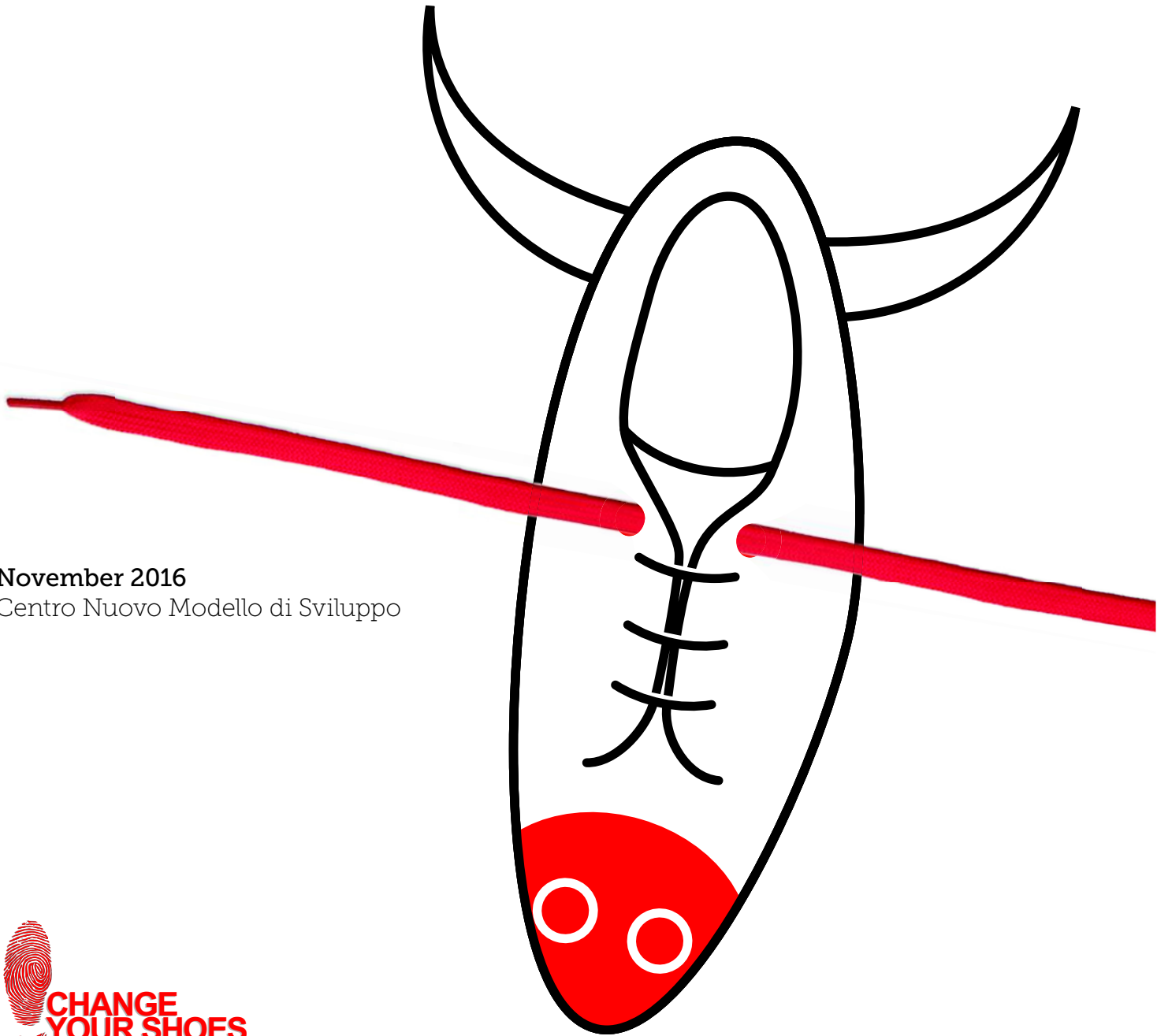


# DID YOU KNOW **THERE'S A COW** IN YOUR SHOE?

The labour and the environment  
behind a pair **of leather shoes**



November 2016  
Centro Nuovo Modello di Sviluppo

# THE POLITICAL STORY BEHIND THIS REPORT

This report was produced as part of “Change Your Shoes” (CYS), a three-year Development Education and Awareness Raising (DEAR) project on social and environmental issues, organized by 15 European and 3 Asian organizations, with the financial support of the European Commission’s Directorate-General for International Cooperation and Development (DG DEVCO)<sup>1</sup> Looking primarily at leather shoes, the aim of the project is: “consumers become more aware that the lifestyle choices come with responsibilities, and through advocacy enhanced by better and relevant information they can instigate policy change that, in the interest of human rights, will ultimately improve the working conditions and well-being of those further down the production chain in the shoe industry”.

Among other activities, the project includes research on social and environmental conditions in the global shoe production chain, starting from tanneries, in countries such as China, India and Indonesia, as well as Turkey, Eastern Europe and Italy. The latter plays an important productive role both in tanning and footwear sectors. Our research focuses mainly on: wages; health risks of chromium VI; financial investments and profits. This information provides the basis for activities aimed at raising awareness of European citizens, through the publication of materials and media campaigns. The research also supports the lobby work necessary to solve cases of human rights violations, to meet the project’s overall objective to improve the working conditions of the most vulnerable workers, wherever they produce our shoes in the global supply chain.

In Italy the research started with an investigation into tanning, the first stage of the production process of leather shoes. The Santa Croce district in Tuscany was identified as the research area, as it represents a strategic

centre for the global supply chain. Once the study had been completed, the research was published in December 2015 in our report: “A tough story of leather”.

In January 2016, the CYS consortium was informed by DG DEVCO that two European business associations, the European Confederation of the Footwear Industry (CEC) and the European Confederation of the Leather Industry (COTANCE), had complained to DG GROWTH (the EC department for economic and industrial development) about the report’s contents. Therefore, a clarification meeting was held in Brussels on February 18th and saw the participation not only of CYS and DG DEVCO, but also unexpectedly of DG GROWTH, DG Employment, CEC, COTANCE and UNIC (Italian Tanners Association), accompanied by lawyers from the law firm Fratini-Vergano.

