the pesticide evaluation system was recently denounced in a letter sent by 119 Members of the European Parliament to the EFSA, asking the latter to review its evaluation procedures to take the cumulative effect of substances into account[21].
- **On the third point,** the re-evaluation process for authorised substances is often very lengthy, resulting in the extension of authorisations even when they relate to potentially hazardous substances. This is strongly criticised by the European Parliament[22]. By way of illustration, on 25 January 2020 the Commission adopted an implementing regulation extending for more than a year the approval periods of nine active substances, three of which (fluotanil, mepiquat and pyraclostrobin) have *endocrine disrupting properties* [23].

In respect of pesticide products containing the active substances, in order to be authorised by Member States, they must contain active substances approved at EU level and meet the conditions set out in Article 4 of the Pesticides Regulation[24].

By way of derogation, in special circumstances

a Member State may authorise, for a maximum period of 120 days, plant protection products containing prohibited substances for limited and controlled use "where such a measure appears necessary because of a danger which cannot be contained by any other reasonable means"[25]. This derogation, recently employed by France in relation to the use of neonicotinoid pesticides by sugar beet farmers[26], was strongly criticised by the EU Court of Auditors in the above-mentioned report. It notes in this regard:

The auditors point out that, despite the EU framework, ***Member States continue to use pesticides thought to be responsible for massive honeybee losses.*** *For example, between 2013 and 2019, 206 emergency authorisations were granted for the use of three neonicotinoids (imidacloprid, thiamethoxam and clothianidin), even though their application has been restricted since 2013, and they have been strictly banned for outdoor use since 2018."*[27].

The Maximum Residue Limits Regulation

The **Maximum Residue Limits** (MRL) Regulation[28] establishes the MRL levels for pesticides that are considered acceptable in food and animal feed.

These MRLs are based on the **risks that these residues of active substances pose to the consumer** and, where relevant, to animals[29] but also on other criteria, such as the MRLs established outside the EU (in particular by the Codex Alimentarius)[30]. As for active substances, the cumulative effect of the residues of several substances used on the same commodity is not assessed, due to the lack of an assessment method recognised by the EFSA.

In principle, MRLs for substances are established following the approval procedure for an active substance. Within 12 months of the latter, the EFSA must deliver a reasoned opinion on the need to set new MRLs[31].

In addition, MRLs **may be set or revised at the request** of any parties with a legitimate interest, including the companies manufacturing these products[32]. Under this procedure, specific MRLs, **including for substances prohibited in the EU,** may be requested to allow the import of products treated with these substances (these are referred to as applications for "import tolerance").

In both cases, within three months of the EFSA opinion, the Commission should in principle prepare a regulation setting MRLs for the active substance concerned. This regulation is adopted under the "regulation with scrutiny" procedure, which allows Parliament to oppose the draft. If the regulation is adopted, the new MRLs will apply to all stakeholders.

The Codex Alimentarius

The Codex Alimentarius, or "Food Code", is a set of international reference values for food production established by a commission, under the joint guidance of the WHO and the Food and Agriculture Organization of the United Nations (FAO), with a view to facilitating international food trade.[33] The standards set by the Codex Alimentarius for pesticides and production methods are often less stringent than those set at European level. Nor is it uncommon for national legislation to set even lower standards than those of the Codex Alimentarius.

Illustration of an application for import tolerance accepted by the European Commission and then blocked by the European Parliament: clothianidin in North American potatoes

In 2018, applications for import tolerances were submitted for clothianidin in imported potatoes on the grounds that an increase in MRLs was necessary to avoid any impediment to the import of these crops from Canada and the United States. Following this application and the favourable opinion of the EFSA, in January 2019 the Commission submitted to the Council a draft regulation for a tenfold increase in the authorised MRL for this neonicotinoid. However, the regulation was not adopted due to the objection of the European Parliament[34].

Brazil: a pesticide paradise

According to a survey by Public Eye and Unearthed, Brazil is the largest pesticides market for the five largest agrochemical companies in the world (BASF, Bayer, Corteva Agriscience, FMC and Syngenta) and 49% of imported chemicals are classified as highly hazardous to health or the environment. And the bulk of these imported products (63%) are for the cultivation of soybeans destined for the global animal feed market[152].

The situation is getting even worse. The process for approving new pesticide products has been accelerated since Bolsonaro took office. In 2019, 474 new pesticide products were approved. This includes 42 products that are not authorised by EU Member States[153]. A total of 44% of the active ingredients authorised in Brazil are not approved in the EU.

HEALTH AND ENVIRONMENTAL CONSEQUENCES OF UNFAIR GLOBALISATION

As a result of current legislation and how it is applied, there is a significant difference between the treatment of food produced in the EU and imported food in terms of substances not approved in the EU.

While it is prohibited to treat crops in the EU with substances that are not approved in the EU[35], **crops produced outside the EU may have been treated with these substances provided that the foodstuffs imported into the EU comply with the MRLs** set by the MRL Regulation.

This difference in treatment is **aggravated by potential "import tolerances"** which may result in the Commission raising MRLs for active substances even when they are banned in the EU.

As the Commission acknowledges:

*There is a **growing tension between the expectations of European consumers that imported food should not contain pesticides that are not approved in the EU and the international commitments of the EU,** in particular in the context of the WTO. (...) At the same time, there is criticism from within the EU that **MRLs which are safe for consumers are set for non-approved active substances (so-called "import tolerances")**, e.g. in cases where the EU non-approval decision was not due to public health reasons, but for instance based on environmental risks. **This allows imports of products treated with active substances that are not available to EU farmers, thus negatively affecting the competitiveness of EU agriculture, as well as the environment in third countries.**[36]*

This difference in the way food produced in the EU and imported foods are treated results in the lowering of the health and environmental standards pursued by the Pesticides Regulation.

Adverse consequences for health protection

The current framework, in which food treated with substances banned in the EU can be exported to the EU, **lowers the consumer health protection requirements for imported products.**

Firstly, **products imported into the EU may legally contain residues of substances that are mutagenic, carcinogenic, toxic to reproduction or have endocrine disrupting effects,** even though these substances are, in principle, excluded in the EU because of the severity of the danger they represent. The only requirement is that residues of these substances in food do not exceed the MRLs. Furthermore, these MRLs are sometimes raised in response to applications for import tolerances, so as not to impede trade.

On this point, the Commission takes an ambivalent position: it has, for some time, stated its intention to reduce the MRLs for hazardous pesticides banned by the EU (because they meet the cut-off criteria) to the limit of detection (i.e. generally 0.01mg/kg) and to **reject new applications for import tolerances on these products**[37].

However, the considerable pressure exerted by pesticide companies and their allies[38] on the Commission seems to have impacted its policy, even though it internally recognises that this approach "would amount to lowering further our level of ambition in relation to the protection of public health"[39].

Thus, on the one hand, there is a very significant delay between the non-renewal of the approval of a hazardous substance and the actual lowering of MRLs. By way of illustration, as can be seen from the table below, substances that are banned in the EU, some of them for more than two years, principally due to genotoxicity issues or adverse effects on endocrine organs, **still have very high MRLs on various commodities** (leeks, hops, chamomile, lemons, oranges, tomatoes). The draft Commission Regulation[40] to lower these MRLs has not yet been adopted.

Active substance	Reasons for EU ban	Authorisation outside the EU	MRL
CHLOROTHALONIL (FUNGICIDE)	PROHIBITED BY REGULATION OF 29/04/2019: ● Possible "genotoxicity concern for residues to which consumers will be exposed" ● "the assessment of consumer risk from dietary exposure could not be completed because of lack of data ..." ● Groundwater contamination, ● High risk to amphibians and fish	USA: yes Canada: yes Brazil: yes	**MRL Sheet** ● 8 mg/kg leeks ● 15 mg/kg gooseberries, ● 60 mg/kg hops
PYMETROZINE (INSECTICIDE)	PROHIBITED BY REGULATION OF 9/10/2018: ● Adverse effects on endocrine organs ● High risk of groundwater pollution	USA: yes Canada: yes Brazil : no	**MRL Sheet** ● 5 mg/kg chamomile, ● 15 mg/kg hops
PROPICONAZOLE (FUNGICIDE)	PROHIBITED BY REGULATION OF 28/11/2018: ● Toxic effects on endocrine organs ● Groundwater contamination	USA: yes Canada: yes Brazil : no	**MRL Sheet** ● 9 mg/kg oranges, ● 3 mg/kg tomatoes, ● 5 mg/kg lemons

On the other hand, the Commission takes a **contradictory position** on import tolerances for substances that are banned because they meet health-related cut-off criteria:

- The "Farm to Fork" strategy presented by the Commission states: *In order to promote a gradual move towards the use of safer plant protection products, **the EU will consider, in compliance with WTO rules and following a risk assessment, reviewing import tolerances for substances meeting the "cut-off criteria" and presenting a high level of risk for human health***[41].
- Conversely, in a report published on the same day, the Commission **appears ready to grant the requested import tolerances:** ***trading partners often submit applications for import tolerances too late to avoid trade disruption***[42].

Moreover, these MRLs for substances banned in the EU because they are considered too hazardous are generally established simply by using the MRL from the Codex Alimentarius, which corresponds to lower standards of protection, and even though, as mentioned, the Commission acknowledges that it does not have a tool for assessing the "cocktail effect" of substance residues.

Secondly, there are also many cases of **MRLs being exceeded,** including for substances banned in the EU.

A study conducted in the Netherlands[43] on a collection of 3,000 samples shows that 21% of vegetables and 19% of fruit contained residues of hormone-disrupting pesticides, most of these residues coming from countries outside the EU[44].

The EFSA's 2018 report[45] on pesticide residues also revealed that in France three quarters of the samples taken for import control contained quantifiable residues and that almost a quarter of them exceeded the MRLs, most of them for substances not approved in the EU.

Traces of ethylene in sesame seeds imported from India

The recent case involving imported sesame seeds from India illustrates a lack of control over the substances used to process imported foods. In September 2020, checks in France detected traces of ethylene oxide on sesame seeds imported from India exceeding the authorised MRLs by more than 3500 times[154]. In the EU, this active substance has been banned in pesticides since 1991 and in biocides since 2011 because of its carcinogenic properties[155]. According to a Senate report from 2021[156], traces of contamination had already been found in batches from 2018, which shows that this lack of control is continuing dangerously over time. This case is particularly worrying: India provides 60% of French sesame seeds supplies[157], which can be found in many food products such as hummus or burger buns.

It should also be noted that it was in the light of the systematic exceeding of MRLs that France decided, in 2016, to **suspend the import of cherries from countries authorising the use of dimethoate** in cherry production[46].

Finally, on the subject of genetically modified ("GM") foods, the European Parliament routinely notes that the cultivation of these foods, which have been made tolerant to certain pesticides not authorised in the EU, risks **increasing the amount of residues** in the crops[47].

Adverse consequences for the environment

In addition to the assessment of health risks, there are some **important differences in terms of environmental protection between the criteria governing the assessment of substances** (as defined by the Pesticides Regulation) **and the assessment of MRLs** (as defined by the MRL Regulation).

While the former include an environmental and bee risk assessment, the analytical framework for MRLs only considers the health effects of the consumption of these substances.

As such, the MRL system (aggravated by "import tolerances") basically permits **the use of substances harmful to the environment and biodiversity by the EU's trading partners.** This raises important ethical questions[48] and runs contrary to the growing recognition of the global interconnectedness of ecosystems and phenomena.

Bee-killing pesticides

Fipronil, which is highly toxic to bees, was banned in the EU in 2016 with effect from 2017. The substance is still **authorised in Brazil,** where it is applied by various methods including being sprayed from aircraft over large areas of agricultural land on potato, sugar cane, maize, cotton, soya, rice, bean, sunflower and wheat crops. Fipronil and neonicotinoids were considered responsible for the **mass death of 500 million bees** and other pollinating insects in early 2019[158].

Similarly, the EU has banned or severely restricted the use of three substances of the **neonicotinoid** family (imidacloprid, thiamethoxam and clothianidin) as seed coatings for all crops because of their impact on bees[159] but **continues to import commodities treated with these substances, which affects the global bee population, essential to the pollination and consequently the maintenance of agricultural production.** Consequently, in a context of global competition on agricultural commodities, EU producers are encouraged to apply for derogations, similar to the recent law adopted in France on sugar beet, to deal with this dichotomy of standards, leading to a "race to the bottom" and annihilating the effects that the ban on neonicotinoids aims to achieve[160].

The **European Parliament has, moreover, repeatedly highlighted these inconsistencies by censuring attempts by the Commission to accede to applications for import tolerances** on certain substances banned in the EU or authorised under strict conditions.

The European Parliament and the Commission: differences of opinion?

The European Parliament opposed the increase of MRLs for **clothianidin**, a substance of the neonicotinoid family used on potatoes, sweet potatoes and stone fruits, on the grounds that *there is insufficient evidence that unacceptable risks to animals, food safety and pollinators will be prevented.*[49]

The Commission has recently adopted a proposal for a Regulation approving applications to increase the MRLs for flonicamid (used to control green aphids), haloxyfop-P (used mainly on soybean) and mandestrobin (used on fruits such as apricots, peaches, cherries and plums) and to which Parliament objected, stressing in particular that the EU ***should not encourage the use in third countries of products that some Member States ban on their territory*** *and of which the Union is trying to restrain the use.*[50]

While the "farm to fork" strategy states that the Commission will "take into account environmental aspects when assessing requests for import tolerances for pesticide substances no longer approved in the EU"[51], such **assessment is still not implemented** by an amendment to the MRL Regulation, as illustrated by the above-mentioned proposals to increase MRLs.

THE EXPORT OF BANNED POLLUTING SUBSTANCES

Finally, it should be noted that European operators can export toxic substances banned in Europe to third countries. For the time being, only France plans to ban these exports by 2022, with the adoption of the EGALIM law promulgated in 2018[52]. According to EUROSTAT, an average of 56,600 tonnes of pesticides per year were exported from the EU to Mercosur between 2015 and 2019[53].

Major European groups, such as Bayer and BASF, massively market toxic products that are dangerous to humans and the environment: a survey revealed that the **members of the CropLife lobby**, which include these two agrochemical giants as well as American and Swiss companies, **generate more than a third of their pesticide sales from products classified as "highly hazardous",** nearly 60% of which are marketed mainly in developing countries, in South America and in Asia[54]. According to the data available for these five companies, Brazil is the largest market in terms of size and 49% of imported pesticides being "highly hazardous", and Argentina is in about fifteenth place, with a similar proportion of toxic pesticides (47%). EU pesticide exports to Mercosur could increase further if the trade agreement currently being finalised is ratified. Pesticides are currently subject to customs duties of up to 14%. And the agreement provides for the elimination of tariffs on more than 90% of EU chemical exports[55].

However, in response to a letter sent by a group of NGOs calling for a ban on the export of pesticides banned in the EU and on the import of products made with these pesticides[56], the Commission indicated that it would tackle the issue and would consider several options – including legislative ones[57].

INTERVIEW

by Samuel Leré

"The lentil, a textbook case"

During your presentation at the "State of Agriculture 2021" symposium organised by the French Academy of Agriculture and Crédit Agricole on 10 February 2021, you addressed the issue of standards in international trade in agricultural products, particularly in the context of trade agreements. You used the example of the lentil, an iconic product of the dietary transition, and of which Canada has become the world's leading exporter. Can you give us some figures?

Sophie Devienne, Professor at AgroParisTech

Canada is the world's largest producer and exporter of lentils, accounting for 54% of global exports. Its production has increased fivefold in 20 years, from 400,000 tonnes in 1990 to 2.2 million tonnes in 2019. Lentils are grown almost exclusively in the province of Saskatchewan, which has soil and climatic conditions suitable for growing lentils. Thanks to major efforts to develop the appropriate technical solutions, Canada has succeeded in making lentils an export product, while benefiting from the ***agronomic advantages of introducing this legume into rotations: it is a crop capable of fixing atmospheric nitrogen in the soil and as such enables savings to be made on nitrogen fertiliser.***

Are Canadian lentils cheaper than lentils produced in the European Union?

Canadians export different types of lentils: coral lentils, blond lentils and some green lentil, the latter, which is in the minority, finds its outlets on the French market. Canadian green lentils arrive in EU ports between EUR 500 and 600 per tonne, and have the advantage of being free of bruchid beetles, so 100% of the lentils can be used by manufacturers. The bruchid beetle (Bruchus) is an insect that lays its eggs on the pods, with its larvae developing inside the seeds. The larvae emerge at harvest or storage, leaving a hole in the infected seed. Every affected lentil plant is virtually destroyed. In Canada, very cold winters destroy the vast majority of bruchids, unlike in France and many parts of the European Union where winters are often not cold enough to destroy them effectively. ***In Europe, no treatment in the field is permitted for the lentil bruchid. Bruchid control is carried out only during storage, usually by fumigation. Result: while the average producer price in France is between EUR 500 and 600 per tonne, there is often a loss of 5 to 10% due to the presence of bruchids,*** *leading to a much higher cost price for the manufacturers processing the lentil. Thanks to their low price, Canadian lentils are competitive and account for a significant proportion of European Union lentil imports (about 50%) and more than a third of its domestic consumption. In France, Canadian lentils represent two-thirds of imports and one-fifth of consumption. There is also the fact that the free trade treaty signed between the European Union and Canada, the CETA, eliminated the remaining tariffs that were applied to lentil-based products such as canned goods (19.2%) and flour (9.9%) upon entering the European Union. It should be noted, however, that the nutritional quality of the Canadian lentil is poorer than that of the French green lentil as it is more floury and tends to turn to mush when cooked.*

What is behind this price difference?

There are several factors behind the success of the Canadian lentil: first, a strong political will on the part of the Canadian government; second, an advantage associated with high work productivity,

made possible by the soil and climate conditions of the Canadian plains and by the huge size of the farms, whose production conditions are governed by less demanding environmental rules. The Canadian authorities have set up a publicly and privately funded programme to develop new varieties of lentils that are resistant to lodging (a phenomenon where a crop ends up lying flat on the ground, usually resulting in a drop in yield as well as quality deterioration and harvesting difficulties) and to certain diseases, or that have a shorter growing season. Research efforts have led to the development of varieties that are resistant to certain herbicides. This allows for significant productivity gains because lentils are very sensitive to weed competition at emergence.

So Canada can produce lentils at lower costs, thanks to political will?

Not only that. Canadian policy choices and soil and climate conditions have helped, but the price difference is also explained by the fact that ***Canadian producers work on very large areas, using growing practices that take advantage of lower environmental standards than those in Europe.*** *Legumes are primarily grown by large farms in Canada, and as of 2011 (the last census data), two-thirds of legumes (by land area) were grown by farms larger than 1,000 ha in size. Across these huge areas, the priority is saving time. Most of these farms sow lentils without tillage, using direct sewing, allowing them to reduce the time spent preparing the fields and plant a larger area with the resources at their disposal. This makes it even more vital to use herbicides to control weeds.* ***Canadian growers can use products such as Sencor,*** *which is particularly effective in destroying the competitors of lentils, as well as* ***varieties that are resistant to these herbicides,*** *so that they can be applied later, when weed competition is greatest, i.e. at a later stage of the lentil crop, without risk of crop damage.*

Lentils: essential for a successful ecological transition

Under current climatic and environmental conditions, scientific recommendations indicate that we should eat less meat, but produce it better. The IPCC report on land and climate change (2019) weighs up available land, land already degraded, and the need to preserve forests, which are valuable carbon sinks, to contain climate change. In view of the scenarios already set in motion, it appears vital to reduce meat consumption and improve its quality, especially when meat production means deforestation. From this perspective, legumes have an important role to play, both in terms of plant protein supply and because their cultivation enables nitrogen to be fixed in the soil and, ultimately, the use of nitrogen fertilisers to be reduced. The ecological and dietary transition involves the consumption of more legumes, including lentils. Lentils are a flagship product of the transition, but not under any conditions.

The use of Sencor on lentils has been banned in the European Union since 2014[161]. *Its active ingredient, metribuzin, is a herbicidal substance of the triazine family, whose* ***persistent and environmentally toxic nature*** *has called into question the renewal of its marketing authorisation. In addition, it is considered by the European Commission as a* ***suspected endocrine disruptor and toxic to human reproduction.*** *These concerns were highlighted during assessment of the European approval renewal application: the report (January 2019) identifies effects on the thyroid in several acute, subacute and long-term toxicity studies consistent with endocrine disrupting activity*[162]. *The use of this substance is therefore banned in Europe on all products except potatoes. Nevertheless, there is an import tolerance with an MRL set at 0.1 mg/kg by the European Commission, even though there is no such MRL in the Codex Alimentarius.*

Does the difference in standards stop at the use of certain products banned in Europe?

Differences in standards do not stop at the use or prohibition of certain products; they also exist for certain practices. *For example, although glyphosate use is still authorised in France, Europe and Canada, the rules for use differ.* ***Unlike their European colleagues, Canadian farmers can use glyphosate until before the lentils are harvested.*** *Applying glyphosate one to two weeks, or even up to four days, before harvest eliminates weeds that could block the harvester, but more importantly, it desiccates the plants in the field, activating plant maturity and reducing the moisture content of the seeds. This practice effectively homogenises the crop over the whole plot, which is very important on large plots where there is inevitably heterogeneity of maturity between plants, and thereby reduces harvesting time, an important advantage in large farms. All in all, it makes harvesting easier for farmers, while preserving grain quality. But* ***the risk is that glyphosate residues remain in the seeds. In Europe, the use of this practice on lentils is prohibited.*** *In some EU countries, glyphosate is approved and is sometimes used on wheat or rapeseed before harvest in wet years. In France, pre-harvest use is permitted but limited to certain cereals, wheat, barley, sometimes oats, rye and triticale, except for malting barley, breadmaking wheat and cereals for seed production, with a pre-harvest interval of 7 days. But it is very rarely used.*

"In Canada, glyphosate can be used until 4 days before the harvest. In Europe, this practice is forbidden."

You mention glyphosate: you said in your presentation at the Academy of Agriculture conference that the MRL on lentils had increased 100-fold in Europe in 2012 under pressure from Monsanto. How do you explain such a change?

That's right. In 2011, the MRL for glyphosate in lentils was 0.1 mg/kg in Europe, which corresponds to the limit of quantification for residues of plant protection products. On 5 May 2011, Monsanto Europe approached Germany, the Member State designated as rapporteur for glyphosate, and asked it to redefine an MRL for glyphosate in lentils. Its objective: to adjust European regulations to allow lentils from the U.S. and Canada to be sold in the EU. Monsanto provided regulatory and scientific data in support of its application. The data were evaluated by the competent German authorities. Their assessment report and the application were subsequently reviewed by the European Food Safety Authority (EFSA). In its reasoned opinion of 13 January 2012, EFSA concluded that the analysis of the use of glyphosate on lentils and its residues did not raise public health concerns and recommended setting the limit at 10 mg/kg. ***What is difficult to understand is that this MRL is twice as high as the Codex Alimentarius MRL of 5 mg/kg for dry lentils.*** *It is also higher than the Canadian MRL of 4 mg/kg. A study commissioned by the Canadian Health Agency in 2015-2016*[163] *on the analysis of glyphosate residues in Canadian food products found that the level of glyphosate residues in legume-based products was generally higher than in other food products, a finding that it found to be consistent with the widespread pre-harvest use of glyphosate in these seeds. One-third of the lentil-based product samples analysed, and half of the dried seeds, contained glyphosate residues with a maximum level of 2.6 mg/kg, which is below the Canadian MRL but significantly higher than the MRL in effect in the European Union before the amendment introduced in 2012.*

EUROPEAN LENTILS THREATENED BY UNFAIR COMPETITION

CANADIAN LENTIL		EUROPEAN LENTIL
Teated with **SENCOR .** ⚠ *Toxic for the environment and human reproduction*	**PESTICIDES**	SENCOR treatment forbidden since 2014
Treated with **GLYPHOSATE.** ⚠ **until 4 days before the harvest** *The residue left on seeds is higher*		GLYPHOSATE treatment forbidden **the days before the harvest**
500-600€ per ton **0€ of tariff** *Since the CETA agreement entered into practice*	**PRICE ON EUROPEAN MARKET**	**500-600€ per ton** + **5-10% of losses** *caused by a pest present in Europe*

1/3
of european consumption of lentils

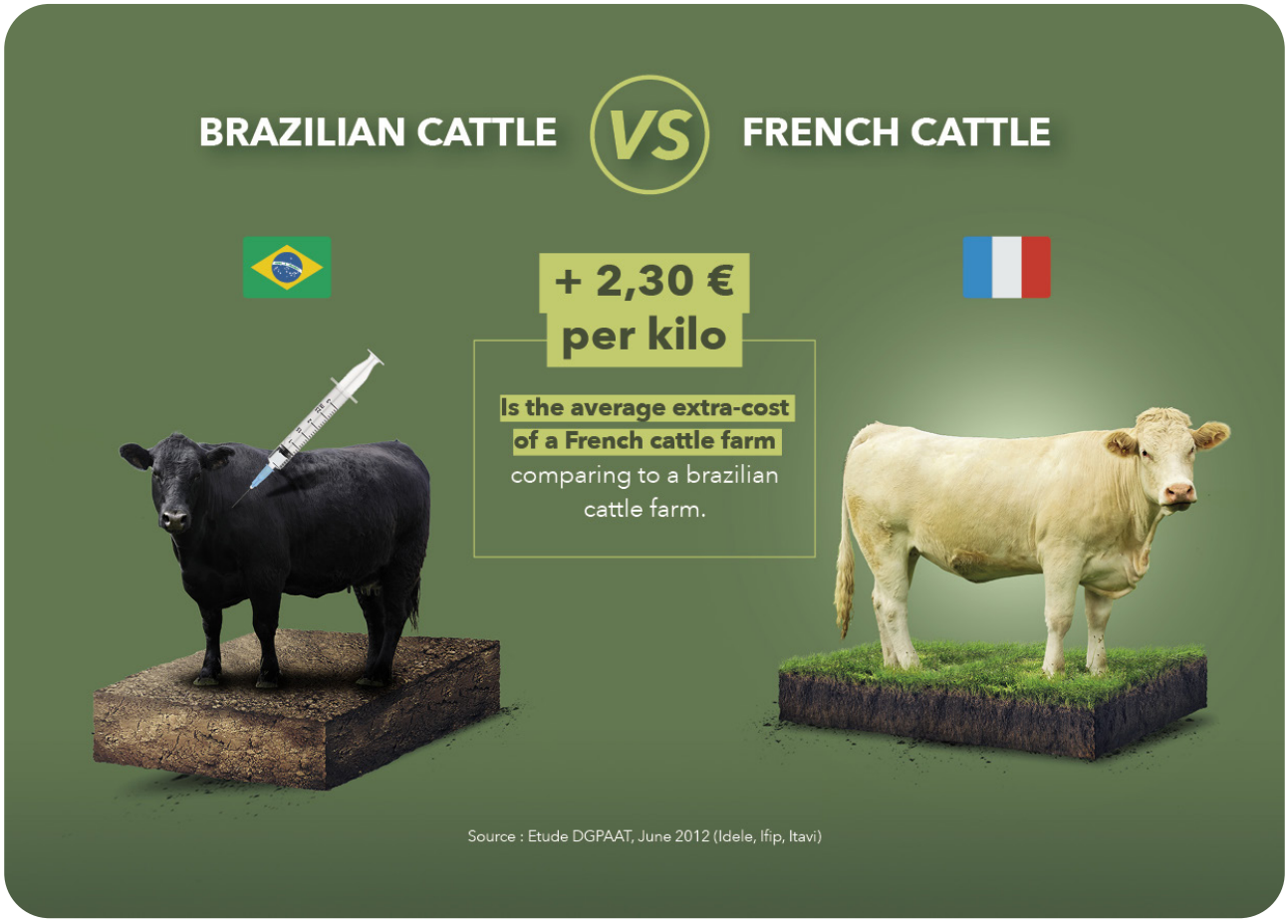
Source : FNH • INTERBEV • Institut Veblen

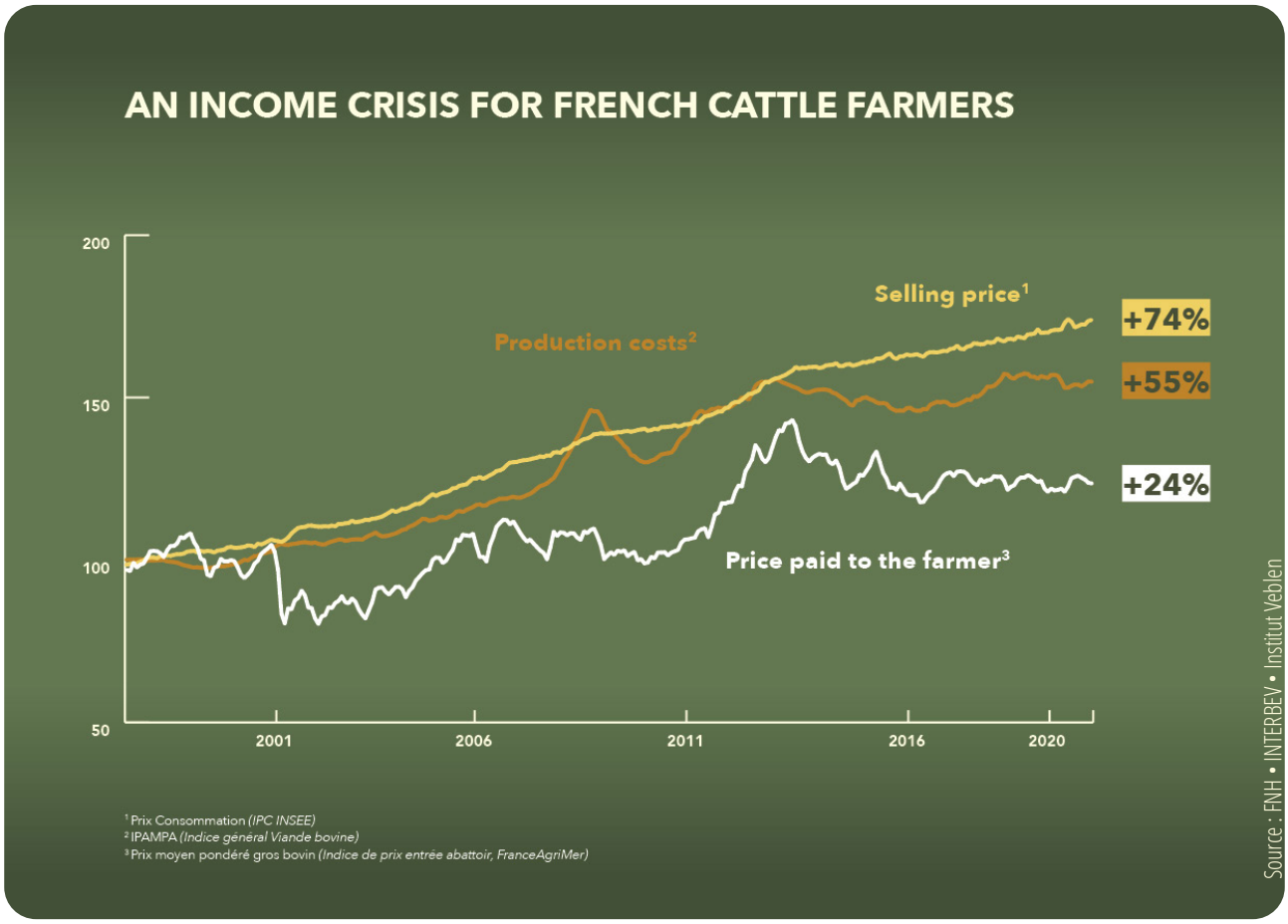
UNFAIR COMPETITION IN EUROPEAN LIVESTOCK FARMING

When it comes to livestock farming, the EU is more advanced than other regions of the world, with an approach that focuses on the synergies between animal health, animal welfare and human health.

This is reflected in the adoption of numerous regulations on animal feed (ban on growth hormones and growth promoting antibiotics, ban on meat and bone meal), animal welfare (transport conditions in particular), and traceability. However, **only the regulations prohibiting the use of growth hormones currently apply to imported animal products.** This considerably weakens the effectiveness of European standards.

The EU imports considerable and increasing quantities of animal products. By way of illustration, imports of beef from Mercosur countries amounted to more than 245,000 tonnes in 2019[58]. These quantities could increase further as the EU concludes international trade agreements allocating new quotas to third countries, such as the agreement with Mercosur[59]. According to the impact study on this agreement, **EU beef imports from Mercosur countries could increase from 54% to 78%.**





ANTIBIOTICS ARE ROUTINE... EXCEPT IN EUROPE

The use of antibiotics as growth promoters has been banned in the EU since 2006[60] and further restrictions were introduced under the Veterinary Medicines Regulation of 11 December 2018[61]. This regulation also prohibits the use of antibiotics in animals as a preventive measure to compensate for poor hygiene, inappropriate rearing conditions or lack of care.

The reasons justifying these bans include in particular the **need to combat the growing resistance to antibiotics,** which represents a considerable health threat that is acknowledged worldwide[62].

And for the first time, the regulation on veterinary medicinal products **provides for a "mirror measure"** whereby the ban on the use of antibiotics in animals for growth promotion or yield enhancement ***shall apply, mutatis mutandis,*** *to operators in third countries and those operators shall not use the designated antimicrobials [...] in respect of animals or products of animal origin exported from such third countries to the Union* (Article 118).

This mirror measure is consistent, in particular, with the highly global nature of the threat posed by antimicrobial resistance, as noted in the preamble to the Regulation:

Antimicrobial resistance to medicinal products for human use and veterinary medicinal products is a growing health problem in the Union and worldwide. Due to the complexity of the problem, its ***cross-border dimension*** *and the high economic burden, its impact goes beyond its severe consequences for human and animal health and has become* ***a global public health concern*** *that affects the whole of society and requires* ***urgent and coordinated intersectoral action in accordance with the 'One Health' approach***[63]*.*

However, **this provision will potentially only enter into force in 2022** and only after the adoption by the Commission of delegated acts in order to "establish the necessary detailed rules" on the application of this ban. It is therefore crucial that the Commission adopts these acts without delay in order to implement this mirror measure, which could have a significant impact on European imports of animal products from countries such as Canada, the United States and Brazil that make extensive use of antibiotics, as shown in the table in **Annex 1**[64].

If the Commission delays the adoption of these acts, the obligations imposed on EU farmers will remain insufficient to address this global risk.

BAD MEMORIES OF MEAT AND BONE MEAL

The EU has adopted strict regulations on the feeding of ruminants. The aim of these regulations is to contribute to the eradication of transmissible spongiform encephalopathies ("TSE", also known as "mad cow disease"), which is a degenerative infection affecting the nervous system of cattle, originating from the use of *meat and bone meal*, obtained from bovine carcasses and animal cadavers, in cattle feed.

For example, Regulation 1999/2001 of 22 May 2001 laying down rules for the prevention, control and eradication of certain TSEs[65] prohibits the feeding to ruminants of all proteins, dicalcium phosphate and tricalcium phosphate of animal origin (Article 7.1 and Annex IV, Chapter I).

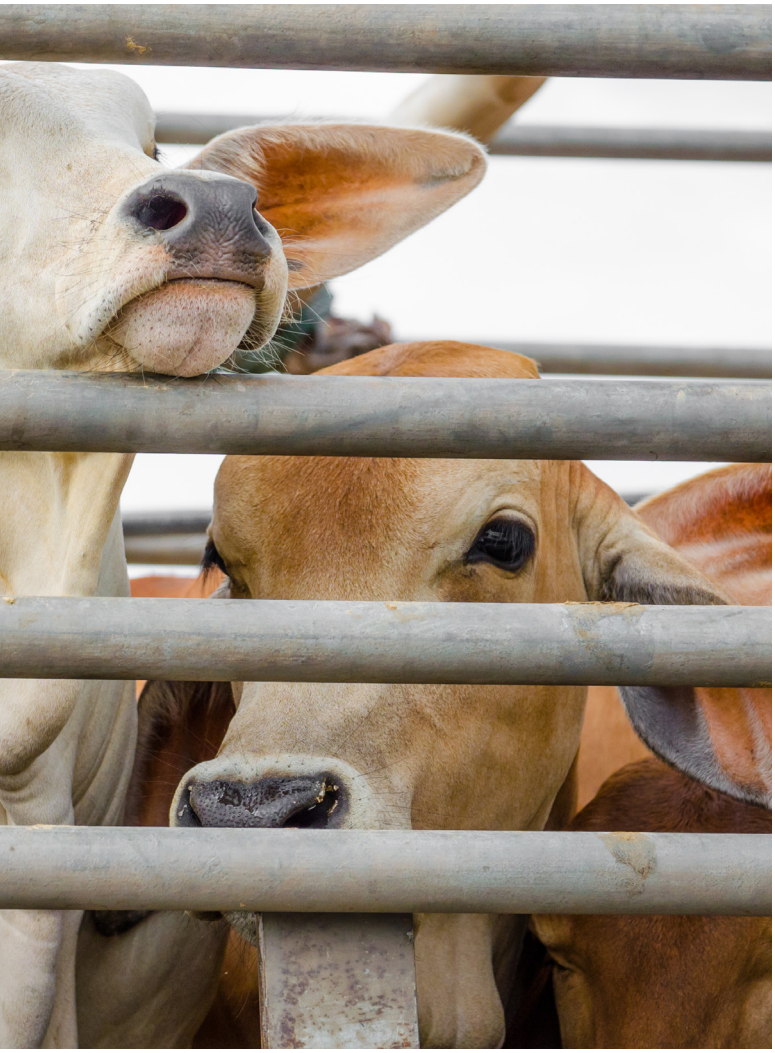
This ban aims not only to **protect animal health** but also to **restore consumer confidence in the conditions under which cattle are reared**[66] and to **benefit human health** since the possibility of transmission of TSE to humans (in the form of Creutzfeldt-Jakob disease) through the consumption of meat products has been highlighted.