During the meeting, the representatives of UNIC only advanced vague objections against the report, but concluded by announcing they would take legal action if it was not withdrawn. At the same time DG DEVCO and DG GROWTH officials were criticizing the report by claiming that its contents were out of the scope of the project. The CYS delegation agreed, as an act of good will, to temporarily withdraw the report, to answer the criticisms put in writing by UNIC and to wait for a second meeting aimed at publicly debating the outcomes of the report, before publishing it again.

On March 4th UNIC sent its written criticisms and CYS replied by March 21st. CYS provided UNIC, CEC, COTANCE and the European Commission with a detailed written statement in reaction to the criticisms raised against the report “A tough story of leather” and outlined all the relevant sources. Furthermore, CYS proposed to organize a public meeting in Geneva on April 28th with COTANCE, including international organizations like ILO and trade unions, but COTANCE refused to participate. Meanwhile Südwind, the CYS consortium

<sup>1</sup> European Year for Development (EYD) 2015 – Starting point of the way to an ethical and sustainable shoe supply chain (DCI-NSAED/2014/ 353-107)

leading agency, was informed by DG DEVCO officials that, due to the problem with the report, the EC grant contract would be reviewed and could also be terminated. Furthermore, DG DEVCO said that a second meeting in Brussels, again behind closed doors, would be necessary to discuss the issue.

The second meeting took place on May 2nd, in the DG GROWTH building, and the same representatives who met on February 18th were involved. While the industry's representatives claimed that the report had to be definitively withdrawn, because it was harmful to their image, and hence to the economic interest of the European tanning sector, the European Commission officials maintained that the report was out of the scope of the project because the research was not supposed to analyse poor working conditions in Europe, but only those in non-European countries. Instead, if we wanted to deal with Europe, we should have referred only to best practices, they said. Furthermore UNIC, CEC and COTANCE demanded that CYS stop the independent media reporting about exploitative working conditions in Italy and even ask them to delete already published reports and TV broadcasts from online media platforms, such as several TV broadcasts about working conditions in the leather and shoe industry produced by the German TV station ARD. Additionally CYS was urged to delete all articles and postings from social media channels dealing with or referring to the findings of the report "A tough story of leather". CYS rejected both requests raised by UNIC, CEC and COTANCE. As an alternative, CYS offered the industry representatives a dialogue with external moderation by a elder statesman in a broad multistakeholder format, but that offer was unfortunately refused.

Since CYS hadn't received any specific confutation of data and findings and since no arguments proving that the report was outside the scope of the contract had been given to us, on May 3rd the report was put back online together with the criticism expressed by UNIC<sup>2</sup> and CYS' replies<sup>3</sup>. To our dismay, the

2 [http://www.abitipuliti.org/changeyourshoes/wp-content/uploads/sites/3/2015/12/UNIC\\_comments\\_353-107-Feb16-Final-2.pdf](http://www.abitipuliti.org/changeyourshoes/wp-content/uploads/sites/3/2015/12/UNIC_comments_353-107-Feb16-Final-2.pdf)

3 [http://www.abitipuliti.org/changeyourshoes/wp-content/uploads/sites/3/2015/12/CYS-Answers\\_to\\_UNIC.pdf](http://www.abitipuliti.org/changeyourshoes/wp-content/uploads/sites/3/2015/12/CYS-Answers_to_UNIC.pdf)

4 For any information about the initiative of the members of the European Parliament, please contact the office of Mr Cofferati MEP - [http://www.europarl.europa.eu/meps/it/96915/SERGIO+GAETA-NO\\_COFFERATI\\_home.html](http://www.europarl.europa.eu/meps/it/96915/SERGIO+GAETA-NO_COFFERATI_home.html)

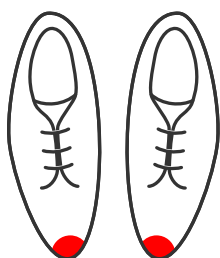
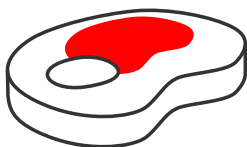
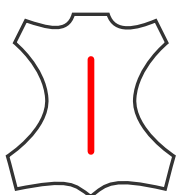
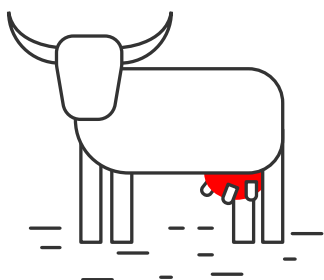
controversy concerning the report from that moment on, started negatively affecting the EC's decision to transfer the financial instalments for the project. The project's consortium, in its second year, was waiting for the 2016 instalment, which, according to the contract, was expected by May 31st. On May 4th the consortium was informed via e-mail that the instalment was sine die suspended, as project expenses in 2015 regarding the Italy report were under examination. This put all the NGOs in the consortium in hard financial difficulties and, interpreting the suspension as an attempt to impose a block on the Italian report, CYS informed a group of Members of the European Parliament about these developments.

On June 15th, 26 Members of the European Parliament sent Neven Mimica, Commissioner for International Cooperation and Development, a letter asking for an explanation of the instalment's suspension<sup>4</sup>. As a consequence, on June 29th 90% of the 2016 instalment was released, while the remaining 10% was retained pending verification of compliance with the contractual conditions, as specified by Neven Mimica's reply. We have never received any formal notification from the EC of any contractual violation, but, according to information collected through various informal contacts, the consortium realized that what is at stake is the Italian report and its political relevance.

In order to avoid further interferences in the dissemination of the report "A tough story of leather", to release the remaining part of the second year instalment, and to safeguard the development of all the CYS planned activities, the consortium has decided to remove the EU logo from the cover of the report, to pay for all associated costs from its organizations' own funds, and to republish it again in all countries of the CYS partnership with CYS-logo and with all partners' logos. At the same time, strongly condemning any form of pressure exerted on the European Commission by economic lobbies, the CYS encourages all political parties, unions and social forces to monitor such lobbying and to ensure that the European Commission is not subjugated to those forces, instead promoting and protecting human rights worldwide.