With regards to imported meat, this ban applies

only to products of animal origin from cattle from regions or countries *with an undetermined risk*[67]. On the other hand, for cattle from countries with a negligible or "controlled" risk of BSE, i.e. according to the OIE, France and most of the EU's trading partners (Brazil, Canada, the United States, Argentina, etc.), the health certificate for the import of beef and veal into the EU does not have to mention the obligation not to feed ruminant meat and bone meal[68].

However, as can be seen from the table attached in **Annex 1,** the **regulations in these countries are much more permissive than EU regulations** concerning animal nutrition.

For example, in Canada, despite a ban in principle on feeding ruminants with ruminant meal, the legislation allows the use of certain proteins, such



as blood meal and gelatine, including from ruminants.

Similarly, in Brazil, while the use of ruminant feed containing animal proteins and fats is in principle prohibited, derogations exist for milk and milk products, calcined bone meal (without protein and or fat), gelatine and collagen prepared exclusively from hides and skins.

As a result, **cattle products imported into the EU do not meet the same level of health and "societal" standards** as products from animals raised according to EU standards. This situation is likely to weaken consumer confidence in farming conditions, particularly in the absence of consumer information on this difference in practices between European and imported meats, as highlighted during the discussions on the CETA.

ANIMAL WELFARE: OUT OF SIGHT, OUT OF MIND

The development of regulatory requirements on animal welfare is intended to respond to changing moral values regarding cruelty to animals. The result is a **significant societal demand for more ethical supervision of livestock rearing practices.**

Here again, the EU appears to be at the forefront of this movement compared with its international competitors. The EU has adopted strict rules not only on animal feed but also on breeding, slaughter and transport conditions.

With regard to transport, the 2004 Regulation on the protection of animals during transport[69] imposes a **maximum transport time** of 8 hours for adult cattle and unweaned calves in a standard vehicle and 29 hours for adult cattle, with a break for watering and feeding every 14 hours and stricter conditions for unweaned calves[70].

These obligations concerning the conditions of animal transport do not extend to imported meat. Indeed, as far as animal welfare is concerned, the **health certificate for importing beef into the EU only covers the regulation on slaughter**.

However, the largest exporters of beef to the EU do not have any regulations that recognise the right of farm animals to be well-treated or that guarantee, for example, maximum transport times or compulsory unloading during long transits[71].

As such, as illustrated in the table attached in **Annex 1:**

- In Brazil, there are currently no technical regulatory limits in terms of animal loading or transport time, merely guidelines that are non-binding and rather vague in their content;
- In Canada, animal welfare standards at federal level are largely inadequate. Voluntary codes of practice do exist, but they are non-binding "minimum standards" with no standards for verification or enforcement. Only certain provinces have adopted more restrictive local

legislation. One recent amendment of a regulation has limited maximum intervals without feeding, watering and rest to more acceptable levels, but standards are still lower than those of the EU.

However, in view of the considerable and increasing quantities of animal products imported into the EU, applying very high standards of animal welfare within the EU without extending them to imported products renders **these ethical requirements meaningless.** Moreover, in the absence of systematic and reliable information on origin and farming conditions, consumers cannot make informed choices about the products they buy[72].

TRACEABILITY THAT STOPS AT BORDERS

While **full individual traceability** from birth of the animal to slaughter is mandatory in the EU[73], this is not a requirement for products of animal origin imported from third countries.

However, the main countries that export meat to the EU, especially the **Mercosur** countries, are governed by **particularly lax regulations on individual traceability (Annex 1).**

In Brazil, for example, traceability is not mandatory, except in the state of Santa Catarina. A national cattle identification system does exist, but producer membership is in principle voluntary and is only required for exports to Chile, Switzerland and the EU at present[74]. Even on farms that have joined this system, animals are not traced from birth but only from fattening, and via a non-exhaustive and non-computerised system that leaves room for errors and fraud.

This lack of strict traceability constraints may **facilitate the occurrence of serious health problems.**

As such, in general, the absence of animal traceability requirements in countries that export meat products to the EU tends to **expose consumers in the EU to increased health risks** and to negate any efforts to ensure the application of certain rules outside the EU, such as the ban on the use of hormones, as shown by an audit conducted by DG Health in Canada in September 2019[75]. This audit identifies various serious shortcomings. In particular, the report contains the following findings:

*The current system implemented by the competent authorities to evaluate the compliance of food establishments with the Canadian legislation and the additional EU provisions is **not able to provide the guarantees that only fully compliant establishments continue to be listed for export to the EU. The system does not adequately reflect the real conditions of structure and hygiene** in the federally registered establishments listed for export. [...] The corrective actions announced and implemented following the previous audit in 2014, and aimed at providing assurances as regards continued compliance of EU-listed establishments with the relevant requirements, have **not been effective.***

The "Carne fraca" scandal

The health scandal known as "carne fraca" (or Operation Weak Meat), involved at least twenty Brazilian establishments—including some belonging to food giants JBS and BRF—which allegedly deliberately mixed rotten meat with other products sold, including meat intended for export. This meat quality fraud was made possible by the corruption of health inspectors.

Brazil is the world's largest exporter of beef. Following this scandal, various countries such as the United States[164], Mexico, Chile, Japan and Hong Kong, adopted strong trade sanctions, suspending Brazilian meat imports[165]. Conversely, the EU only suspended the import of meat from the establishments specifically targeted by the police operation[166].

[...] in the beef sector, ***most of the corrective actions*** *announced by the Central Competent Authority (CCA) in its action plan aimed at addressing recommendation No 1 of the 2014 audit report* ***which concerned the guarantees in respect of traceability and EU-eligibility for the purposes of the hormone-free programme have not been implemented:*** *the two existing computerised databases are not yet fully interconnected, movements of cattle (with the exception of movements to slaughter and initial identification at the holding of birth) are not notified and* ***no controls are performed over the use of official ear tags*** *delivered to the holdings.*

Thus, traceability of EU-eligible cattle mainly relies on hard copies of movement documents and certificates, which were found in several cases to be ***incomplete,*** *or containing* ***erroneous information*** *while at the same time,* ***traceability and eligibility controls*** *at farm level also demonstrated* ***deficiencies.****"*

Yet these damning findings have not led to **any specific action by the Commission** with respect to Canadian beef imports. It **simply made recommendations** to Canada while minimising the results of the audit to European parliamentarians[76]. As things stand, the Commission is merely carrying out audits without applying deterrent sanctions or taking any real action when even serious shortcomings are found.

The extension of EU requirements on the individual traceability of animals whose products are to be exported to the EU is therefore also a **vital, cross-cutting condition for the effectiveness of all mirror measures** regarding livestock: bans on growth hormones, antibiotics and meat-and-bone meal and guarantees on minimum animal welfare conditions during transport.

More generally, traceability is also necessary to ensure respect for human rights and environmental protection throughout the production chain. This is a real issue: we know that the major Brazilian meat industry groups (JBS and Minerva) buy their supplies from cattle farms where working conditions are akin to slavery (extremely low wages, inadequate housing, appalling sanitary conditions, etc.). A report on the subject, produced by Reporter Brasil, shows the inability of major groups to control their entire supply chain, especially when sourcing from secondary suppliers[77]. On the environmental side, a 2020 article in the scientific journal Science links the same groups to illegal deforestation activities in the Amazon and Cerrado regions[78]. The results show that while only 2% of farms are responsible for illegal deforestation in the Legal Amazon and Cerrado areas between 2008 and 2018, they account for 62% of this deforestation. A significant part of this deforestation is linked to agricultural exports. The authors estimate that up to 22% of soybeans and over 60% of beef exported annually to the EU could be linked to illegal deforestation[79]. Thus, cattle farming, with soybean cultivation mainly for cattle feed, is the main source of deforestation in Brazil[80].

LIVESTOCK AND CROP FARMERS: PAYING THE PRICE FOR FREE TRADE AGREEMENTS

In a context of **global competition,** restrictions and obligations applied only to European crop and livestock farmers may jeopardise **European businesses** with better environmental and health standards. European agricultural products, which are subject to stricter standards than those of trading partners outside the EU, suffer from **distortions of competition** with respect to **less virtuous products** that benefit from lower production costs. The phenomenon is **aggravated by the multiplication of trade agreements that include agricultural products,** such as the CETA with Canada, the agreement between the EU and Ukraine and the agreement with the Mercosur states, if ratified.

EU/Ukraine (entered into force in 2017, revised in 2020)	EU/Canada (CETA) (provisional application in 2017)	EU/Mercosur (agreement finalised in 2019, not yet signed)
Duty-free poultry quota : 70,000 tonnes	Total access to the European market for duty-free Canadian beef of 65,112 tonnes, of which: ● New quota of 46,000 tonnes at zero duty; ● 4,162 tonnes (Hormones Panel) ● 14,950 tonnes (Hilton quota)	● New quota of 99,000 tonnes at 7.5% customs duty. ● Customs duty on Mercosur's share of the Hilton Quota is reduced from 20% to 0%: 60,840 tonnes. ● Duty-free poultry quota: 180,000 tonnes

Competing with agricultural models that are even more intensive and productivist than those that dominate in Europe, **European farmers are the big losers** in the absence of a level playing field with operators exporting to the EU. With products in direct competition with imports governed by less stringent social and environmental standards, farmers are being disadvantaged by these agreements. This compromises the acceptability of the Green Deal and the raising of environmental ambitions in the agri-food sector, both at EU level and in each Member State. By **further weakening the EU's farmers,** the EU's **food sovereignty** may be threatened.

A FARMER'S TESTIMONY

by par Marine Colli

"Under these conditions, I don't see how I can keep doing my job"

I started farming in 2009, following in my father's footsteps, convinced that by focusing on a sustainable breeding model and high-quality products that meet consumer expectations, I would be able to make a success of it. My associates and I raise animals according to the Label Rouge standards, meeting strict specifications and following the key principles of agroecology. That of the herd's feed self-sufficiency, for example: we produce almost all of our herd's feed ration on the farm. This way, we are not dependent on "inputs". And the plant protein component of our animals' feed is guaranteed GMO-free. The problem is, this commitment prevents us from earning a living: we sell all our animals at a price of about one euro per kilogram less than our production cost. Under these conditions, I don't see how I can keep going in this business... still less how I can continue to develop my model, to make it more efficient in terms of the environment and animal welfare. As if the situation were not difficult enough, it is aggravated by the fact that France and the

Guillaume Gauthier,
a young Charolais cattle farmer

EU are still failing to protect us, within our own market, from unfair competition from imported meat produced by systems that are completely different from ours. In terms of competitiveness, for me and for all my fellow French cattle farmers, it is a losing battle to compete with factory farms of 10,000 cattle, doped up with antibiotics! And as a farmer, I didn't choose this job to fight against systems like these. So, today, I am asking the public authorities to make this choice: either they want me to continue rearing my animals as I am doing today and must give me guarantees for this, aimed at protecting my production model and ensuring that prices cover my production costs... Or, they believe that the market and globalisation are the masters. In which case I will leave the business, making way for others in France who would like to set up feedlots that can compete with the American-style cattle farms.

our proposal:

to put an end to an incoherence that weighs on our farmers and the ecological transition

FOR THE ADOPTION OF MIRROR MEASURES IN EUROPE

MIRROR MEASURES ADOPTED BY FRANCE

France has enshrined in its legislation the principle of "mirror" measures for **pesticides, veterinary products, animal feed and traceability.** Article 44 of the French law known as the "EGALIM" law[81] introduced Article L236-1A to the French Rural and Maritime Fisheries Code which states:

It is forbidden to offer for sale or distribute free of charge, for human or animal consumption, ***foodstuffs*** *or* ***agricultural products*** *produced using* ***plant protection products, veterinary products or animal feedstuffs that are not authorised by European regulations or that do not comply with the identification and traceability requirements*** *imposed by the these regulations.*

Article 3 of the recent law concerning the use of neonicotinoids for sugar beet[82] supplements this mechanism by providing for the competent ministers to be able to suspend or restrict the import of non-compliant products, by adding the following paragraph to Article L236-1A:

The ministers responsible for agriculture and consumption may (...) ***take protective measures to suspend or set special conditions for the introduction, import and placing on the market in France*** *of foodstuffs or agricultural products mentioned in the first paragraph of this article."*

Unfortunately, the Government has not yet initiated any procedure to implement this legislation.

Moreover, in the European common market, the effectiveness of any action taken at national level is diminished. Without harmonisation, national legislation can easily be circumvented by businesses in other Member States taking advantage of the internal market and its freedoms of movement. While action taken by France within its own market sends a strong signal to the rest of Europe and generates positive political momentum on the subject of the "mirror clauses", it would be more appropriate for the necessary measures to be tak-

en at EU level, given that the EU is generally responsible for implementing food safety standards and ensuring their compliance[83].

The French government is also calling for the creation of a European observatory on health risks[84] and, as mentioned, the adoption of mirror measures in the EU[85].

LEGAL BASIS AND EUROPEAN LEGISLATIVE PROCESS

The legal basis of the EU regulation that would introduce mirror measures would be determined by its objectives[86], which in this case are multiple.

The mirror measures envisaged are motivated by the **protection of consumer health, environmental protection and ethical considerations of animal welfare.** Furthermore, action at EU level would, incidentally, help to preserve the **unity of the internal market** through the adoption of uniform rules, avoiding proliferation of national legislation. Mirror measures would also aim to extend existing environmental and health standards in the EU to imported products, with **clear implications for external trade.** As such, they could also be adopted on the basis of the **common commercial policy**[87] on trade with third countries.

It should be noted that the chosen objectives should also be seen in the context of the analysis of the WTO compliance of the measures, so as to strengthen the credibility of the case for the protection of health and the environment and to avoid giving the impression that mirror measures might be motivated by purely commercial purposes.

Consequently, the proposed instrument could be based on one or more Articles of the following provisions of the TFEU: Article 207.2 (commercial policy), Article 114 **(functioning of the internal market),** Article 168.4 **(protection of human health),** and Article 192 **(protection of the environment),** while taking into account Article 191, according to which EU environmental policy shall be based on the **precautionary principle**. Animal welfare measures may be integrated under environmental protection and Article 13 TFEU, which provides that EU policies shall take account of **animal welfare** requirements.

Since these objectives, with the exception of commercial policy, correspond to shared competence, pursuant to Article 5 TFEU, it would be necessary to demonstrate, in accordance with the principle of subsidiarity, that the objective pursued cannot be achieved by the Member States individually, since the EU is better placed to act effectively, and that the Regulation does not go beyond what is necessary to achieve that objective, in accordance with the principle of proportionality.

Regardless of the legal basis chosen from among the above, the **procedure to be followed** for the adoption of a European legislative act is the same: it must be adopted by the European Parliament and the Council in accordance with the ordinary legislative procedure[88].

Finally, as regards the **form of the legal instrument,** in view of the objectives pursued[89] and the need to have identical provisions in all Member States, **action by means of a regulation is the most appropriate solution** since it has the benefit of immediacy and is directly applicable in the Member States. Conversely, a directive would leave Member States some flexibility with regard to implementation, which could result in differences of application that run contrary to the aim of standardising regulation throughout the internal market.

OUR PROPOSAL FOR THE DRAFTING OF THE "MIRROR MEASURES" REGULATION

The "mirror measures" Regulation should focus on those priority areas of agriculture where the absence of such measures impedes the aforementioned health, environmental and ethical objectives pursued by the EU, namely pesticides and livestock rearing conditions.

Pesticides

To adequately protect the health of European consumers and regain their confidence, to stop contributing to environmental destruction in exporting countries, and to facilitate farmers' adherence to the EU's ambitious new food strategies, mirror measures on pesticides must be implemented. These might consist of a **ban on the placing on the European market of foodstuffs treated with substances not approved by the Pesticides Regulation** because they are too dangerous to health or the environment, including due to the risks they pose to bees.

This ban could be implemented by means of **declaratory certificates,** as with the ban on the use of growth hormones.

Furthermore, in order for the EU to adopt a coherent approach in this area, the mirror measure should be accompanied by:

- **The removal of the ability,** provided for in Article 53 of the Pesticides Regulation, to **grant derogations** allowing the use, within Europe, of substances considered too hazardous for health or the environment.
- **a ban on the production, storage and circulation of these substances within the EU,** similar to the ban adopted by the EGALIM law codified in Article L. 253-8 IV of the French Rural and Maritime Fisheries Code.

Finally, in order to ensure **the effectiveness of all these measures,** the Regulation should also provide for:

- **stronger controls on food** placed on the market within the EU to verify the absence of residues of prohibited substances and, if these substances are proven to be present, controls at producers' premises, including in third countries.
- **specific and dissuasive sanction procedures** in the event of proven infringements, both within the EU and in third countries, targeting non-compliant producers in particular.

Livestock rearing conditions

With regard to rearing conditions, at least the following mirror measures need to be adopted:

- A ban on the placing on the market of products derived from animals treated with **veterinary products or fed with feed not authorised by European regulations, or non-compliant with the identification and traceability requirements** imposed by these regulations. In practical terms, this means banning the placing on the market of imported meat from: cattle "doped" with antibiotics, cattle fed with meat and bone meal, and cattle not individually traceable from their place of birth to their place of slaughter.
- A ban on the placing on the market of **products derived from animals which are not certified as having benefited from certain minimum animal welfare conditions,** particularly with regard to transport.

In addition, to ensure these measures are effective, the Regulation must provide for the **stronger controls** in the main exporting countries and the implementation of **procedures for suspending imports** in the event of proven violations, targeting non-compliant establishments in particular.

INTERVIEW

by Samuel Leré

"A European regulation on mirror measures could be compatible with WTO law"

Why are WTO rules often seen as an obstacle to adopting measures that are more protective of the environment and health?

The danger of internal measures being incompatible with WTO rules is a recurrent argument used against the adoption of measures that are more protective of health and the environment than "international standards".

Clémentine Baldon, lawyer, Baldon Avocats

By way of illustration, many of the EU's trading partners (Canada, USA, Brazil, etc.) regularly criticise the EU Pesticide Regulation before WTO committees[167], arguing that some decisions taken by the EU on MRL thresholds are scientifically unfounded and stigmatise imported products.

As a result, some people tend to see the WTO as a barrier. But ***the legal options for countering these arguments should not be underestimated.*** *An EU regulation on mirror measures could be compatible with WTO law. Clearly, the objective of WTO law is to facilitate trade, but States are in principle free to set the level of health and environmental protection they deem appropriate, in accordance with the original objectives of the WTO agreements.*

What WTO rules would apply to the measures in question?

Under WTO law, the instrument on mirror measures should not be considered a single measure but a set of separate measures, which may fall within the scope of different agreements. As such, some of them should be considered in light of the Agreement on Sanitary and Phytosanitary Measures[168] ***("the SPS Agreement")*** *and others under the Agreement on Technical Barriers to Trade[169]* ***("the TBT Agreement")*** *and the 1994 General Agreement on Tariffs and Trade[170]* ***("the GATT").*** *These agreements provide for different regimes, but lay down several common rules, such as the principle of non-discrimination, the prohibition of restrictions not necessary for trade and the use of international standards as benchmarks.*

The SPS Agreement, for example, should apply to measures prohibiting the placing on the market of foodstuffs treated with pesticides banned for health protection reasons, while the TBT Agreement and GATT would apply to environmental protection and animal welfare measures.

What are the main factors in favour of the compatibility of the measures with WTO law?

All mirror measures should be subject to a detailed analysis under the relevant WTO agreements. This is the purpose of the analysis in ***Annex 2.***

To sum it up, this analysis shows that the texts applicable to the various measures all allow a measure that would hinder international trade to be "saved" provided that it pursues a legitimate objective, that it "genuinely" allows this objective to be achieved—without going beyond what is necessary—and that it is based on international standards or, failing that, on scientific evidence. Although the analysis would partly depend on how the envisaged measures would be drafted and implemented, they may well be found to be WTO compatible in the light of the compatibility criteria set out in the WTO Agreements.

For example, measures banning the placing on the market of foodstuffs treated with pesticides banned in the EU because they are harmful to the environment could be justified if it is shown that they pursue a ***legitimate objective*** *within the meaning of the TBT Agreement or that they fall within the* ***exceptions provided for in Article XX of the GATT.*** *These include the protection of the environment, animal life or health, the preservation of plants and the conservation of exhaustible natural resources. The latter grounds, in particular, could be invoked for a measure aimed ultimately at preserving the bee population.*

Similarly, the ban on the placing on the market of products derived from animals that have not benefited from certain minimum animal welfare conditions could be justified by the protection of public morality in the EU. In this respect we can cite the position adopted by the WTO Appellate Body in the Seal Products *dispute, which recognised that public morality includes the ethical requirements of animal welfare.*

Furthermore, several of the measures envisaged would offer a higher level of protection than the international standards that are supposed to justify them. The considerations put forward by the EU will therefore need to be supported by sufficient scientific evidence or relevant standards, where appropriate. In the case of SPS measures, the rules allow for minority scientific opinions or, temporarily, the precautionary principle.

"Consistency of EU action would be the main factor supporting the compatibility of mirror measures."

Consistency of EU action would be the main factor supporting the compatibility of mirror measures, since it would basically involve imposing on all producers the measures that are already imposed on European producers. In order to demonstrate this consistency, and the EU's "good faith", it is essential to put an end, as recommended, to the derogations allowing the use in the EU of substances that are hazardous to health or the environment and to ban the export of these substances to third countries. The EU should also continue its diplomatic actions in favour of more widespread abandonment of the substances in question within the framework of the Codex Alimentarius, the WTO and targeted programmes.

Annex 1

	Topic	EU/France	Canada
HEALTH - TRACEABILITY	Feeding and use of meat and bone meal	Regarding the use of animal proteins in animal feed, French legislation has been fully aligned with European legislation since November 2017. Regulation (EC) No 999/2001 (Article 7 and Annex IV, point I) prohibits the feeding to ruminants of all proteins, dicalcium phosphate and tricalcium phosphate of animal origin. These bans are general in nature but provision is made for exemptions, including for ruminants. Accordingly, the following products are permitted in the feed of all farmed animals, including ruminants: milk and milk-based products, colostrum and colostrum-derived products, eggs and egg products, hydrolysed proteins derived from non-ruminants or from ruminant hides and skins, gelatine and collagen from non-ruminants. In addition, fishmeal is permitted in feed for unweaned ruminants (for the preparation of milk substitutes). The options open in France are available in memorandum DGAL/SDSPA/2017-879 of 07/11/2017.	The list of permitted feed components in Canada is governed by Schedule IV of the Feeds Regulations (SOR/83-593), which date from 1983 and are amended regularly. The latest version is dated 6 June 2019. "Protein-based foods" are classified in category 5 of this schedule. It includes (p 64-69): Animal blood meal, dehydrated animal blood, hydrolysed animal hair, fresh animal meat by-products, animal meat meal, animal meat with bone meal, hydrolysed poultry feather meal, etc. Point 19 of the chapter on "Standards and general requirements" specifies (p.23-24) that a "food shall not contain: d.1) proteins in any form derived in Canada: (i) except in accordance with a permit issued under section 160 of the Health of Animals Regulations for the purpose of section 6.4 of those Regulations, from specified risk material, or (ii) from the carcasses of any ruminants, other than cattle, that died or were condemned (i.e. rendering) before they otherwise would have been slaughtered for human consumption as food; d.2) proteins in any form derived from the carcass of an animal other than: (i) a fish, or (ii) a food animal, as defined in section 1 of the Safe Food for Canadians Regulations, that was raised or slaughtered to become an edible meat product." The 1997 feed ban (FB), however, prohibited the feeding of most proteins from mammals to ruminants (with the exception of proteins derived exclusively from pigs and horses as well as milk, gelatine, animal fat or blood products). The enhanced feed ban (EFB) dating from 2007 and revised in 2012 weakened this ban. For example, despite a ban in principle on feeding ruminants with ruminant meal, Canadian legislation permits the use of certain proteins, such as blood meal and gelatine, including from ruminants. The use of broiler litter has been banned since the mad cow crisis. > Feeds Regulations (SOR/83-593)
	Growth promoters, antibiotics and veterinary drugs	Hormonal growth promoters are prohibited: Directive 96/22/EC — Prohibition on the use in stockfarming of certain substances having a hormonal or thyrostatic action and of ß-agonists. Ambitious public policies to combat antibiotic resistance in veterinary medicine have been introduced in several EU Member States, in particular in France (Ecoantibio Plans 1 and 2), where positive results have already been observed (a 20% reduction in the use of antibiotics in livestock in four years). The use of antibiotics as growth promoters has been banned in the EU since 1 January 2006. Framework regulation EU 2019/6 on veterinary medicinal products applicable in 2022 (28 January) introduces new restrictions and the potential for future restrictions, including for the fight against antibiotic resistance, which will only be applicable in the EU (ban on the preventive use of antibiotics, definition of a list of critical antibiotics, etc.). In particular, the regulation calls for an end to the systematic use of antibiotics for prophylaxis: "[...] the use of antibiotic medicinal products for prophylaxis shall be limited to the administration to an individual animal only" and "Antimicrobial medicinal products shall not be used in animals for the purpose of promoting growth nor to increase yield". Article 107 of EU Regulation 2019/6. Article 118 of the Regulation provides that third country operators shall not use the designated antimicrobials referred to in the Regulation (use as growth promoters or critical antimicrobials) for animals or animal products exported to the EU.	Since December 2018, all cattle producers in Canada have needed a prescription to purchase the full range of antibiotics authorised for livestock. Previously, this was only the case in Quebec and in other provinces, the producer could, for example, order antibiotics directly from a feed dealer without a prescription. This change applies to all the links in the cattle breeding chain: breeders, fatteners and also feedlot operators. The new policy applies not only to injectable products, but also includes certain boluses, treatments for calf diarrhoea, antibiotic premixes, etc. In practical terms, this means that the pharmaceutical industry has had to withdraw all direct claims on growth-promoting effects. Indirect claims (e.g. helps in maintaining the mean daily weight gain [MDWG] in case of disease) are still permitted, however. The new regulation does not prohibit the use of antibiotics as a growth promoter; rather, it prohibits growth promotion claims and requires a veterinary prescription for most antibiotics. This is not really a constraint for the larger feedlots that employ their own vets. In addition, there is still no requirement for a prescription for amprolium, decoquinate, lasalocid, monensin, salinomycin or toltrazuril. For example, monensin, which is an ionophore, affects the ability to ferment a starch-rich diet and thus impacts feed efficiency. The management of these drugs is governed by two sets of laws and regulations: Food and Drugs Act and Regulations (C.R.C., c. 870), which are administered by the Veterinary Drugs Directorate of Health Canada, and the Feeds Act and Regulations (SOR/83-593). Furthermore, it appears that some growth promoters are frequently used for pre-weaning calves (often not identified, see traceability) in suckling farms. These include Ralgro® (where the active ingredient is zeranol) and Compudose® (where the active ingredient is oestradiol). These can be found on the European market.

COMPARATIVE TABLE ON LIVESTOCK STANDARDS IN DIFFERENT COUNTRIES

Mexico	United States	Brazil
The regulation on the use of by-products in animal feed has been governed since 28 June 2000 by Regulation NOM-060-ZOO-1999 laying down animal health specifications for the processing of animal by-products and their use in animal feed. The NOM-060-ZOO-1999 regulation has been amended from 2003 onwards, when BSE was confirmed in the United States. Since that time and as with US policy, animal by-products of ruminant origin may no longer be fed to ruminants. The regulations have been amended since as the need has arisen. Mexico has been classified as a negligible risk country for BSE by the OIE since 2016. The version currently in effect is dated 24 May 2018. It follows the implementation of the 2013-2018 national strategic plan which aims to help develop domestic consumption quality and open up third country markets. It permits the use of ruminant blood meal and hide meal for cattle feed. Meals from other animals (pigs, poultry) are authorised for ruminants. Fats, processed tallow, milk proteins, gelatine and feather meal are not prohibited either. As in the United States, the use of broiler litter in cattle feed is permitted. Research on the use of animal meal and broiler litter in ruminant diets therefore continues in Mexico, as indicated by this 2018 study published by the University of Veracruz, entitled "Use of poultry by-products as a protein source in the preparation of ruminant diets". In particular, it concludes that "supplementation based on poultry meal promoted a higher productive-yield in heifers supplemented under a stabling system".	The BSE Final Rule of 2008 did not consider it necessary to ban blood (including ruminant blood), monogastric meal or broiler litter in cattle feed from a health point of view. Prohibited substances in animal feeds are listed in section 589 of Title 21 of the Federal Code (21 CFR Part 589). The latest version is dated 1 April 2019. The use of broiler litter was temporarily suspended between 2003 and 2005 following the first cases of BSE in the United States. The states, rather than the federal authority (Food and Drug Administration) are responsible for regulation. Several states have regulations regarding the marketing of animal waste as food ingredients. No state specifically regulates the feeding of litter to animals, however.	Law No 6.198 of 26 December 1974 governs animal feed. It has been amended as the need has arisen. Overall, this regulation is more permissive than in the EU (on additives, etc.). On the issue of meat and bone meal, directive No. 8 of 25 March 2004 prohibits the production, sale and use of products intended for ruminant feed containing animal proteins and fats. However, exemptions exist for milk and milk products, calcined bone meal (with no protein or fat), gelatine and collagen prepared exclusively from hides and skins.
The use of several growth hormones is permitted and widespread in conventional cattle farming. The Specifications for the regulation of chemical, pharmaceutical, biological and food products for use in animals or for consumption by them date from 1995 (NOM-012-ZOO-1993) and were revised in 1998 and 2004. Two further regulations cover the sale of antimicrobial salts fed to animals directly or incorporated in animal feed (NOM-040-ZOO-1995) and the guidelines for classification and prescription of veterinary pharmaceuticals according to the risk level of their active ingredients (NOM-064-ZOO-2000). Many growth promoters are authorised in the conventional sector, such as zilpaterol, zeranol and estradiol. There are a number of limits to the "protection" of exports to the EU. For example, currently there are no maximum permissible limits for diethylbestrol residues in tissues (Codex, 2017). They are only detected by monitoring live animals in farms and slaughterhouses, to comply with the requirements of trade between countries (Regulation NOM-004-ZOO-1994, Control de residuos tóxicos en carne, grasa, hígado y riñón de bovinos, equinos, porcinos y ovinos). Some products have been banned, however (NOM-061-ZOO-1999): the animal health specifications for foodstuffs intended for animal consumption prohibit the use of clenbuterol in the formulation of feed rations for livestock. Since March 2012, it has not been possible to register new antibiotics as growth promoters, and the use of nitrofurans, nitroimidazoles and quinoxaline olaquindox in livestock farming has been banned. Antibiotics are still used as growth promoters, however, as is the case for monensin, which accounts for more than 50% of the antibiotics used in cattle farming. There is no explicit prohibition of the use of antibiotics as growth promoters in the federal Animal Health Act, its regulations or the related standards. However, in accordance with NOM064 (of 5 March 2013), antibiotics are no longer included in the list of growth promoters. A ban could soon be forthcoming. > Mexico's animal health standards	These matters are managed within the United States Department of Agriculture (USDA) by the Food Safety and Inspection Service (FSIS). Several growth hormones are permitted for routine use in intensive cattle farming. Oestradiol, progesterone and testosterone can be used as implants in the animal's ear, as can zeranol and trenbolone acetate (effective for 90 to 120 days). In addition, melengesterol acetate, which can be used to suppress oestrus or to improve weight gain and feed efficiency, is approved for use as a feed additive. Not all hormone combinations are approved (depending on the class of cattle). > Code of Federal Regulations (CFR), Title 21, Parts 522 and 556). Due to antibiotic resistance issues, regulations introduced by the Food and Drug Administration (FDA) in the second half of the 2010s banned the use of medically important antibiotics for humans in cattle without a veterinary prescription and prohibited their use as growth promoters. As in Canada, the new regulations do not actually prohibit the use of antibiotics as a growth promoter but require a veterinary prescription and prohibit direct claims. After a two-year decline (2016 and 2017), the use of antibiotics in livestock farming has started to rise again according to the latest annual report published by the FDA, particularly for antibiotics important to human medicine. The additional use of antibiotics for medical purposes partially compensates for the "disappearance" of antibiotics defined as growth promoters. The United States actually uses a wide variety of antibiotics as growth promoters: bacitracin, an antibiotic used in human medicine that the World Health Organization classifies as medically important. There is also evidence that the use of bacitracin in cattle may increase resistance to colistin, a last-resort antibiotic used in humans to treat serious, life-threatening infections that cannot be treated with other drugs. The United States also currently uses carbadox as a growth promoter, although this antibiotic has been shown to be carcinogenic in laboratory animals. The United States also uses the antibiotic bambermycin as a growth promoter. Bacitracin, carbadox and bambermycin are not authorised for use in cattle in the EU.	A draft partial ban on the use of antibiotics as growth promoters (Portaria No. 171 of 13/12/2018) has been on the table since the end of 2018. The intention is to ban the use of tylosin, lincomycin, virginiamycin, bacitracin and tiamulin as growth promoters. The ban has not yet come into effect, though, and one might well ask if it ever will. There are further examples (welfare) of unfinished projects. Various technical instructions are published at regular intervals (IN no. 45 of 22/12/18, IN No. 14, etc.), on matters such as a ban on colistin sulphate or standardization of use. High levels of antibiotic use have been recorded in southern Brazil in particular, linked to the increased use of antibiotics in animal husbandry at sub-therapeutic doses to improve animal growth.

	Topic	EU/France	Canada
HEALTH - TRACEABILITY	Livestock and meat traceability	Regulation (EC) No 1760/2000 imposes a European system for the identification and registration of cattle and the labelling of beef and beef products. The regulation has been in force since 14 August 2000. The rules include mandatory labelling and ensure the traceability of beef throughout the food chain. All animals, including imported cattle, must have an ear tag attached to each ear to identify them and determine their place of birth. EU countries are required to establish a database with information on all cattle and their movements. Each animal receives a passport within 2 weeks of its birth or importation. This document must then accompany the animal throughout all its movements and must be returned when it dies. Each farmer must keep an up-to-date register and report each birth, death and movement of cattle to the competent authorities within 3 to 7 days of the event. These archives must be accessible for a maximum of 3 years. All beef on sale in the EU must be labelled with a reference code to identify its origin and information on the place of slaughter and cutting. Since 1 January 2002, the label also indicates the animal's country of birth as well as its country of fattening and slaughter. Labels may contain optional additional information about the meat marketed, but the wording must first be approved by the competent national authority.	The Health of Animals Regulations describe the requirements for identifying cattle and reporting their movement. Canadian calves are only identified at the time of their first movement, whereas in the EU they are identified from birth: the identification and traceability system is also different and more limited in Canada. Deadlines for notifying movements may be up to 30 days. Furthermore, according to the latest Food and Veterinary Office (FVO) audit (09 to 20/09/2019), "the two existing computerised databases are not yet fully interconnected, livestock movements (with the exception of movements to slaughter and initial identification at the holding of birth) are not notified and no checks are performed over the use of the official ear-tags delivered to the holdings. Thus, traceability of EU-eligible cattle mainly relies on hard copies of movement documents and certificates, which were found in several cases to be incomplete, or containing erroneous information while at the same time, traceability and eligibility controls at farm level also demonstrated deficiencies. > The rules
	Slaughterhouse: carcass showering	The EU has authorised the use of lactic acid for decontaminating carcasses, but not as a substitute for the good hygiene practices that are identified as essential. Lactic acid is now permitted in the EU for application to the carcass but has some disadvantages, including discolouration of cut surfaces of the meat. This practice has not been adopted, therefore. Regulation (EU) No 101/2013 deals with this authorisation. In particular, peroxyacetic acid and citric acid remain prohibited: Regulation (EC) No 853/2004 of the European Parliament and of the Council of 29 April 2004 laying down specific hygiene rules for food of animal origin.	The treatment of carcasses with peroxyacetic acid (and citric acid, as only lactic acid is permitted) is not authorised in the European Union but is still widely practised in Canada (on 80 to 85% of carcasses according to the Canadian industry). In Canada, it is mandatory to wash carcasses to avoid possible contamination (a curative approach that contrasts with the preventive approach in the EU). Canadian companies criticise this ban as one of the main obstacles to exporting to the EU. In June 2017, Canada indicated that it wished to make an application for the use of citric acid and peroxyacetic acid. Normally, responsibility for this would lie with the Joint Management Committee for SPS measures identified in the agreement, but some observers are concerned that it might take place within the dispute settlement mechanism or the regulatory cooperation forum. The Safe Food for Canadians Regulations (SOR/2018-108) sets out the general rules for the provinces. For example, the Ontario regulation that specifies the available treatments is the Food Safety and Quality Act, 2001, O. Reg. 31/05, art. 79 et al. 104 (1) (b) and Meat Plant Guidelines - Microbial control interventions for red meat species and poultry (Reference No. S9.08.13.02).

Mexico

In terms of general animal traceability, ear tag identification has been universally mandatory since 2017 for cattle, once they leave their cow-calf facility. There is also an electronic movement register. This system remains incomplete, however. Indeed, the "National Agreement for Animal Traceability 2018-2024", introduced the National Livestock Register (PGN), the National Individual Identification System for Cattle (SINIIGA) and the Electronic Movement Register (REEMO).