# YOUR SHOES, FROM THE FIELD TO THE STORE

1



## FARMS

The journey of a leather shoe begins on the farm, where cattle are raised. It is these animals that provide the majority of the **skins** produced throughout the world, approximately **66%**. However, the skins of sheep, goats and pigs are also used for industrial purposes.

## ABATTOIR

The primary revenue is represented by the meat industry, but shouldn't be underestimated the value of byproducts, particularly the skin.

## TANNING









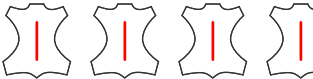


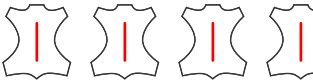



Raw animal skin is an extremely delicate product. After skinning, the skin is salted and sent to the tanning sector, where it undergoes a lengthy process involving about twenty different operations. At the end of this process, after passing through all the stages of the tanning chain, the skin is finished and is ready to be turned into the components of a pair of shoes.

## SHOE MANUFACTURING

The thickest skin is used to manufacture the soles, while the thinner, softer parts provide the uppers and various other components. Luxury brands are very careful about the quality of the skins used and often use specific corporate strategies to monitor the origin of the raw materials and the quality of the processing throughout the production chain.

# THERE'S NO LEATHER WITHOUT MEAT

## MAIN PRODUCERS OF BEEF

COUNTRY	BEEF	RAW SKIN
 USA	 <b>11,078,000 tons</b>	 <b>834,000 tons</b>
 Brazil	 <b>9,723,000 tons</b>	 <b>832,000 tons</b>
 China	 <b>6,890,000 tons</b>	 <b>760,000 tons</b>
 UE	 <b>7,410,000 tons</b>	 <b>668,000 tons</b>
 India	 <b>4,125,000 tons</b>	 <b>479,000 tons</b>






JBS is a Brazilian multinational specialised in the meat industry and heavily involved in the leather industry.

  
**185,000**  
employees

\$\$\$\$\$\$\$ annual turnover  
\$\$\$\$\$\$\$ **50 billion**  
\$

Each day, it slaughters:

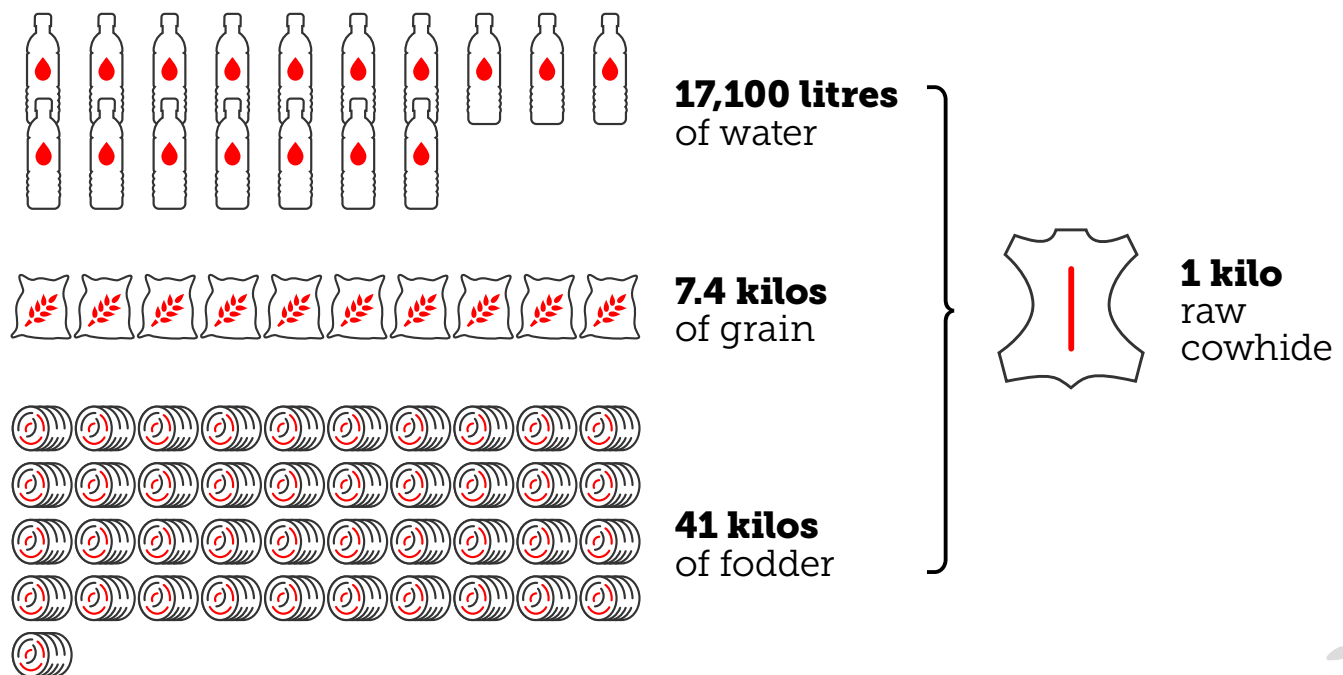
**100,000**  cattle  
**70,000**  pigs  
**25,000**  lambs

It owns 26 tanneries throughout the world:  
**Brazil, Argentina, China, Germany, Italy, Mexico, South Africa, Vietnam and Uruguay**

# THE FEED COST OF A RAW SKIN

3

MATERIALS REQUIRED TO PRODUCE ONE KILO OF RAW COWHIDE



On a global scale, more than **40% of annual cereal** production is used **to feed livestock**, and almost **one third of the 14 billion hectares of arable land available** throughout the world is used to obtain food to be given as feed to animals.