. In 2018, more than 11 million cattle were identified and recorded in the register. Between 2005 and 2018, nearly 74 million cattle were identified in this way (source: DG Sanco - European Commission). In some producing regions (Sinaloa, Baja California), public security problems (drug mafia) prevent identification. It is difficult to estimate the number of cattle involved, however. They are mainly intended to supply Mexico's domestic market.

Movement of cattle within the country is regulated in accordance with the legislation on the control of tuberculosis, brucellosis, paralytic rabies and ticks (Boophilus spp.). Farmers must meet specific requirements for the movement of cattle, taking into account the place of origin and destination and the health of the animal.

In response to possible European demand, Mexico has recently developed a "split system" for beef production for the EU market. This system involves different farms/feedlots and an approved slaughterhouse with an integrated cutting plant. All entities in the system must be approved by SENASICA (Ministry of Agriculture). According to DG Sanco, the only slaughterhouse in the "split system" has issues with mismatches between ear tags and identification documents, leaving room for errors. In the Commission's view, "There are some issues related to the intake checks on bovines arriving at the approved feedlot and slaughterhouse within the split system. The absence of cross-checks between the ear tags numbers of all arriving animals and accompanying health certificate means that the link between the two is not confirmed. The official procedures for the split system do not include this cross-check. The official veterinarian in the slaughterhouse needs this health certificate to certify certain attestations in the EU export certificate. If the link between the certificate and the individual animals is not confirmed, the system cannot work.

> The rules (NOM001SAG/GAN2015)

All types of carcass treatments are permitted: lactic acid, peroxyacetic acid, citric acid, etc. Facilities approved for export to the EU have carcass showering systems using this type of product, as shown in the DG Sanco audit of 20 to 29 November 2018 (DG(SANTE)/2018-6716-RS). Other regulatory differences and shortcomings still remain in terms of residue controls in particular, and these have also been pointed out by DG Sanco during the various recent audits.

United States

There is no mandatory federal beef traceability system in the United States. The establishment of official certifications has been mainly linked to the requirements of export markets. In the beef sector, two main programmes are currently being implemented: the "Age and Source" programme to allow access to developed markets in Asia, and the "Non-Hormone Treated Cattle" (NHTC) programme, which regulates production authorised for export to the European Union. The NHTC certification opens the door to beef exports to the European Union. This certification revolves around private schemes approved by the USDA, "Processed Verified Programs" which are based on the following three constraints: the animals must be raised in approved farms and delivered to the slaughterhouse with a certificate providing evidence that treatments given to the animals are hormone-free. To this end, individual traceability and the keeping of a food register are mandatory, animals and meat not treated with hormones must be segregated at the slaughterhouse, and samples from animals not treated with hormones must be collected at slaughter and analysed by accredited laboratories for detection of possible residues of hormone compounds. Hatcheries and feedlots must be certified by a private company approved by the USDA for hormone-free certification. The European Union certifies the entire programme implemented by the USDA and not each individual tool. The validation is based on a field survey and extrapolation to the whole system (concept of "system audit").

In Europe, the control of health hazards is ensured by adherence to good hygiene practices "identified as essential". During slaughter, this involves, for example, tying off the weasand and bagging the rectum prior to evisceration, identifying/tracing/requalifying risky carcasses, etc. In the United States, these hazards are controlled through the use of decontamination treatments, a practice that is systematic and generally takes place at several points in the chain, using chemical compounds that may be highly corrosive. The compounds are listed in Directive 7120.1, including anti-microbial substances frequently used in the food industry, primarily organic acids (lactic, citric and acetic acids). The list also features compounds (e.g. chlorine and chlorine derivatives, tri-phosphates), but also hydrogen peroxide, peracetic acid, etc. The Directive cited specifies the methods of use: method of application (spray, showering), maximum concentrations, whether post-treatment rinsing is required.

> The rules

Brazil

In Brazil, traceability is not mandatory, except in the state of Santa Catarina. The Brazilian Individual Identification System for Cattle and Buffalo (SISBOV) is the official system for the individual identification of cattle. Producer membership of the system is voluntary, however, except where it is defined as mandatory in a specific regulatory act or required by official health controls or programmes (as is the case in Santa Catarina). The system is now governed by a standard updated in 2018 (Instruçao Normativa No. 51, of 1 October 2018) and based on Article 7 of Decree No. 7623 of 22 November 2011.

Membership of the SISBOV system is only required for exports to Chile, Switzerland and the EU. Membership currently involves the use of a certifier, a private service provider approved by MAPA, who defines the inventory and identification of all the animals present on the farm. The farm is then declared "SISBOV-certified", and each animal is marked with an ear tag, a tattoo or an electronic device. Even though the system was made more flexible in 2010, allowing farmers to keep a herd of animals identified by SISBOV and a non-identified herd on the same farm, provided that they are kept separate, the number of member farms remains limited.

Today, there are fewer than 2,300 of them in the system. The list of Brazilian farms approved to supply cattle for meat exports to the EU published by DG SANCO showed just under 1,700 eligible farms at the end of 2019.

> More detailed information

> Rules

Slaughterhouse sanitary management and control procedures are highly inadequate. The various audits carried out by importing countries trading with Brazil show that there are limits to the sanitary management of slaughterhouses. For example, in several reports dating from 2017, the USDA noted the lack of control of conflicts of interest between slaughterers and health inspection and the lack of control and training of personnel in slaughterhouses certified for export. Equally alarming is the fact that "the post-mortem inspection procedures in place do not ensure that only healthy, contamination- and defect-free carcasses receive the inspection mark" for export, especially to the EU. Moreover, both the USDA and DG SANCO consider that Brazilian methods for controlling residues in meat do not comply with international standards. Prior to the u-turn in February 2020, the US authorities had announced that following their latest audit (June 2019), the US market would remain closed to unprocessed Brazilian beef. The "Weak Flesh" (carne fraca) health inspector bribery scandal revealed in 2017 highlighted many failings and while corrective actions have since been implemented, numerous doubts remain. The European Commission's audit programme for 2020 includes two control and monitoring trips around animal health and food safety issues affecting products of animal origin. In the meantime, a new regulation on controls on products of animal origin and slaughterhouses (Decree No. 9.013 of 29 March 2017 - RIISPOA) came into force on 3 April 2017 and was amended by Decree No. 10.468 of 10 August 2020.

	Topic	EU/France	Canada
ANIMAL WELFARE	Breeding and transport	The EU has provided a common legal framework for animal transport since 1991, updated by Regulation (EC) No 1/2005 on the protection of animals during transport, hereafter referred to as "the Regulation", which came into force on 1 January 2007. Transport time in a standard vehicle is a maximum of 8 hours for adult cattle and unweaned calves. The maximum travel time for adult cattle in suitably equipped vehicles is 29 hours (with a water and feed break every 14 hours). For unweaned calves in suitably equipped vehicles, the maximum travel time is divided into: 9 hours' travel time, 1 hour's rest, 9 hours' travel. If the animals have not reached their destination after this transport time, they must be unloaded, fed and watered, and must rest for a minimum of 24 hours at an EU-approved checkpoint. Everything is available in the May 2018 Guide to good practices for the Transport of cattle.	Canada has rudimentary animal welfare standards. The Health of Animals Act, 1990 governs animal welfare at the federal level. It was last amended in early 2019 (on transport, see below). There are limited voluntary codes of practice with no verification or enforcement standards. These codes are non-binding "minimum standards". In some cases, there is more stringent provincial legislation. Many marketing organisations have also created their own voluntary guidelines that producers are not required to follow. The Health of Animals Regulations Part XII has recently been amended with respect to the transportation of animals. Changes to the Animal Transportation Regulations came into effect on 20 February 2020 and include maximum intervals without food, water or rest (FWR). For ruminants too young to be fed exclusively on hay and grain (calves), the FWR has been reduced from 18 to 12 hours. For all other ruminants, the FWR has been reduced from 48 to 36 hours. The rest time after the maximum interval without FWR is increased from 5 hours to 8 hours.
	Slaughterhouse	In the EU, Regulation (EC) No 1099/2009 governs the protection of animals at the time of killing. It introduces animal welfare rules that apply to the killing or slaughter of animals for the production of food or products such as fur or leather. It also addresses the killing of farm animals in other contexts such as disease control situations. It defines the methods of restraint and stunning (mandatory except in case of ritual slaughter), the levels of training required for the operators involved, the detailed rules for slaughterhouse construction, installation and operation and the penalties for any breach of the law.	In Canada, the humane handling and slaughter of food animals is the responsibility of the Canadian Food Inspection Agency (CFIA). Part 6 (Commodity-specific Requirements), Division 7 (Meat Products and Food Animals) of the Safe Food for Canadians Regulations (SFCR) sets out conditions for the handling and slaughter of all species of food animals. The conditions are very general and insufficiently binding. When the Agency observes a compliance deviation from the laws it administers, it has a number of tools at its disposal to intervene.

Mexico

The issue of well-being is making headway in Mexico. For the Administration, the priority is access to external markets. "National legislation needs to be harmonized with international standards at the OIE, thereby legitimizing exports of animal products." In Mexico, the Federal Law on Animal Health (LFSA) defines animal welfare as "a set of activities aimed at ensuring animals are comfortable, relaxed, safe and protected during breeding, [...] transportation and slaughter". It dates from 2007 and was last revised in February 2018. It is not really binding. SENASICA publishes guides to good practice, some of which are inspired by the EU.In terms of ruminant transport, the latest standard in force dates from 1995 (NOM-051-ZOO-1995). It specifies transport times for cattle (with no limits on density). Cattle should not be transported for more than 18 hours without rest or without being given drinking water. Rest periods without unloading the cattle during the journey must be at least 3 hours. For journeys taking more than 24 hours, animals are given food in addition to a break every 18 hours.

The killing of animals in slaughterhouses is defined in Mexico by standard NOM-033-SAG/ZOO-2014, Metodos para dar muerte a los animales domésticos y silvestres. Stunning, and training for it, is mandatory.

United States

The transport time for animals is governed by the Twenty-Eight Hour Law, the first version of which dates from 1906. As the name of the law indicates, the maximum duration of transport before a break for cattle is 28 hours (+8 hours for sheep), with no maximum density. In 1963, the US administration specified the conditions for a break (food, water, rest) of at least 5 hours. More stringent private procedures exist. Similarly, some state laws are more restrictive.

The law that governs the conditions of slaughter is the Humane Methods of Slaughter Act (HSA). This law was originally passed in 1958. The basis of the current version dates from 1978 and specifies that animals must be made insensitive to pain before being slaughtered (poultry is not included). However, this law is inadequately implemented and has been challenged several times in the US Congress, without any real changes being adopted. For example, in 2008, revelations by the Humane Society of the United States about cattle abuse in a California slaughterhouse led to the largest-ever meat recall in the country (affecting 65,000 tonnes of beef produced between February 2006 and February 2008). In October 2013, following further incidents in the spring, the US Department of Agriculture's Food Safety and Inspection Service (FSIS) issued a "Compliance Guide for a Systematic Approach to the Humane Handling of Livestock" to support the Humane Methods of Slaughter Act. It was updated in 2020.

Brazil

The legislation in force in Brazil is much less demanding than the rules applicable in Europe, particularly in terms of density, housing and available space. For example, branding is still permitted. The 2017/2018 Brazilian consultation on animal protection did not result in any regulatory advances in this area. Private certification of farms exists, as do guides to good practice published by the Ministry of Agriculture (MAPA) for cow-calf production and vaccination (administered by farm workers, resulting in particular in considerable losses through the proliferation of abscesses).

For transport, the good practice guide of the Ministry of Agriculture (MAPA) published in 2013 continues to apply. The latest legislation on the transport of live production animals dates from 18 June 2020 (Resoluçao No. 791). This resolution consolidates the rules on the transport of production animals (and also animals for sport, leisure and exhibition). There are currently no technical regulatory limits in terms of animal loading or transport time, merely guidelines that are rather vague.

The Brazilian consultation of 2018 (Portaria No. 62 of 10 May 2018) on animal protection in slaughterhouses did not result in any regulatory advances in this area. The regulation from 2000 (Instruçao Normativa No. 3 of 17 January 2000) still applies. This regulation contains very few provisions (e.g. "Animals kept in barns or pens shall have free access to abundant clean water and, if held for more than 24 (twenty-four) hours, shall be fed in moderate quantities and at appropriate intervals").
Directive NR 36 on the safety and health of slaughterhouse workers introduced in 2013 and amended four times between 2016 and 2018 consists of 16 chapters dealing with matters such as ergonomics and minimum standards for furniture and tools, product handling, working environment and break times, and reception and unloading of animals. Beyond the issue of labour costs (see below), worker density in slaughterhouses is still very high. The regulatory gap between the EU and Brazil remains significant.

	Topic	EU/France	Canada
ENVIRONMENT	Water (nitrogen, effluents, etc.)	Current regulations focus on protecting water quality, both above and below the surface. French and European laws regulate the construction of farm buildings and the management of effluents, as well as the fertilisation of meadows and crops and the use of crop protection products. In France, all farms are subject to environmental regulations: small farms are subject to the Departmental sanitary regulation (Règlement Sanitaire Départemental, RSD) and medium-sized and large farms to the legislation on Installations Classified for Environmental Protection (Installations Classées pour la Protection de l'Environnement, ICPE). The regulations differ depending on whether the farm is located in a vulnerable zone or not. Hence, the stricter regulations relate to classified farms (>100 suckling cows, >50 dairy cows, >50 calves or fattening cattle), (ICPE thresholds).	Environmental regulations are defined at the provincial level in Canada (federal state). Location of manure storage and setbacks from neighbouring properties or waterways may be regulated. Examples of regulatory measures to reduce diffuse pollution from agriculture at the provincial level that are less stringent than those in Europe: - Ontario: The Nutrient Management Act (2002) establishes regulatory requirements for certain nutrient management practices and requires farmers to document these practices to reduce the risk of water contamination from agricultural sources. Regulated practices include manure management (e.g. storage and application), application of off-farm materials (e.g. sewage biosolids or vegetable processing waste), and treatment of manure and other materials in on-farm anaerobic digesters. - Manitoba: The Livestock Manure Mortalities Management Regulation (1998) prescribes various requirements for the use, management and storage of livestock manure to reduce water pollution from livestock. Permits are required for the construction, alteration or expansion of manure storage facilities and specific constraints, such as maximum livestock numbers, fencing restrictions, drainage and water work restrictions, apply on Crown land ("public" land leased to ranchers). - Quebec: The Agricultural Operations Regulation (2002) seeks to address the problem of diffuse pollution caused by agricultural activity, by achieving an effective balance of phosphorus in the soil to maintain soil fertility and limit losses from excessive use of manure. It includes norms for livestock buildings and manure management, and restrictions on land use to limit water pollution. Other regulations deal with the use of fertilisers and pesticides in agriculture.
	Deforestation, GHG	The EU is aiming for climate neutrality by 2050. The European Commission's legislative proposal dates from March 2020. The targets for 2030 were revised upwards in September 2020 with a reduction of at least 55% in GHG (greenhouse gas) emissions by 2030 compared with the level in 1990. The Council reached agreement on the 2030 target in December 2020. Three-way negotiations are now planned for legislation validated in June 2021 concerning the implementation of the 2030 objective. This agreement is expected to change the EU Emissions Trading Scheme/ETS (reduction/removal of CO2 permits). The division of effort, and in particular the agricultural element, has not yet been decided. In its national strategy, France has set a target of reducing non-energy related emissions [...] from agriculture by almost 40% between 2015 and 2050.	In December 2016, federal, provincial and territorial First Ministers announced the Pan-Canadian Framework on Clean Growth and Climate Change (PCF). In the PCF, the federal government indicates that by 2018, all provinces and territories will be required to introduce a scheme that sets a carbon price of $10 per tonne, rising incrementally to $50 per tonne by 2022. This cap-and-trade carbon tax is expected to achieve an equivalent reduction in emissions to that achieved through market pricing of carbon. Carbon taxes had already been implemented in some provinces. The creation of a federal carbon tax was ruled unconstitutional by the Alberta Court of Appeal in February 2020. We will need to wait for the decision of the Federal Supreme Court of Canada to find out what the future of this federal carbon tax will be. The farm impact study shows a potential decrease in income for beef farms of 0.8%.

Mexico	United States	Brazil
In Mexico, there are no clear regulations on the management and use of livestock manure. Some standards exist on pollutant discharges to water, but with no clear specifications for livestock manure.	In the United States, environmental regulations focus on water protection, as they do in the EU. From 1972, the Clean Water Act (CWA) established minimum regulations for point sources of surface water pollution, including large cattle operations (over 1,000 head). The Act made it illegal to discharge pollutants into surface waters without a permit. While US regulations focus primarily on surface water, European regulations seek to protect both surface and groundwater. Only the largest beef farms in the US (generally >1,000 head) are subject to environmental regulations at the federal level, which have lower standards than those in the EU. Additional regulations exist at the state level and these are often stricter. In 2003, the CWA was revised to include more stringent regulations to control manure runoff from larger feedlot units; it was implemented in 2008.	Permanent preservation areas (PPAs) along the river were established in 1965. They were reinforced in 1986 and 1989 and confirmed by the Forestry Code (Law 12.651/12) of 2012. They are similar to the cross-compliance measures implemented under the CAP. Title IV of Decree No. 1745 of 6 December 1979 regulates the management of soil pollution. Article 57 of this decree prohibits the deposit, disposal, dumping, burial, infiltration or accumulation of residues in the soil if they are polluting. The soil can thus be used if the residues are not considered polluting. All things considered, this law is not particularly restrictive and does not contain any specific provisions, in particular concerning feedlots (confinamento in Portuguese). In Brazil, raw effluent from dairy cattle and confinamentos continues to be discharged into waterways using the conventional dilution method. These discharges are one of the reasons for the eutrophication of rivers, streams, lakes and ponds. Guidance and measures to avoid pollution do exist, but without any regulatory obligation.
Following the 2012 Climate Change Law, in 2014 Mexico established a mandatory reporting system for direct and indirect greenhouse gas emissions for all facilities with annual emissions exceeding 25,000 tCO_2e. Emitters in the energy, industry, transportation, agriculture, commercial services and waste sectors will be required to report a variety of GHG emissions, including carbon dioxide, methane and nitrous oxide, as well as all GHGs identified by the IPCC and designated by the Secretariat of Environment and Natural Resources (regulation). Every three years, an accredited third party must verify the emission reports. The new regulations are a key step in the implementation of the General Climate Change Act of 2012. Mexico must reduce its GHG emissions by 22% by 2030.	After the Trump administration withdrew from the Climate agreements, the Biden administration rejoined the Paris Agreement, binding commitments still have to be taken, to be expected in coming weeks.	The federal constitution provides for environmental protection (chapter VI. Article 225): "All have the right to an ecologically balanced environment, which is an asset of common use and essential to a healthy quality of life, and both the Government and the community shall have the duty to defend and preserve it for present and future generations." The "new" forestry code (Law 12.651/12) is a determining factor in the preservation of the environment. It provides for a cadastral survey (in progress) of the whole of Brazil. It requires the continuation of permanent preservation areas (PPAs) and the legal reserve (LR) but with no retroactive effect. The problem is not so much the regulations, but their implementation and enforcement. In particular, the ability of IBAMA - the Federal Agency for Environmental Protection, which carries out spot checks - to take action has been greatly reduced by the decisions of the Bolsonaro government. As a result, 2020 was Brazil's worst year for deforestation in 12 years according to IBAMA/IBGE. Brazil is still a signatory to the Paris Climate Agreement, but the Bolsonaro government is reluctant to meet its commitments (-37% GHG emissions in 2025 and -43% in 2030 compared with 2005). However, agricultural measures are being implemented (Plano ABC: Decree No. 7390 of 9 December 2010) with the development of integrated farming (livestock, crops, forestry), rehabilitation of pastures, etc. However, these are still essentially experimental demonstration projects with limited effect in 2020.

Annex 2

ANALYSIS OF THE PROPOSED REGULATION ON MIRROR MEASURES WITH RESPECT TO WTO LAW

The danger of internal measures being incompatible with WTO rules is a recurrent argument used against the adoption of measures that are more protective of health and the environment than "international standards".

While it is true that the EU's trading partners are quick to argue that certain EU standards (such as the Pesticides Regulation) would constitute unnecessary or even discriminatory barriers to trade[90], **the legal options for countering these arguments should not be underestimated.**

Under WTO rules, the Regulations should not be considered as a single measure but as a set of distinct measures, some of which would fall within the scope of the Agreement on Sanitary and Phytosanitary Measures ("the SPS Agreement")[91], and others within the scope of the Agreement on Technical Barriers to Trade ("the TBT Agreement")[92] and the General Agreement on Tariffs and Trade 1994 ("the GATT")[93].

In the light of the compatibility criteria defined by these agreements, the proposed Regulation could be deemed compatible with WTO rules, as illustrated by an analysis carried out on certain mirror measures envisaged in the areas of pesticides, animal welfare and animal feed.

MIRROR MEASURES ON PESTICIDES

The analysis of measures banning the placing on the market of foodstuffs treated with substances prohibited in the EU varies depending on whether the substances in question are prohibited for reasons of health protection or the protection of the environment and biodiversity.

MIRROR MEASURES ON PESTICIDES HAZARDOUS TO HEALTH

The following analysis focuses on measures banning the placing on the market of foodstuffs treated with substances prohibited in the Union due to their intrinsic health risks, particularly as they meet one of the cut-off criteria mentioned in Article 4 of the Pesticides Regulation, meaning that they are mutagenic, carcinogenic, toxic to reproduction or endocrine disruptors. These measures will be analysed with respect to the rules of the SPS Agreement, with which they could be deemed compatible.

Applicable WTO Agreement

The reason for banning the import of foodstuffs treated with substances that are prohibited in the EU because they are hazardous to health is that the mere presence of these substances in the imported products is too dangerous – even in very small doses. This is why, following an analysis based on their intrinsic danger, they are *de facto* excluded by the Pesticides Regulation.

As such, it may be considered that compliance with the current MRLs, even where the limit is low, does not provide a sufficiently high level of health protection for European consumers. It is to this end that the Commission is considering the possibility of refusing any import tolerance for these substances[94].

The objective is clearly to protect *human and animal life and health from risks arising from additives, contaminants, toxins or disease-causing organisms in foods,* within the meaning of the SPS Agreement. Hence, it is this agreement that would be applicable.

Analysis of the compliance of the measures with the rules of the SPS Agreement

The SPS Agreement allows the validation of a measure taken on its basis, provided that it is based on scientific principles, has normative grounds, is necessary and does not constitute arbitrary or unjustifiable discrimination.

The scientific basis of the measure

The SPS Agreement requires that the measure *is based on scientific principles and is not maintained without sufficient scientific evidence* (Art. 2.2) and is *based on an assessment, as appropriate to the circumstances, of the risks to human, animal or plant life or health (...)* (Art. 5.1). **By way of derogation,**

under Article 5.7 *[In] cases where relevant scientific evidence is insufficient, a Member may provisionally adopt sanitary or phytosanitary measures on the basis of available pertinent information, including that from the relevant international organizations as well as from sanitary or phytosanitary measures applied by other Members.*

In the current scenario, the EU has chosen to exclude the use of certain categories of substances because of their intrinsic properties and the dangers they pose to human and animal health. This approach (known as the "hazard-based approach") dispenses with the need to conduct a case-by-case risk assessment for pesticides derived from these substances. Under these circumstances, it may seem difficult to base the measure on Article 5.1 of the SPS Agreement, since both EFSA and Codex Alimentarius consider that compliance with MRLs is sufficient to ensure the safety of these substances for human health. The current scientific consensus is therefore not particularly supportive of the scientific merits of the measures envisaged.

However, the case law of the Hormones dispute shows us that it is possible for risk assessment not to be based on the majority opinion of the scientific community:

The 'available scientific evidence', referred to in Article 5.2, includes both generally held or majority scientific views, as well minority, or dissenting, scientific opinion.[95]

A **minority opinion,** provided it is based on valid scientific studies, may therefore constitute a sufficient basis for risk assessment.

In the *Hormones* dispute, the Appellate Body also clarified that risk assessment is not limited to *risk ascertainable in a science laboratory operating under strictly controlled conditions,* but must include risk *in human societies as they actually exist, in other words, the actual potential for adverse effects on human health in the real world where people live and work and die*[96]. In other words, the assessment cannot be reduced to physical and chemical risks alone: it must also take into account **"practical" risks.** In this respect, the failures of the MRL system, as illustrated by the cases of the serious exceeding of levels,[97] could help demonstrate the need for a more protective system. Similarly, evidence of the impossibility of ensuring compliance with good agricultural and veterinary practices by foreign operators[98] would strengthen the European position.

If the measure cannot be based on Article 5.1, it could also be based on the **precautionary principle,** which is reflected in Article 5.7[99] of the SPS Agreement. While its interpretation is not consistent with the analysis in EU law, the article does allow for **temporary** measures to be taken in the event of insufficient scientific evidence, *on the basis of available pertinent information.* This is generally based on scientific information from the relevant international organizations or on the practices of other Members in relation to SPS measures.

In the context of Article 5.7, it is necessary to prove *the possible existence of a risk.* Furthermore, once the measure is adopted, the information must be supplemented by additional information to remedy the lack of scientific evidence, without there being any obligation to achieve specific results.[100] The review of whether measure should be maintained must be made in the light of the fact that States act prudently *where risks of irreversible, e.g. life-terminating, damage to human health are concerned*[101]. It should therefore be possible to justify measures prohibiting, at least temporarily — until there is more certainty about the potential harmfulness of these substances at low doses — the use of pesticides because of possible risks to human health.

The normative basis of the measure

SPS measures must be established on the basis of *international standards, guidelines or recommendations (...)*. (Art. 3.1). If they are, they will be *deemed to be necessary to protect human, animal or plant life or health, and presumed to be consistent with the relevant provisions of this Agreement and of GATT 1994* (Art. 3.2). By way of derogation, *Members may introduce or maintain (...) measures which result in a higher level of sanitary or phytosanitary protection than would be achieved by measures based on the*

relevant international standards, guidelines or recommendations, if there is a scientific justification, or as a consequence of the level of (...) protection a Member determines to be appropriate (Art. 3.3).

The measures in question are clearly stricter than the international standards of the Codex Alimentarius, which promote the MRL system. However, under Article 3.3 of the SPS Agreement, the EU is free to set a higher level of sanitary protection than international standards[102], based on a risk assessment or on the derogation described in Article 5.7 of the SPS Agreement. The compliance of measures with Article 3.3 is therefore directly dependent on the EU's success in demonstrating the scientific justification for the measures under Article 5.1 or, alternatively, Article 5.7.

Necessity of the measure

According to Article 2.2 of the SPS Agreement, Members must ensure that their SPS measures are *applied only to the extent necessary to protect human, animal or plant life or health.*

Article 2.2 requires that the measure be **proportionate** to the objective pursued, i.e. that there is no viable alternative that is less trade-restrictive in view of the technical and economic constraints. However, this proportionality must be assessed in the light of two factors already established: the risk assessment intended to establish the health hazard of the substances in question and the consequent freedom of the EU to define its own level of protection.

The current system of MRLs is the main alternative to the proposed ban. However, this system allows the importation of products containing the substances in question despite their inherently harmful properties for human health. Moreover, there is a proven risk of the significant exceeding of MRLs, even for substances banned in the EU[103]. It could therefore be argued that this system is insufficient to ensure the desired level of consumer protection and, as such, that the introduction of mirror measures would be proportionate to the desired objective of protecting the health of European consumers.

No arbitrary or unjustifiable discrimination

Finally, the measures must not ***arbitrarily or unjustifiably discriminate*** *between Members where identical or similar conditions prevail, including between their own territory and that of other Members. Sanitary and phytosanitary measures shall not be applied in a manner which would constitute a disguised restriction on international trade* (Art. 2.3 and Art. 5.5).

These articles require, in substance, the application of the measure in **good faith**. The measure must not create **arbitrary or unjustifiable discrimination** or a disguised restriction on trade, including where it is based on the precautionary principle. Here, the EU could face the argument that the proposed measures discriminate *de facto* between domestic and imported products. As domestic production is already subject to these requirements, only imported products will, in practice, be affected. However, this potential discrimination does not appear arbitrary or unjustifiable in the light of the consistency of the European measure, which is apparent in two respects:

Internal consistency: the mirror measure is specifically aimed at ensuring consistency in the regulatory regime applicable to products placed on the European market. Therefore, structurally, mirror measures that pursue a legitimate objective without distinction are not instruments of arbitrary discrimination or protectionism[104]. In this respect, the consistency of the EU's position would be **considerably strengthened if it banned the export to third countries of substances banned in the Union,** as proposed by some MEPs[105], and put an end to the possibility **of derogation for substances banned in the EU.**

External consistency: the ban should be accompanied by **diplomatic** actions to promote the general phasing-out of the substances in question, as envisaged in the evaluation of the legal framework applicable to pesticides in 2020[106]. The actions envisaged or desirable include:

- the promotion of a higher level of health protection within the relevant multilateral bodies (Codex Alimentarius, WTO SPS Committee) and in bilateral negotiations (free trade agreements);
- the implementation of targeted support measures, in particular for developing countries through existing development funds;
- a policy for communication with trading partners and their economic operators, ensuring the transparency of the pesticides system within the European Union.

MIRROR MEASURES ON PESTICIDES HAZARDOUS TO THE ENVIRONMENT

Measures to prohibit the marketing of foodstuffs treated with substances that are banned in the EU because they are harmful to the environment and/or biodiversity would be covered by the TBT Agreement and the GATT, against which they must be examined.

Applicable WTO Agreements

First of all, the SPS Agreement does not appear to be applicable to the measures at issue. Its scope covers SPS measures defined as *all sanitary and phytosanitary measures which may, directly or indirectly, affect international trade*[107]. These measures are therefore defined in terms of their purpose —sanitary or phytosanitary— with the specification that the objective must be pursued within the territory of the Member initiating the measure. As such, the SPS Agreement excludes from its scope measures with extraterritorial effect. However, in this case, the measures in question are aimed at protecting the environment and biodiversity in third countries, so they do not constitute "SPS measures" within the meaning of the SPS Agreement.

We need therefore to look to the TBT Agreement and the GATT, both of which open the door to regulation with extraterritorial reach[108].

Applicability of the TBT Agreement

The TBT Agreement applies to technical regulations, standards and conformity assessment procedures. Annex 1 of the TBT Agreement lists four types of "technical regulations", including measures that lay down "product characteristics" and those that set out "their related processes and production methods". In the EC – *Asbestos* dispute, the Appellate Body established that a measure constitutes a technical regulation if it relates to a particular product, it specifies the characteristics of that product (i.e., its *objectively definable qualities, attributes, or other distinguishing marks),* and compliance with it is mandatory[109].

In the *EC – Seal Products* dispute, the Panel recalled the reasoning of the Appellate Body in EC – Asbestos, which had found that the measure prohibiting asbestos-containing products *laid down a product characteristic in the negative form*[110]. Thus, under this case law, the ban on the placing on the market of products treated with prohibited pesticides could be analysed as a "technical regulation" under the TBT Agreement. While the question cannot be definitively settled at this stage, it is relevant to conduct the analysis in the light of the TBT Agreement. In any event, the measure should also be examined under the GATT.

Analysis of the compliance of the measures with the rules of the TBT Agreement and the GATT

The GATT, as a general law, applies in principle, but the TBT Agreement —the special law— must be applied first. Since the two agreements are not mutually exclusive and there is no presumption of compatibility with the GATT in the event of compliance with the TBT Agreement[111], the analysis must also be carried out with respect to the GATT.

Compliance with the TBT Agreement

The test provided by Article 2 of the TBT Agreement should be followed here. The case law shows that the standards contained in this article are applied in a manner very similar to the analysis carried out under the GATT[112]. In particular, the criteria used in Articles 2.1 of the TBT Agreement[113] and III:4 of the GATT[114] are applied in a convergent manner, insofar as the scope of the measures covered is the same in both cases[115].

Principle of non-discrimination

In accordance with Article 2.1 of the TBT Agreement, a technical regulation must accord to imported products *treatment no less favourable than that accorded to like products of national origin and to like products originating in any other country.* In other words, it must not discriminate between imported products and like domestic products.

Discrimination can only be established between products considered "similar" according to the set of indicators developed by the case law,[116] namely: international tariff classification, physical qualities and properties, end uses and consumer preferences and habits.

While the similarity test is not, in principle, based on the objectives of the regulation, the concerns behind the measure may play a role in the assessment[117]. It has already been accepted that the existence of a risk to health can exclude the competitive relationship between the dangerous product and the one which does not present any risk[118].

It would be possible to transpose this solution to the present case by arguing that, in the light of consumer preferences for environmentally friendly products[119], the different **production methods** preclude similarity between treated and untreated foods. If such an argument were accepted, then foods treated with substances that are banned because they are too dangerous for the environment would not be considered similar to foods that were not treated with these substances, thereby excluding the possibility of discrimination (which can only occur between similar products). The measures would then be deemed to comply with Article 2.1.

If, on the other hand, the foods are considered similar, it should be verified that the imported products are not **treated less favourably** under Article 2(1). Here, mirror provisions are in principle non-discriminatory "in law" since their purpose is to harmonise the system applicable to goods placed on the European market, provided there are no derogations. As such, it is vital that we address the issue of the derogations granted within the EU for certain environmentally hazardous substances, such as neonicotinoids, to avoid discrimination between domestic and imported products.

As regards possible *de facto* discrimination, this could be invoked if the EU's trading partners that permit the use of substances banned in the EU are denied access to the European market for foodstuffs treated with these substances[120].

However, a measure may still meet the requirements of Article 2.1 if the discrimination it creates is the result of a *legitimate regulatory distinction*[121]. For this, the measure must demonstrate impartiality in its design, architecture, operation and application to the particular circumstances of the case[122]. Here, the EU could rely on a legitimate regulatory distinction as in the "Hormones" dispute, in which the Appellate Body implicitly validated the structural impartiality of similarly designed mirror measures[123]. The Appellate Body found that the Panel's finding that the measures made arbitrary and unjustifiable distinctions was not supported *by the architecture [or] structure* of the measures.

Unnecessary obstacle to trade

Article 2.2 requires verification that *technical regulations are not prepared, adopted or applied* in order to or with the result of ***creating unnecessary obstacles*** *to international trade* (Art. 2.2). The obstacle to trade must be shown to be necessary to achieve a legitimate objective[124]. Here, therefore, the mirror measure must be shown to pursue a legitimate objective and be proportionate to that objective.

The **legitimate objectives** listed in Article 2.2 of the TBT Agreement include the **protection of animal life or health,** the **protection of plant health** and the **protection of the environment.** Clearly these reasons could be used to justify a measure aimed at protecting the environment and biodiversity. One panel found that the objective of protecting an endangered animal resource could be interpreted as protecting the life or health of animals or the environment[125].

In any case, this list is not exhaustive and has been supplemented by case law, in which the concept of "legitimate objective" is as interpreted by the courts[126]. As such, while the exceptions of GATT Article XX are not directly applicable to a TBT measure, it is at least possible to draw on them to identify legitimate objectives, in view of the proximity of the checks effected under the two provisions.

With regard to the ban on the placing on the market of food produced using substances prohibited because they are harmful to the environment abroad, the environmental protection objective listed in Article 2.2 seems appropriate for assessing the measure. Moreover, since the measure would also have the objective of preserving biodiversity, for example bees, the objective of preserving exhaustible natural resources, as listed in Article XX(g) of the GATT, could also be cited in its defence. The Appellate Body has already accepted, in the context of Article XX(g), that the protection of endangered species may fall within the scope of exhaustible resources[127]. It is important to emphasise that paragraph (g) **also applies when the protected resources are located outside the territory of the State initiating the measure**[128] and are not those forming the subject of the trade restriction[129]. There must be a close relationship between the end—the protection of the protected species—and the means—the trade restriction[130]. It is also required that the measure be **applied in conjunction with restrictions on domestic production or consumption.** By analogy with the GATT, it can therefore be argued that TBT measures can, in principle, pursue such an objective, including abroad[131]. In the present case, this reasoning would be fully relevant to preserving the bee population, and pollinators in general, since it is now scientifically established that the population is collapsing so fast that it is endangering the species as a whole and threatening the functions it performs for humanity[132].

The EU could also cite the objective of protecting public morals. In the *EC – Seal Products* dispute, the Panel accepted this reasoning under Article 2.2, by analogy with the exceptions of GATT Article XX[133]. In this case, it would need to be shown that the purpose of the regulation is not in itself to protect the environment abroad, but to prevent the EU, through its commercial activity, from participating in the endangerment of the environment or species under threat of extinction, in order to respond to societal demand from European citizens and consumers who refuse to contribute to practices that are contrary to their ethical imperatives.

Secondly, in order to determine the extent to which a measure achieves an objective, the design, structure, functionality and practical application of the measure must all be taken into account. As the measures in question have not yet been implemented, only their intrinsic characteristics can be considered. With these measures, citing the protection of public morals within the EU could make it easier to prove the full achievement of the objective, which would be fulfilled more "directly" than the objective of environmental protection or preservation of resources abroad.