## Alternatives to meat

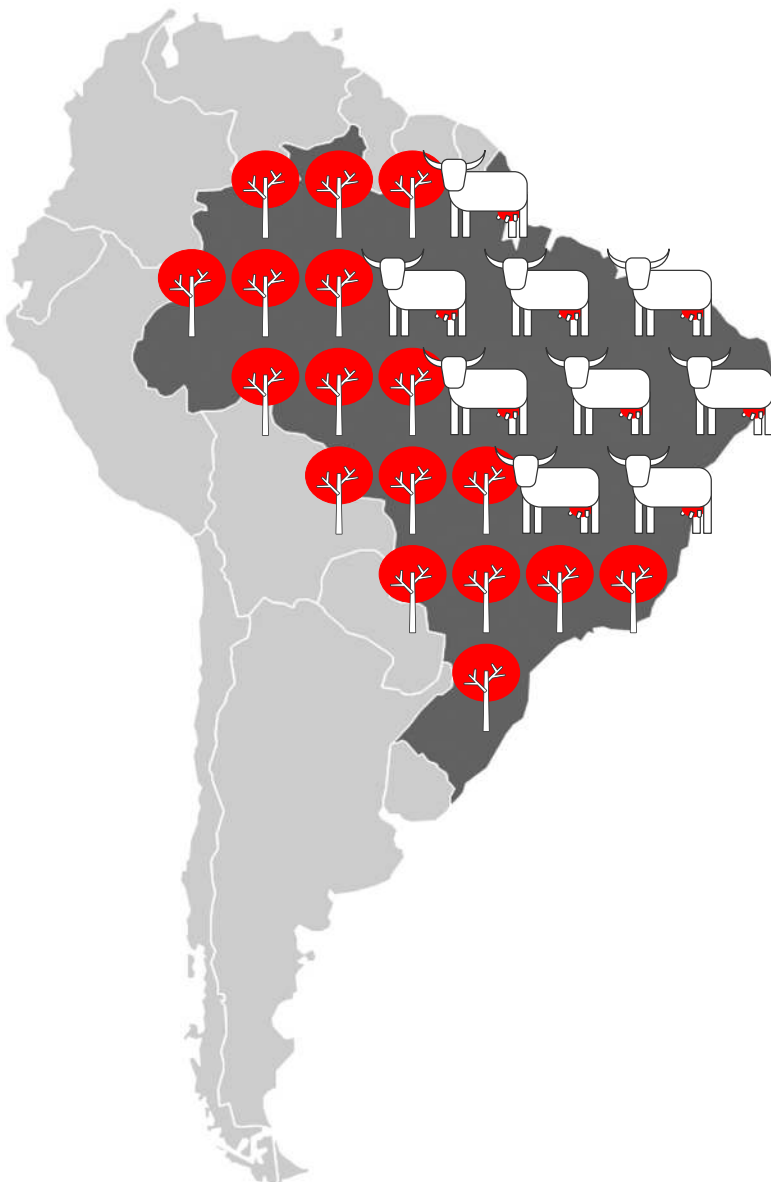
One of the characteristics of meat is its high protein content. But it is not the only **protein-rich food**, and we can meet our protein needs using other products. Apart from fish, eggs and dairy products, many vegetables also provide the protein required for a healthy diet, provided that we are careful to eat a varied range of foods including **cereals, legumes, soya and dried fruit**. Limiting our intake of meat, or even eliminating it entirely from our diets, is indicated not only for environmental and food equality reasons, but also to protect our health, because excess meat in our diets can have negative effects on the kidneys and intestines.



# THE ADVANCE OF GRAZING LAND INTO THE FOREST

Brazil is home to **211 million head of cattle**: the amount of land required to raise all of these animals is enormous, and attention of producers has been focussing on the Amazon rainforest as a means of providing the necessary hectares.

Only **4.9%** of the deforested land in Brazil **is intended for agriculture**. And while **21% is unused** pending a decision as to how it will be used, **62.2% is used as pasture**. So the largest rainforest on the planet is disappearing so we can raise livestock.



The French association Envol Vert estimates that cattle farming intended for the **production of meat and leather** contributes at a rate of **65% to deforestation** of the Amazon: the pasturelands are located primarily in a fifty-kilometre-wide strip along the main roads passing through the forest.

Forests have an incredibly important role for a number of reasons, not least because they combat climate change as a result of their ability to absorb carbon dioxide. The spread of grazing land at the expense of the forest not only robs us all of valuable forested areas, but also increases production of greenhouse gases.

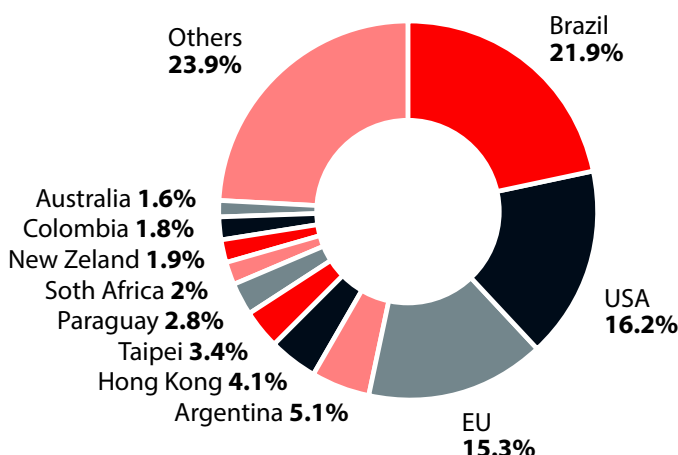
The FAO claims that **animals** contribute **14.5%** to the production of **greenhouse gases**, but the calculation used takes into account only gases associated with animal excrement. If we were to include those linked to the production of grain, the figure would double.

# BRAZIL - THE PROMISED LAND FOR TANNING BUSINESSES

Brazil is the second-largest producer of raw leather but does not sell it in that state, preferring instead to process it and sell it in the form of **tanned leather**, of which it is the world's **third-largest producer**.

**Brazil** is a **major net exporter of both wet blue and finished leather**, mainly to China, the United States and Italy.