Finally, the measure should not restrict trade more than necessary. There are two analyses to be made here:

- A **relational analysis** on the **contribution of the measure to the objective.** In other words, it needs to be shown that the measure *actually* achieves this objective. To do so involves considering factors such as the extent to which the measure contributes to the achievement of the objective pursued, the nature of the risks involved, the degree of trade impairment, and the importance of the societal interest that the measure is intended to protect[134]. Since the EU cannot interfere in the national policies of its trading partners, it can only respond to this urgent situation by refraining from encouraging

practices that run counter to its environmental concerns. In this respect, with a market of almost 500 million consumers, the EU has significant leverage and therefore responsibility in the choice of its imports. Demand from the EU helps to encourage certain products and production methods. Conversely, by refusing to import products that do not comply with its requirements, the EU is meeting the societal demand expressed by European consumers by contributing to a change in practices.

- A comparative analysis to determine if there is a viable alternative that is less restrictive to trade. The measure must be compared with possible feasible alternatives, to see whether the latter can offer equivalent protection of the objectives pursued while being less detrimental to trade[135]. The alternative could be to provide consumers with information on the origin or prohibited substance content of the products, for example by means of a label. However, this system would come up against a lack of traceability, endemic among certain trading partners. In any case, it would not ensure the same effectiveness in removing from the market products considered harmful and originating from countries with more relaxed standards. Alternatives such as these do not seem to meet the level of protection sought by the EU. In order to achieve this level of protection, therefore, a ban seems an appropriate means, as is already the case for domestic production. However, **since the degree of trade impairment is particularly high,** the measure amounting to a ban on the importation of a large quantity of products, this would be the most difficult point on which to convince a panel or an appellate body.

It is also worth noting that the pursuit of a legitimate objective **implies a certain level of consistency and not undermining its *full* achievement**[136] by, for example, establishing certain exceptions that would result in insufficient protection of the underlying values[137]. With this in mind, it would be desirable to **drastically restrict the use of exceptions and derogations** and to establish "reverse" mirror measures, ensuring full consistency of EU action.

A measure based on international standards

Even if the measure is justified under Article 2.2 of the TBT Agreement, it is in principle only consistent with the TBT Agreement if it is based on relevant international standards (Article 2.4 of the TBT Agreement) unless these are an *ineffective or inappropriate means for the fulfilment of the legitimate objectives pursued.* As such, it should first be investigated whether it is possible to rely on certain standards such as the International Code of Conduct on the Distribution and Use of Pesticides and, failing that, cite the inefficacy of existing standards in achieving the objectives pursued (to not contribute to environmental degradation in exporting countries).

Compliance with the GATT

Since the measure's compliance with the TBT Agreement does not permit formal presumption of its compatibility with the GATT, the latter should be analysed. However, in view of the proximity of the two analyses, compliance with the TBT Agreement will in most cases indicate compliance with the GATT. For ease of reference, the main factors underpinning analysis of GATT compliance are listed below.

Depending on whether the measure consists of a simple import ban or a general measure prohibiting the placing on the market of products in the EU, it would fall either within the scope of Article XI on border measures or Article III:4 governing internal regulations[138].

In the latter case, the similarity of domestic and imported products would need to be verified and the existence of less favourable treatment of imported products established. However, since Article 2 of the TBT Agreement has the same scope as GATT Article III:4, a measure that complies with the TBT Agreement should, in principle, be compatible with GATT Article III:4.

If the measure fell under the scope of Article XI of the GATT[139]—i.e. interpreted primarily as an import ban—it would automatically be considered contrary to this article, since the measures intended here

are prohibited and would have to be considered an exception in order to be found compliant.

In the event of incompatibility with GATT Article XI or Article III, Article XX contains several exceptions which might justify the measure, provided that it is not applied *in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade.* Paragraphs relating to the protection of public morals (a), the protection of human, animal or plant life or health (b), and the preservation of exhaustible natural resources (g) can be cited, following an analysis similar to that of legitimate objectives under the TBT Agreement. As explained above, the latter two grounds would be the most relevant.

The applicability of the other agreements should therefore be verified, starting with the TBT Agreement due to its specific nature. In this scenario, by prohibiting the placing on the market of animal products from farms that do not comply with European animal transport standards, the measures in question make access to the European market conditional on compliance with certain production standards. The applicability of the TBT Agreement to such measures, depending on whether the production method affects the physical characteristics of the product, is still under discussion. Pending clarification of the case law, it cannot, at least, be ruled out that such measures may be classified as technical regulations within the meaning of the TBT Agreement[140]. As with measures on environmentally hazardous pesticides, the GATT would be applied cumulatively with the TBT Agreement.

MIRROR MEASURES ON ANIMAL WELFARE

Mirror measures on animal welfare (in this case relating to transport) would be covered by the TBT Agreement and the GATT and seem to qualify for an exception by virtue of their ethical objective.

Applicable WTO Agreements

Animal welfare standards can have health benefits by preventing the development and transmission of pathogens between animals and from animals to humans. In this regard, it could be argued that some animal welfare measures are also aimed at protecting the **health of animals and humans** within the meaning of the SPS Agreement.

However, in the case of transport, the main objective is to **reduce animal suffering.** As a result, the measures are based on **ethical reasons,** excluding the possibility of them being classified as SPS measures and, as such, the applicability of the SPS Agreement.

Analysis of the compliance of the measures with the rules of the TBT Agreement and the GATT

Compliance with the TBT Agreement

Principle of non-discrimination

As noted above, discrimination can only be found between "like" products. The EU could therefore argue in the first instance that meat products from animal welfare compliant farms are not "like" products from non-compliant farms, due to their different **production methods**. While the Appellate Body has argued against this approach in the past[141], it appears to have begun to shift its position in this direction[142]. In addition, as the European consumer is becoming increasingly informed and aware of ethical issues[143], the similarity between domestic and imported products could be challenged in terms of **consumer preferences** for animal welfare friendly products.

Again, in the event that products are not found to be like products, the measures would be deemed

compliant with Article 2.1 of the TBT Agreement. If, on the other hand, the goods are deemed to be like goods, then a panel would have to verify that the EU measures do not result in **less favourable treatment** of imported products than domestic products. Here again, the mirror provisions are non-discriminatory "in law" since they are intended to harmonise the applicable system. But they create "de facto" discrimination in favour of European domestic products insofar as the EU's trading partners that do not impose the same animal welfare standards will be denied access to the European market, at least temporarily.

As with the measures relating to environmentally hazardous pesticides, a possible *legitimate regulatory distinction* (see above) can be argued, as in the Hormones dispute, where the Appellate Body implicitly validated the structural impartiality of similarly designed mirror measures[144].

Unnecessary obstacle to trade

Article 2.2 of the TBT Agreement involves checking whether measures are trade restrictive, and whether they pursue a legitimate objective and are proportionate to that objective.

First of all, as regards the restrictive nature of the measures, the finding made in relation to *de facto* discrimination appears transposable. The application of mirror measures will necessarily restrict trade in meat products between the EU and its trading partners.

Secondly, in order to determine the extent to which a measure achieves an objective, the design, structure, functionality and practical application of the measure must all be taken into account. As the measures in question have not yet been implemented, only their intrinsic characteristics can be considered. However, they confirm that the rationale for the measures is to respond to the societal demand expressed by European consumers (see above on the impartiality of the measures). In addition, it has already been accepted that the protection of animal welfare can be a legitimate objective under the objective of protecting animal life or health and the environment listed in Article 2.2 of the TBT Agreement[145].

Finally, in terms of proportionality, both relational and comparative analyses should be conducted (see above). As regards the **contribution of the measure to the objective pursued,** the same reasons can be put forward to justify the EU's action, namely that it wishes to refrain from encouraging practices that are contrary to its ethical imperatives, by refusing to import products that do not comply with these imperatives, as a means of satisfying the societal demand expressed by European consumers. As for the **comparative analysis,** in terms of animal welfare, the alternative is based on consumer information schemes on the origin of the meat. However, here too, these systems come up against a lack of traceability in certain countries and, by allowing products from countries with lower or even non-existent standards to be placed on the market, this type of alternative does not meet the desired level of stringency with regard to animal suffering.

A measure based on international standards

The possibility of basing measures on the World Organisation for Animal Health (OIE) standards for animal welfare should also be investigated. In particular, it might be possible to use the Terrestrial Animal Health Code, which contains standards for animal transport (Chapter 7.3)[146]. ISO 34700 standards may also be relevant[147]. However, as international standards in this area are low, they may not be adequate to support EU objectives, unless they are used for sectors where the EU has not yet established a level of protection[148].

Compliance with the GATT

Here too, as with the non-discrimination requirement, in the event of non-compliance the Union will be able to avail itself of the exceptions provided for by the GATT.

As explained above, the measures in question

are intended to meet a social demand for higher ethical standards in livestock rearing. As such, the measures could benefit from an exception to Article XX on the basis of the objective of protecting public morals, which has been held to cover animal welfare measures[149].

The review of the need for measures would be based on the same considerations as under the TBT Agreement. In order to demonstrate the good faith of its action, the Union would, again, have a vested interest in asserting the consistency of its approach by relying on actual or potential diplomatic actions such as:

- Participation in animal welfare negotiations and forums (such as the OIE) to promote a higher level of protection;
- The now systematic inclusion of animal welfare provisions in bilateral free trade agreements, in application of the integration clause with regard to animal welfare enshrined in Article 13 TFEU.

MIRROR MEASURES BANNING THE IMPORT OF BEEF FED WITH MEAT AND BONE MEAL

Measures prohibiting the import of livestock products fed with meat and bone meal are likely to fall under the SPS Agreement, the TBT Agreement and the GATT, or the GATT alone.

The ban on the use of meat and bone meal in cattle feed was introduced in response to the risks associated with bovine spongiform encephalopathy (mad cow disease). While it is true that the processing of animal protein theoretically limits the risk of this disease, the level of consumer protection may not be as high as would be provided by a complete ban on meat and bone meal. In the *Hormones* dispute, the ban on the use of growth hormones in meat and meat products was analysed **with respect to the SPS Agreement.**

The European ban and its possible extension to imported products are also aimed at public morality, consumer confidence and animal welfare.

As such, the measures could also be considered "technical regulations", thereby rendering the TBT Agreement applicable. There are rules on food that address production methods, but it is not entirely clear whether these methods have an impact on the physical characteristics of the product or not (see above). In the event that this agreement is applicable, the EU could cite the protection of public morals, or the ethical objective of protecting animal welfare, a legitimate objective under Article 2.2 TBT[150].

With regard to the GATT, if the measure were deemed contrary to the principles of non-discrimination, the EU could rely on the exception provided by Article XX(a), relating to the protection of public morals. Case law uses this provision in the context of the protection of animal welfare[151]. While, in the current state of scientific knowledge, demonstrating a health risk is likely to be problematic, the public's deep-seated concern about meat and bone meal since the mad cow crisis could be put forward here, particularly since the EU has banned its use in livestock farming within its territory for precisely these reasons.

In both cases, there may be grounds for the measures provided that strong factual arguments are made.

END NOTES

1. The global assessment report on biodiversity and ecosystem services summary for policymakers. IPBES.

2. UN COMTRADE DATABASE, EU28's food and agriculture imports increased from €52 billion to €66.5 billion, inflation-adjusted figures in constant EUR (EUROSTAT 2015)

3. Ferrari, E., Chatzopoulos, T., Perez Dominguez, I., Boulanger P., Boysen-Urban K., Himics, M., M'barek, R., Cumulative economic impact of trade agreements on EU agriculture – 2021 update, EUR 30496 EN, Publications Office of the European Union, Luxembourg, 2021, ISBN 978-92-76-27157-4, doi:10.2760/501873, JRC123037.

4. INSEE - statistiques

5. Income loss estimated by IDELE, based on the 2019 French Farm Accountacy Data Network (RICA)

6. IDELE, based on the National Identification Database (BDNI)

7. Le modèle d'élevage herbivore français, acteur du développement durable. IDELE

8. The term "pesticides" usually refers to products used on plants that control, destroy or deter organisms considered to be pests

9. Referred to as "plant protection" products under EU law

10. Regulation (EC) No 1107/2009 of the European Parliament and of the Council of 21 October 2009 concerning the placing of plant protection products on the market and repealing Council Directives 79/117/EEC and 91/414/EEC

11. The precautionary principle is a general principle of law requiring authorities to take "appropriate measures to prevent specific potential risks to public health, safety and the environment, by giving precedence to the requirements related to the protection of those interests over economic interests", and which allows them, in the event of scientific uncertainty of such risks, "to take protective measures without having to wait until the reality and seriousness of those risks become fully apparent" see Judgment of the General Court (ECG) of 17 May 2018, Bayer and Others v Commission, T429/13 and T451/13, point 109.

12. Pesticides Regulation, recital 4.

13. Pesticides Regulation, Article 4.1: "The assessment of the active substance shall first establish whether the approval criteria set out in points 3.6.2 to 3.6.4 and 3.7 of Annex II are satisfied. If these criteria are satisfied, the assessment shall continue to establish whether the other approval criteria (...) are satisfied".

14. Pesticides Regulation, Annex II, points 3.6.2, 3.6.3, 3.6.4 and 3.6.5.

15. ibid, points 3.7.1, 3.7.2 and 3.7.3

16. Pesticides Regulation, Article 4, para. 2. The Pesticides Regulation defines "vulnerable groups" as "persons needing special consideration when assessing the acute and chronic health effects of plant protection products", including "pregnant and nursing women, the unborn, infants and children, the elderly and workers and residents subject to high pesticide exposure over the long term" (Article 3, 14)).

17. Pesticides Regulation, Annex II, point 3.8.3.

18. According to the EU Pesticides database. According to a 2017 European Parliament report (p. 16), this is linked to the review carried out between 1993 and 2009 which led to the withdrawal of approximately 70% of the active substances on the market prior to 1993.

19. See the European Court of Auditors' Press Release of 09/07/2020, EU action had little effect on halting the decline of wild pollinators, say auditors.

20. Report from the Commission - Evaluation of Regulation (EC) No 1107/2009 and Regulation (EC) No 396/2005

21. https://www.lemonde.fr/planete/article/2021/02/25/119-parlementaires-europeens-denoncent-les-failles-du-systeme-d-evaluation-des-pesticides_6071226_3244.html

22. See for example the European Parliament resolution of 18 December 2019: "...it is unacceptable that substances which are known to meet the cut-off criteria for active substances that are mutagenic, carcinogenic and/or toxic for reproduction, or that have endocrine-disrupting properties, which are established to protect human and environmental health, continue to be allowed for use in the Union, thereby putting public and environmental health at risk".

23. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AOJ.L_.2021.023.01.0013.01.ENG&toc=OJ%3AL%3A2021%3A023%3ATOC

24. Pesticides Regulation, Article 29, para. 1.

25. Article 53 of the Pesticides Regulation.

26. Order of 5 February 2021 provisionally authorising the use of sugar beet seeds treated with plant protection products containing the active substances imidacloprid or thiamethoxam

27. See the European Court of Auditors' Press Release of 09/07/2020, EU action had little effect on halting the decline of wild pollinators, say auditors.

28. Regulation n°396/2005 of the European Parliament and of the Council of 23 February 2005 on maximum residue levels of pesticides in or on food and feed of plant and animal origin and amending Council Directive 91/414/EEC.

29. MRL Regulation, Article 10

30. MRL Regulation, Article 14

31. MRL Regulation, Article 12: "The Authority shall, within a period of 12 months from the date of the inclusion or non-inclusion of an active substance in Annex I to Directive 91/414/EEC after the entry into force of this Regulation, submit a reasoned opinion based in particular on the relevant assessment report".

32. MRL Regulation, Article 6, para. 2.

33. http://www.fao.org/fao-who-codexalimentarius/en/

34. The Commission subsequently issued a reaction in August 2019.

35. Unless specific conditions are waived under Article 53 of the Pesticides Regulation.

36. Report commission Decision of 20/05/2020 mentioned above.

37. Letter from DG Health of the European Commission, from 2017

38. Toxic residues through the back door, Corporate Europe Observatory, 16/02/2020. See for example: Minutes of a meeting between the Commission and Bayer on 15/11/2017. See also Le Monde - L'Union européenne sous pression pour autoriser des pesticides interdits dans les produits importés [European Union under pressure to allow banned pesticides in imported products], 17 February 2020

39. See: Email from Commission on import tolerances substances meeting cut-off criteria 25-03-2019.

40. https://members.wto.org/crnattachments/2020/SPS/EEC/20_4085_00_e.pdf; http://www.senat.fr/europe/textes_europeens/e15337.pdf

41. Communication from the European Commission, "A Farm to Fork Strategy for a fair, healthy and environmentally-friendly food system", 20/05/2020, point 4.

42. See Report from the Commission - Evaluation of Regulation (EC) No 1107/2009 and Regulation

(EC) No 396/2005 which states: "To inform business operators and third countries, the Commission and EFSA provide early information about developments related to the approval of active substances that might eventually lead to lowering of MRLs. Despite this early warning, trading partners often submit applications for import tolerances too late to avoid trade disruption"

43. foodwatch, foodwatch-Background Paper: Stop the poison boomerang (21 April 2020), p. 11 (citing an article from the Dutch newspaper Trouw).

44. ibid.

45. EFSA, National summary reports on pesticide residue analysis performed in 2018 (2020), p. 62. See also, EFSA, 2018 Annual Report on Pesticides (2020).

46. Order of 21 April 2016 suspending the import and placing on the market in France of cherries from Member States or third countries where the use of plant protection products containing the active substance dimethoate is authorised. This suspension has been renewed every year since then (see Order of 2020).

47. See Resolution of 14 May 2020 concerning soybean MON 87708 × MON 89788 × A5547-127. Parliament further notes that the Commission's control programme does not require Member States to check residues of glufosinate used in addition to glyphosate and banned in the EU.

48. Such considerations have, for example, been enshrined by the Constitutional Council in Decision 2019-823 QPC of 31 January 2020 which recognises as an objective of constitutional value the "protection of the environment, the common heritage of all mankind", justifying restrictions of the right of free enterprise (the ban on the export of pesticides banned in the EU introduced by the EGALIM law), including to protect the environment outside the EU.

49. Resolution of the European Parliament of 13 March 2019

50. Resolution of the European Parliament of 17 September 2020.

51. "Farm to fork": The Commission will take into account environmental aspects when assessing requests for import tolerances for pesticide substances no longer approved in the EU

52. From 1 January 2022, the production, storage and circulation (i.e. trade and export) of pesticides containing active substances that have not been approved under Regulation (EC) No 1107/2009 of the European Parliament and of the Council of 21 October 2009 for reasons relating to the protection of human and animal health or the environment, shall be prohibited.

53. Eurostat (2015-2019) Database: International Trade > EU Trade Since 1988 by HS2, 4, 6 and CN8 > Exports of HS code 3808 (pesticides) from the EU to Mercosur, last five years (2015 – 2019). Quoted by Greenpeace, EU-Mercosur: Double standards concerning agrotoxics (May 2020), p. 6.

54. https://www.publiceye.ch/en/topics/pesticides/pesticide-giants-make-billions-from-bee-harming-and-carcinogenic-chemicals.