## LEADING EXPORTERS OF SEMI-PROCESSED COW AND HORSE HIDES BY WEIGHT (in % of total global exports, 2014)



In recent years, the Ministry of Industry and Economic Development has committed substantial financial resources to implementation of the 'Brazilian Leather' programme, promoted by Apex, the export promotion agency. The local tanning industry is developed above all in São Paulo and Rio Grande do Sul.

### The Mastrotto story

In Italy, one of the major names in the tanning sector is that of the Mastrotto Family. The founder of the business was Arciso, who had a tannery in Arzignano in 1958.

The three sons then split the business, creating two separate tanning empires. On the one hand there is Rino, who founded Rino Mastrotto Group SpA, and on the other, Bruno and Santo, who created Gruppo Mastrotto SpA.

Greenpeace has included **Gruppo Mastrotto and Rino Mastrotto Group** among the **major purchasers of raw hides** originating from animals farmed in deforested zones.

### Rino Mastrotto Group



**471** employees in Italy

€€€€€€ 2013 turnover **280 million**

Production units



### Gruppo Mastrotto



**2,000** employees around the World

€€€€€€ 2013 turnover **450 million**

Production units

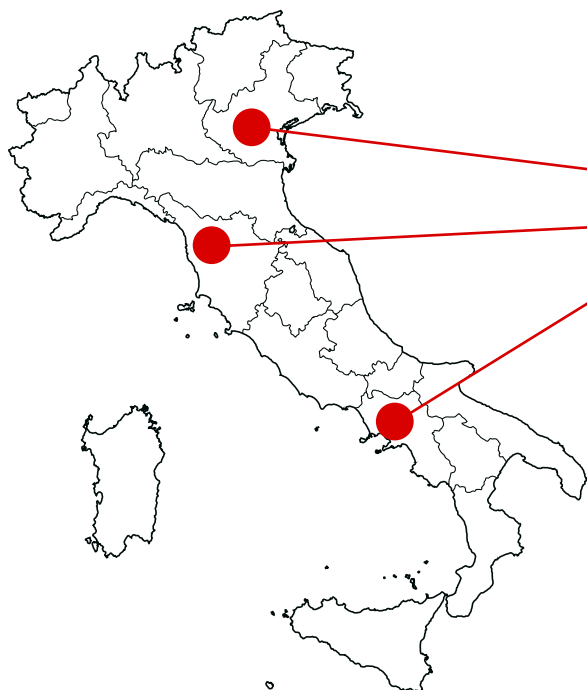
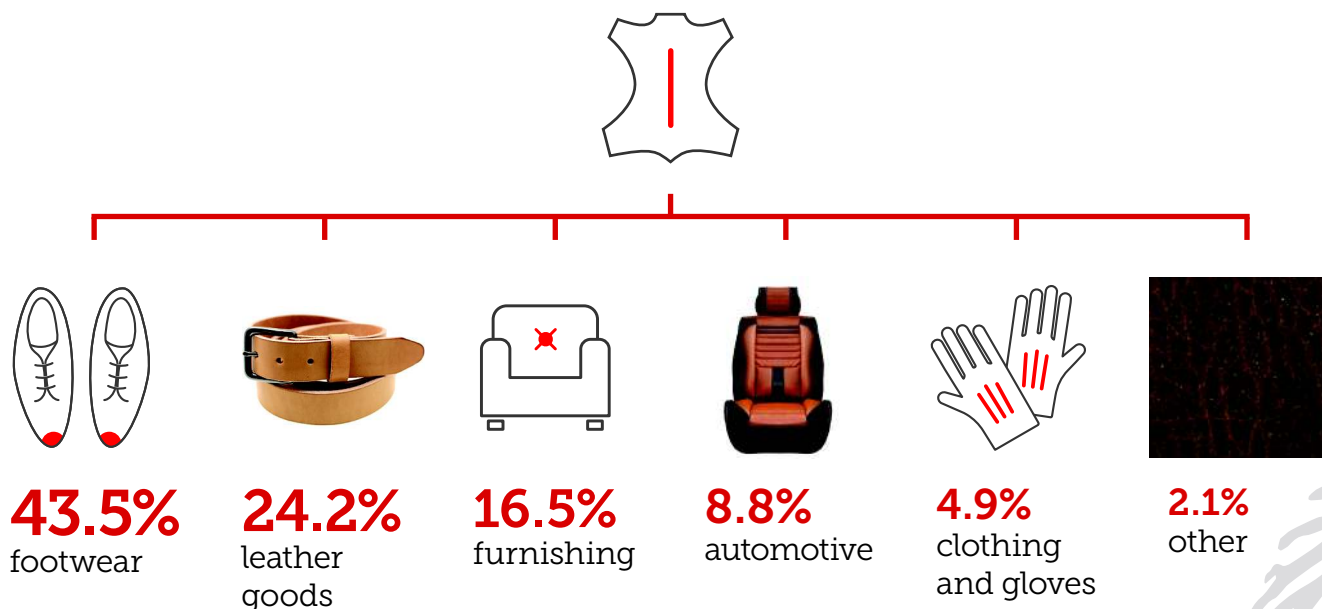




# ITALY, HOME TO THE TANNING OF LUXURY SKINS

Total production by the Italian tanning industry, for the 2013 year, was **5,25 billion**.

## ITALIAN TANNING PRODUCTION BY DESTINATION (in % volume, 2013)



Tanning activity is performed mainly in three districts, which together cover 88.6% of total Italian production: they are **Arzignano** in Veneto, **Santa Croce** in Toscana, **Solofra** in Campania.

The number of people employed in the sector is around 23,000, plus several thousand temporary workers not included in traditional statistics.

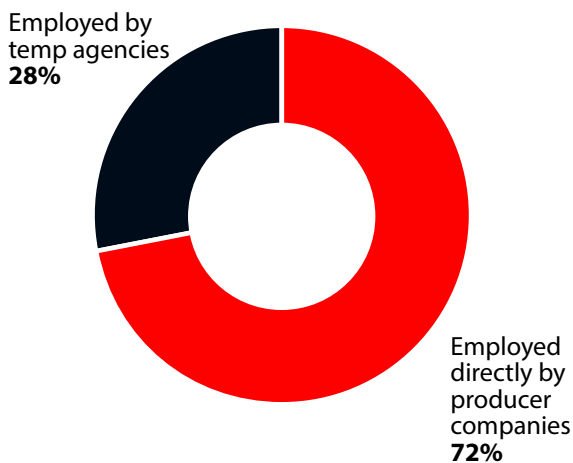
The majority of those employed (46%) work in Arzignano, followed by Santa Croce with 35.5% and Solofra with 15%.

# THE TEMP WORKERS BEHIND THE SKINS OF SANTA CROCE

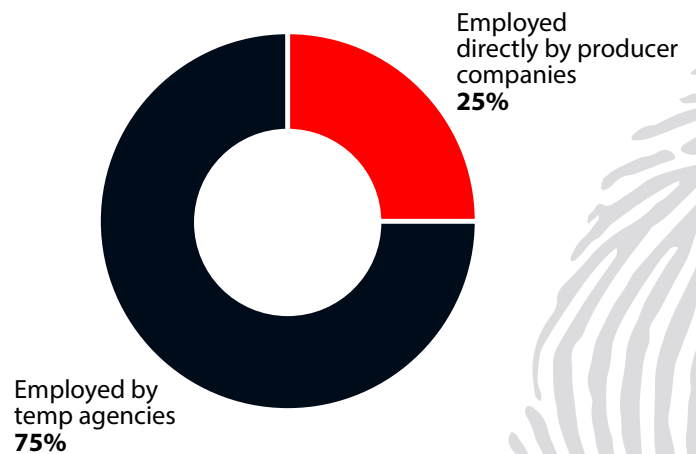
The Santa Croce tanning district is located on both banks of the River Arno, halfway between Pisa and Florence. There are a total of **240 tanneries** in the District of Santa Croce, mostly small-scale businesses. Some are equipped to perform all phases of processing, but these are rare. Most only have the machinery strictly necessary for tanning activities. The district is therefore also home to a large number of other establishments, more than **500** in fact, which undertake specific processing operations: these are the so-called **subsuppliers**, where workplace inspections are rare and where the bulk of the temp workers are employed.



## JOBS ON THE BASIS OF METHOD OF HIRING



## THE NEW JOBS BY TYPE IN 2014 IN SIX MUNICIPALITIES OF THE TANNING DISTRICT



Numbers employed in the district in **2014** represent **12,700 individuals**, 9,247 (72%) of whom are employed directly by producer companies and 3,451 (28%) of whom are employed by temp agencies.

**Temp agencies** are intermediaries that send workers for the period strictly necessary according to the requirements of the requesting company. In Italy, temp work was introduced between 1999 (Treu Law) and 2003 (Biagi Law). In 2015, **Poletti's Decree** extended the possibilities for application.

# THE IMMIGRANTS DOING THE LEAST ATTRACTIVE JOBS

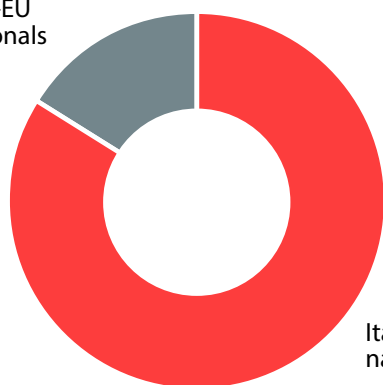
The tanning sector is home to large numbers of immigrants, because the work involved is very difficult and highly unpleasant. In Santa Croce, the first sector where immigrants found work was pre-tanning, and in particular **scraping (fleshing) and splitting**, which involves handling heavy, dirty skins, a **task with little attraction for Italians**.



Previously, the toughest jobs were performed by Southern Italian workers, but many of those individuals then started their own businesses as subcontractors and their jobs were **taken over by the Senegalese**. Bosses often prefer Senegalese workers over Italian. Senegalese workers are available to do overtime and to work on Saturdays, they do not complain. It is the result of specific dynamics of exploitation and blackmail.

**WORKERS PERMANENTLY EMPLOYED IN THE TANNING DISTRICT BY NATIONALITY**

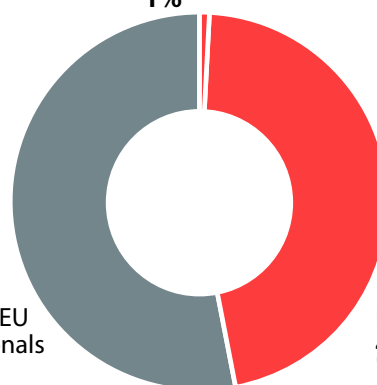
Non-EU nationals  
16%



Italians and EU nationals **84%**

**TEMP CONTRACTS BY NATIONALITY CONCLUDED IN 2014 IN SIX MUNICIPALITIES OF THE TANNING DISTRICT**

EU nationals  
1%



Non-EU nationals  
53%

Italians  
46%

## Sylla's story: the chains of temping

Sylla was born in Senegal in 1979 and has worked in tannery sector since September 2005. He has always worked as a splitter for the same firm, but has never had a permanent contract. The most he has been offered is contracts for one month or five days. The owner calls him 'my guy' and demands that he works only for him. The temp agency supports the owner: when Sylla finishes a contract, it does not offer to find him work with other firms, it only calls him when 'his' firm needs him. This is how the temp agencies, the very symbol of flexibility, are transforming workers into the private property of the firms in the sector.



# WHAT A LOT OF UNREGISTERED WORKERS YOU HAVE, MR WOLF!

Despite the vast range of hiring methods available under the law, the use of undeclared labour continues to persist in the Santa Croce District. This is the most serious form of infringement of workers' rights, because it deprives them of protection against accidents and of pension and retirement entitlements.

The task of verifying that the law in relation to employment relationships is being enforced appropriately falls to the local authorities known as the **Provincial Labour Directorates**, but in Pisa there are only **19 inspectors** for the entire province, of whom only **11 are employed full time**.