55. EU-Mercosur: Double standards concerning agrotoxics. How the EU and German companies profit from the sale of pesticides detrimental to biodiversity, Greenpeace Germany, May 2020

56. https://twitter.com/SlowFoodEurope/status/1351496113556217859.

57. Letter from the Commission (9 December 2020).

58. Statistics from the Meat Market Observatory

59. LSE, Sustainability Impact Assessment in Support of the Association Agreement Negotiations between the European Union and Mercosur, Draft Final Report July 2020, p. 185.

60. See Commission Press Release IP/05/1687 of 22/12/2005 "Ban on antibiotics as growth promoters in animal feed",

61. Regulation (EU) 2019/6 of the European Parliament and of the Council of 11 December 2018 on veterinary medicinal products.

62. Discussions on the revision of the Code of Practice for antimicrobials are also underway as part of the work being done by the Codex Alimentarius' Intergovernmental Task Force on Antimicrobial Resistance. See article "No time to waste to conserve antibiotics for future generations", 09/12/2019 on the Codex Alimentarius website.

63. Regulation (EU) 2019/6, Recital 41.

64. In Brazil in particular, six antibiotic growth promoters are authorised in animal feed (Report of the Assessment Committee for the draft EU/Mercosur Agreement of 18/09/2020, p.107)

65. Regulation (EC) No 999/2001 of the European Parliament and of the Council of 22 May 2001 laying down rules for the prevention, control and eradication of certain transmissible spongiform encephalopathies

66. During the "mad cow" crisis of 1996, beef consumption collapsed, due both to fear of the disease and to the revelation of previously unknown farming practices.

67. Regulation (EC) No 999/2001, Annex IX, Chapter C.

68. Regulation (EC) No 999/2001, Annex IX, Chapter C, Section C

69. Regulation (EC) No 1/2005 of 22 December 2004 on the protection of animals during transport and related operations, Annex 1, Chapter V, point 1.2.

70. For unweaned calves in suitably equipped vehicles, the maximum travel time is divided into: 9 hours of travel, 1 hour's rest, 9 hours of travel. If the animals have not reached their destination after this transport time, they must be unloaded, fed and watered, and must rest for a minimum of 24 hours at an EU-approved checkpoint.

71. See in this regard the Eurogroup for Animals report on the EU-Mercosur trade agreement, p. 9 ff.

72. With the notable exception of eggs.

73. Regulation 2017/625

74. https://www.gov.br/agricultura/pt-br/assuntos/sanidade-animal-e-vegetal/saude-animal/rastreabilidade-animal/sisbov

75. https://ec.europa.eu/food/audits-analysis/audit_reports/details.cfm?rep_id=4287.

76. See answer given by the Commissioner for Health and Food Safety, Mrs Kyriakides, on 30/11/2020 to the written question by MEP Eric Andrieu. See also on this subject the article in La France Agricole, "Bruxelles tente d'enterrer la polemique sur le bœuf aux hormones" [Brussels tries to bury the controversy over beef hormones], 15/12/2020.

77. Monitor, "*Trabalho escravo na industria da carne*."Reporter Brasil, January 2021. See also: https://www.theguardian.com/environment/2021/jan/06/brazilian-beef-farms-used-workers-kept-in-conditions-similar-to-slavery

78. https://www.researchgate.net/publication/343017296_The_rotten_apples_of_Brazil's_agribusiness

79. https://www.researchgate.net/publication/343017296_The_rotten_apples_of_Brazil's_agribusiness

80. See for example: Greenpeace press release of 11 June 2019.
See also: Devoir de vigilance et Déforestation. Le cas oublié du Soja [Duty of Vigilance and Deforestation. The Forgotten Case of Soy], FNE, Mighty Earth and Sherpa, March 2019

81. Law No 2018-938 of 30 October 2018 for a balance in trade relations in the agriculture and food sector, and healthy, sustainable and accessible food for all.

82. Law No 2020-1578 of 14 December 2020 concerning the conditions for the placing on the market of certain plant protection products in the event of a health danger to sugar beet.

83. https://www.europarl.europa.eu/factsheets/en/sheet/51/la-securite-des-aliments. Food safety includes food and feed hygiene, animal health, plant protection products and the prevention of food contamination. However, controls are carried out at national level.

84. Written question No 11848 submitted by Mr Michel Raison, Defending French production against unfair competition from foreign products.

85. See the aforementioned Contribution from France dated 20/11/2020 to the

public consultation on EU trade policy.

86. According to the established case law of the Court of Justice of the European Union ("CJEU"), the choice of legal basis for an EU measure must be based on objective factors such as the aim and content of the measure: CJEU, Commission v. Parliament and Council (2009), C-411/06, EU:C:2009:518, para. 45. To proceed on an erroneous legal basis may lead to the invalidation of the measure (CJEU, Opinion 2/00 on the Cartagena Protocol (2001), EU:C:2001:664, para. 5).

87. Article 207 of the TFEU. However, according to consistent case-law, "the mere fact that an act of the European Union is liable to have implications for international trade is not enough" for it to fall within the scope of the common commercial policy. Article 207 TFEU is only applicable if the act "relates specifically to international trade in that it is essentially intended to promote, facilitate or govern trade and has direct and immediate effects on trade" (CJEU, Commission v. Council (2013), C-137/12, EU:C:2013:675, paras. 56-57). For example, Parliament based its proposal for a regulation on imported deforestation on Article 114 TFEU (internal market) and Article 192 TFEU (environment), despite the certain effects that the proposed measures would have on external trade.

88. Articles 289 and 294 of the TFEU.

89. In particular, Article 207(2) TFEU provides that the adoption of internal and autonomous measures under the common commercial policy shall be adopted by means of regulations

90. See, for example, the communication of 1 November 2019, in which Canada and other WTO members challenge European regulations in this area.

91. Agreement on the Application of Sanitary and Phytosanitary Measures, 15 April 1994, Annex 1A of the Agreement Establishing the WTO, entry into force: 1 January 1995.

92. Agreement on Technical Barriers to Trade, April 15, 1994, Annex 1A of the Agreement Establishing the WTO, entry into force: 1 January 1995.

93. General Agreement on Tariffs and Trade, as amended by "GATT 1994", 15 April 1994, Annex 1A of the Agreement Establishing the WTO, entry into force: 1 January 1995.

94. Letter from DG Health of the European Commission, from 2017.

95. Report of the Appellate Body, EC - Hormones (1998), para. 27.

96. "EC – Hormones" dispute, AB report, para. 187.

97. Study conducted in the Netherlands and 2018 EFSA Report

98. See in this regard the example of the audit carried out in Canada as part of the CETA environmental impact assessment.

99. Report of the Appellate Body, EC – Hormones, para. 124: "the precautionary principle indeed finds reflection in Article 5.7 of the SPS Agreement". But the Appellate Body states that "the principle has not been written into the SPS Agreement as a grounds for justifying SPS measures that are otherwise inconsistent with the obligations of Members set out in particular provisions of that Agreement".

100. Report of the Appellate Body, Canada - Continued Suspension (2008), para. 679.

101. Report of the Appellate Body, EC – Hormones (1998), para. 124.

102. This is also allowed under Article 5.7.

103. See the above-mentioned EFSA study and report.

104. See in this respect "EC–Hormones" (1998), para. 210 et seq.

105. Joint Statement from MEPs on the EU's double standards on hazardous pesticides, Brussels, 11 November 2020.

106. Evaluation of Regulation (EC) No 1107/2009 on the placing of plant protection products on the market and of Regulation (EC) No 396/2005 on maximum residue levels of pesticides, Box 15.

107. Article 1.1.

108. These measures, as a means of unilaterally addressing extraterritorial issues, are perceived by some States as illegitimate interference in the internal affairs of the exporting country and are therefore a likely source of dispute at the WTO level.

109. Report of the Appellate Body, EC–Seals (2001), para. 2.152

110. Report of the Appellate Body, EC–Asbestos (2001), paras. 61 and 68.

111. Report of the Panel, EC – Asbestos, para. 8.16

112. Robert Howse, "The World Trade Organization 20 Years On: Global Governance by Judiciary", The European Journal of International Law (2016), vol. 27, no. 1, p. 56.

113. Technical regulations must accord to imported products "treatment no less favourable than that accorded to like products of national origin and to like products originating in any other country".

114. "Products of the territory of any contracting party imported into the territory of any other contracting party shall be accorded treatment no less favourable than that accorded to like products of national origin in respect of all laws, regulations and requirements affecting their internal sale, offering for sale, purchase, transportation, distribution or use".

115. Report of the Appellate Body, United States – Clove Cigarettes (2012). The Appellate Body held that the interpretation of the concept of similarity set out in Article 2.1 TBT must be made in the context of the TBT Agreement and of Article III:4 of the GATT.

116. As recalled in "United States – Tuna 2 " dispute (2017).

117. Report of the Appellate Body, United States – Clove Cigarettes. In this dispute brought under the TBT Agreement, the Appellate Body endorsed the reasoning in the EC – Asbestos case under the GATT, in which the Appellate Body stated that all relevant evidence must be evaluated, including the regulatory concerns underlying a measure, where they are reflected in the competitive relationship of the products.

118. Report of the Appellate Body, EC – Asbestos, paras. 152-154.

119. Report of the Appellate Body, United States – Clove Cigarettes, para. 136 et seq. European consumers are more and more informed and aware of ethical issues. See in particular Information Report No 476 (2019-2020) by Mrs Françoise Cartron and Mr Jean-Luc Fichet, issued on behalf of the Senate Delegation for Foresight, tabled on 28 May 2020, p. 27 et seq.

120. There are two criteria for determining the existence of de facto discrimination: (i) the use by the exporting State of a production method which is prohibited in the importing State, and (ii) a change in competition conditions introduced by the measure to the detriment of imported products. See the United States – Tuna 2 dispute (2017).

121. Report of the Appellate Body, United States – Clove Cigarettes (2012).

122. ibid.

123. Report of the Appellate Body, EC – Hormones (1998), para. 246.

124. Article 2.2 of the TBT Agreement: "For this purpose, technical regulations shall not be more trade-restrictive than necessary to fulfil a legitimate objective, taking account of the risks non-fulfilment would create. Such legitimate objectives are, inter alia, (...) the protection of human health or safety, animal or plant life or health, or the environment. In assessing such risks, relevant elements of consideration are, inter alia: available scientific and technical information, related processing technology or intended end-uses of products".

125. Report of the Panel, United States – Tuna II (2011), para. 7.437. However, the Appellate Body did not have the opportunity to validate this reasoning.

126. Report of the Appellate Body, United States – Tuna II (Mexico) (2012), para. 313.

127. Appellate Body, 12 October 1998, United States – Shrimp

128. Report of the Appellate Body, United States – Shrimp (1998), para. 121.

129. Report of the Panel, United States – Tuna

II. The protected resource (e.g. bees) is not the one subject to the trade restriction (agricultural products based on banned pesticides).

130. ibid., para. 136.

131. C. Blattner, Protecting Animals Within and Across Borders (Oxford University Press, 2019), p. 139.

132. Greenpeace, "Abeilles en danger: un fléau aux causes multiples et aux conséquences catastrophiques" [Bees at Risk: A Crisis with Multiple Causes and Catastrophic Consequences].

133. Report of the Panel, EC – Seal Products, para. 7.382. The Appellate Body did not have the opportunity to rule on the matter.

134. Report of the Appellate Body, United States – Tuna II (Mexico) (2012), paras. 320-322.

135. ibid., para. 322.

136. ibid., p. 137.

137. Report of the Panel, EC – Seal Products (2013), para. 7.409. The Panel considered that an exception impeded the pursuit of the objective, which could not be "achieved" within the meaning of Article 2.2 of the TBT Agreement.

138. Subject to not being reclassified as a measure at the border. In the absence of similar domestic production, a sales ban would in practice amount to an import ban, triggered by the crossing of a border. However, it could be argued that the absence of domestic production is simply the consequence of the marketing ban, and not the other way around, to endorse the applicability of Article III (see Report of the Panel, EC – Asbestos, paras. 8.91-8.96). It should also be noted that the mere fact that an internal regulation includes a ban on imports in order to be effective does not change its classification and turn it into a simple administrative measure applied at the border (interpretative note to Article III).

139. As a simple import ban or an internal regulation reclassified as a border measure

140. Ming Du, "What Is a "Technical Regulation" in the TBT Agreement?" European Journal of Risk Regulation (2015) No. 6, p. 400.

141. ibid.

142. "Canada – Renewable Energy " (2013).

143. See supra, note 31.

144. "EC – Hormones" dispute (1998): the Appellate Body found that the Panel's finding that the measures made arbitrary and unjustifiable distinctions was not supported "by the architecture [or] structure" of the measures

145. Report of the Panel, EC – Seal Products (2013), para. 7.409

146. Eurogroup for Animals, Animal Protection in EU Trade Negotiations (2020), p. 28. It should be noted, however, that the EU-Mercosur agreement contains a narrower definition of the relevant international standards able to be used here and that Article 6 of its TBT chapter does not mention the OIE as one the regulators generating these standards.

147. ISO 34700, Animal welfare management — General requirements and guidance for organizations in the food supply chain.

148. Eurogroup for Animals, op. cit. p. 29.

149. This interpretation is that of the Appellate Body in its report on the " EC–Seal" dispute (2014).

150. Report of the Panel, EC — Seal Products (2013), para. 7.409.

151. Report of the Appellate Body, EC — Seal Products (2013), paras. 5.139, 5.146 and 5.166.

152. Pesticide giants make billions from bee-harming and carcinogenic chemicals, Public Eye and Unearthed, February 2020

153. Hazardous Pesticides from Bayer and BASF—a global trade with double standards, Campanha Permanente Contra os Agrotóxicos e Pela Vida, INKOTA-netzwerk, Khanyisa, MISEREOR and Rosa-Luxemburg-Stiftung, April 2020

154. https://www.leparisien.fr/economie/consommation/graines-de-sesame-contaminees-pres-de-300-produits-deja-retires-des-rayons-20-11-2020-8409568.php

155. MRL Sheet. By way of illustration, the MRL for sesame seeds was set at 0.02mg/kg.

156. http://www.senat.fr/rap/r20-368/r20-368.html

157. Information report by Mr Laurent Duplomb, on behalf of the Committee on Economic Affairs, 17 February 2021

158. P. Grigori, "Half a billion bees dead as Brazil approves hundreds more pesticides"(Mongabay, 23 August 2019).

159. For imidacloprid: Regulation 2018/783 of 29/05/2018; for thiamethoxam: Regulation 2018/785 of 29/05/2018; for clothianidin: Regulation 2018/784 of 29/05/2018

160. By way of illustration, see the EU Court of Auditors' press release from 09/07/2020, EU action had little effect on halting the decline of wild pollinators, say Auditors.

161. Article 53 of Regulation (EC) No 1107/2009, however, gives Member States the power to authorise, by way of derogation from the normal procedure and for a period not exceeding 120 days, the placing on the market of plant protection products "for limited and controlled use, where such a measure appears necessary because of a danger which cannot be contained by other reasonable means". The Member State must then inform the European Commission and the other Member States, "providing detailed information about the situation and any measures taken to ensure consumer safety". Source: Reply from the Ministry of Agriculture and Food published in the JO Sénat of 25/07/2019.

162. ibid.

163. Beata M. Kolakowski, Leigh Miller, Angela Murray, Andrea Leclair, Henri Bietlot, and Jeffrey M. van de Riet "Analysis of Glyphosate Residues in Foods from the Canadian Retail Markets between 2015 and 2017" J. Agric. Food Chem. 2020, 68, 5201-5211

164. https://www.usda.gov/media/press-releases/2017/06/22/perdue-usda-halting-import-fresh-brazilian-beef

165. https://www.lefigaro.fr/flash-eco/2017/03/21/97002-20170321FILWWW00394-le-mexique-suspend-l-importation-de-produits-avicoles-du-bresil.php

166. https://money.cnn.com/2017/03/22/news/economy/brazil-meat-scandal/

167. See, for example, the communication of 1 November 2019, in which Canada and other WTO members challenge European regulations in this area.

168. Agreement on the Application of Sanitary and Phytosanitary Measures, 15 April 1994, Annex 1A of the Agreement Establishing the WTO, entry into force: 1 January 1995.

169. Agreement on Technical Barriers to Trade, 15 April 1994, Annex 1A of the Agreement Establishing the WTO, entry into force: 1 January 1995.

170. General Agreement on Tariffs and Trade, as amended by "GATT 1994", 15 April 1994, Annex 1A of the Agreement Establishing the WTO, entry into force: 1 January 1995.

FONDATION NICOLAS HULOT
THINK TANK

https://www.fnh.org/think-tank/

After 30 years of actions, the Nicolas Hulot Foundation is giving a new ambition to its Think Tank activity, created about ten years ago. Starting with the question: "What would a government determined to make the ecological transition do? ", the Foundation's Think Tank focuses on the "blind spots" in public policies by untangling the subjects bogged down or even unexplored. **Its ambition: create the conditions for a next five-year period of social and ecological transformation.**

A non-partisan space, the Think Tank proposes concrete and **ambitious roadmaps to build a social force ready to deploy the ecological and solidarity-based transition.** To do so, its action is based on two principles:

1. Tackle the issues at the heart of the French people's expectations but for which the State has not gone all the way, to think and propose a path of action that links sustainability, social well-being and economic resilience.

- The Think Tank focuses on key ecological issues such as: reduction of pesticides, transformation of the automobile model, future of livestock farming, exit from nuclear power or the evolution of freight.
- Each subject is investigated in the light of the locks that block the transition: support in employment, coherence of financing, reform of European budgetary rules, transformation of companies or development of a green diplomacy.

2. Thinking through and for dialogue in order to federate widely in action. The Think Tank builds new alliances in society, expanding the usual working circles - NGOs, academics... - to unions, professional federations... The challenge is nothing less than to design, with those who will be called upon to implement it, a transition path that is both demanding and unifying.

The work of the Think Tank is reflected in the regular publication of:

- **Reports:** in-depth formats, updating new data to establish a clear picture and define roadmaps for transition.
- **Contributions:** "note" formats to welcome individual or collective productions on subjects to be cleared or explored.
- **Points of view:** "tribune" formats to ask an expert's opinion on a current or emerging topic.

To go further, the Think Tank organizes events, the ***Think Tank Talks,*** to debate and discuss the new data and the proposed roadmaps. A ***newsletter*** allows everyone to stay informed of new productions.

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30e ANNIVERSAIRE

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INTERBEV is the French interbranch organization for livestock and meat, founded in 1979 on the initiative of associations representing the French livestock and meat industry. INTERBEV is composed by five sections whose missions are to ensure the development and promotion of beef, calves, sheep, horses and goats sectors. INTERBEV federates and promotes the common interests of breeding, artisanal, industrial and commercial activities in these sectors, which constitutes one of the first economic activity in our territory.

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