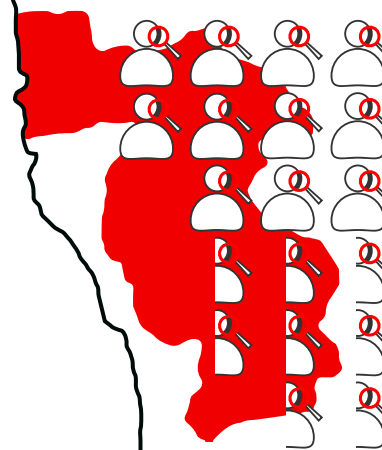
## SITUATIONS INSPECTED FROM 1 JANUARY 2011 TO 31 DECEMBER 2014 IN SANTA CROCE



The **possible forms of illegal employment** include hiring workers under contracts for limited hours, or part-time, and then making them work full-time.

**Half a day under contract and half a day illegally:** it is difficult for anyone to say no. «Work is like that now, if you don't agree they won't call you any more». A company might hire a worker for the first time through an agency, then, if it is happy with the work, it will contact the worker a second time directly, without any intermediary, and employ that worker without any contract or insurance cover.

**11 full-time  
8 part-time  
inspectors**  
for the entire  
province of Pisa



# AN ODOUR OF ROTTEN EGGS... AND DEATH

10

One of the most serious risks in tanneries is **poisoning by hydrogen sulphide**, also known as hydro sulphuric acid (H<sub>2</sub>S), a colourless, extremely poisonous gas with a sharp odour of rotten eggs, which **can cause death if inhaled**. Hydrogen sulphide is formed from sulphur compounds, which are used in the various phases of the tanning process.

To avoid situations where workers breathe in poisonous gases, **machines must be fitted with extraction systems**. But the reality is that even where these systems are fitted, they are not always on when they should be.

## THE EXTRACTION SYSTEM FOR A TANNING DRUM



### June 2004: the death of Thiam Mamadou Lamine in Santa Croce

He was aged 35 years and was Senegalese. It was his first day working as a temp: he died after being assailed by a cloud of hydrogen sulphide released by a drum that he had just opened to check the skins. Thiam had already worked in tanneries, including the one where he lost his life. And that time, after having opened the lid of the drum, his breath was cut off as if he was in a gas chamber. First aid was provided immediately, but attempts to save him were in vain. In Senegal, he left behind a wife and two children, one of whom he had not yet even met.

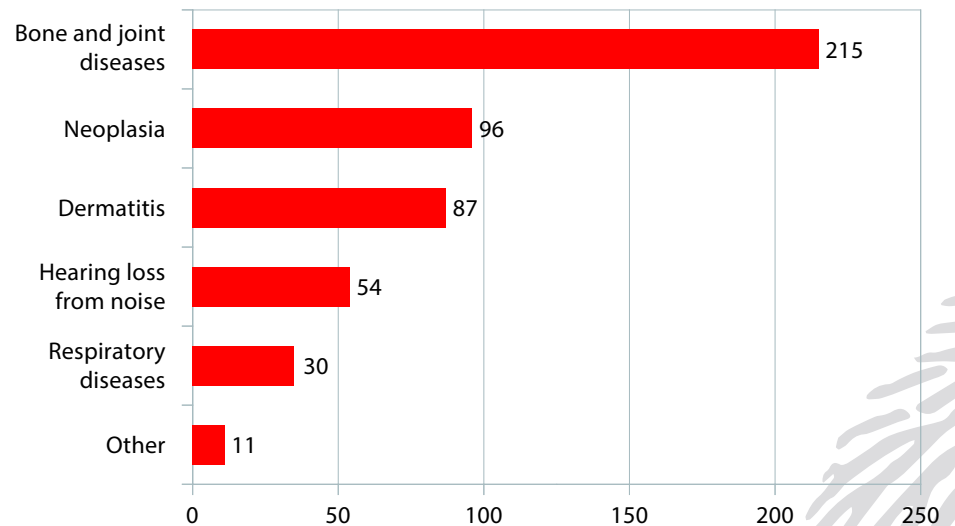
# THE RISKS FOR WORKERS

In addition to accidents, tanneries also have to deal with the problem of occupational diseases, those issues that develop over time, through contact with hazardous substances or long periods spent in unhealthy atmospheres. There have been **493 cases** of **occupational diseases** recognised in **Santa Croce between 1997 and 2014**, subdivisible into **five major groups**.

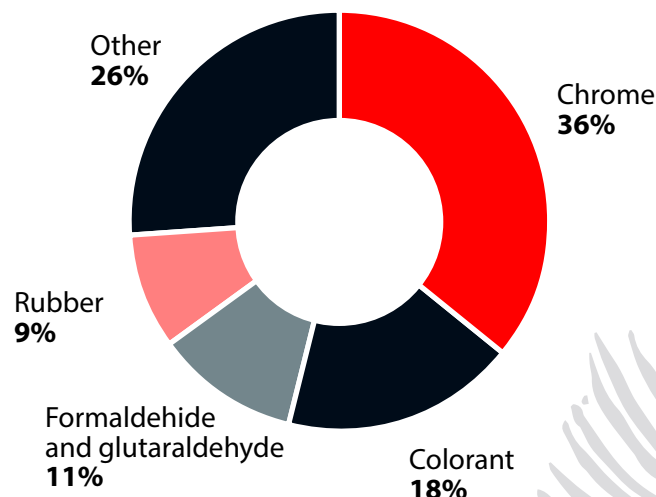
**Musculoskeletal disorders** are the most numerous group, representing **44%** of all occupational diseases. Second rank is taken by **cancers** with an incidence of **19%**. The organs most frequently affected are the nasal passages and the bladder.

Third rank in terms of occupational illnesses is taken by contact dermatitis resulting from sensitivity developed towards one or more of the **300 chemical substances used** in the animal skin processing cycle.

**DISTRIBUTION OF OCCUPATIONAL DISEASES (Tuscan tanning sector 1997-2014)**

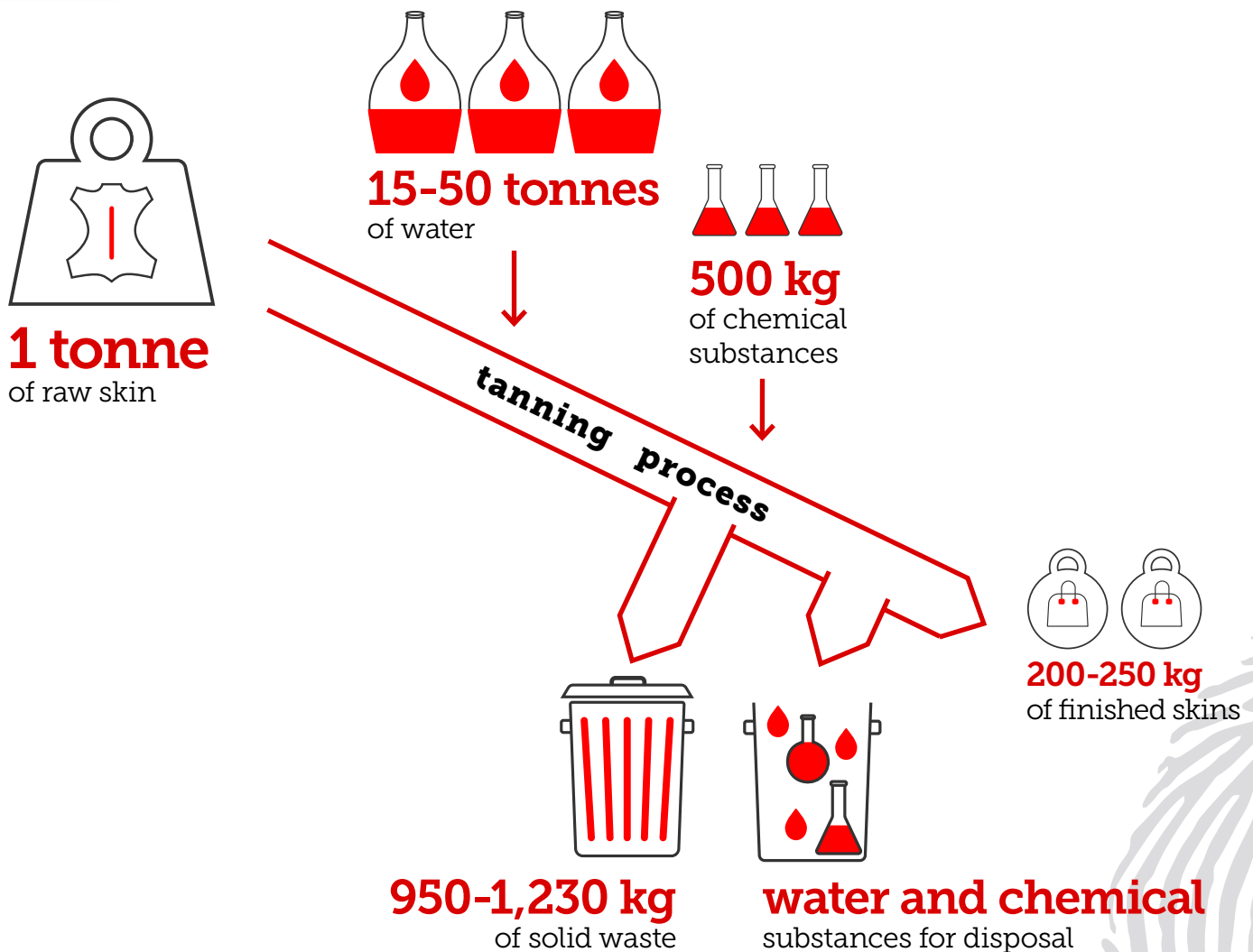


**CONTACT DERMATITIS ON THE BASIS OF THE TRIGGERING SUBSTANCE (Tuscan tanning sector)**



# A SECTOR WITH CONSIDERABLE ENVIRONMENTAL IMPACT

12

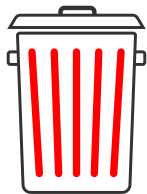
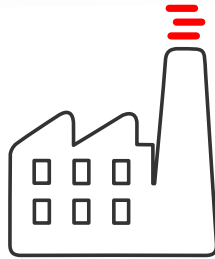


The tanning industry has a major impact on the environment, not only because of the effects generated by the animals providing the skins, but also because of the vast consumption of water and the large quantity of biological and chemical wastes produced during the industrial phase.

Tanneries in Santa Croce **consume** approximately **6 million cubic metres of water each year**, taken mainly from the groundwater. For each tonne of rawhide, the industry obtains 200-250 kg of skins tanned using chromium, which require a total of 15-50 tonnes of water, 500 kg of chemical substances and **9.3-42 GJ of energy**.

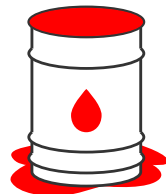
# IT'S ALL ABOUT HOW YOU CLEAN UP

13



## SOLID WASTES

Tanneries produce biological solid waste that is sent for treatment recycling to specialized enterprises. Many other substances are sent with dirty waters to purification plants where sludges are extracted and sent for final treatment to specialized enterprises.



## DIRTY WATER

The treatment systems are designed to clean the water of chemical and organic pollutants, before releasing it into natural watercourses. Although the district has a population of only 110,000, its actual **pollutant load** to be disposed of is comparable to that of a city of more than three million inhabitants.

Between 2006 and 2013 a purification plant of Santa Croce discharged illegally into the river Arno 5 million cubic metres of liquid waste. Companies involved saved 4,350,000 euros on processing costs and disposal of sludges.



## POLLUTANT GASES

Not just hydrogen sulphide, but a whole range of other pollutant substances are produced during the tanning process, from the initial phase involving cleaning of the skins to the final finishing phase.

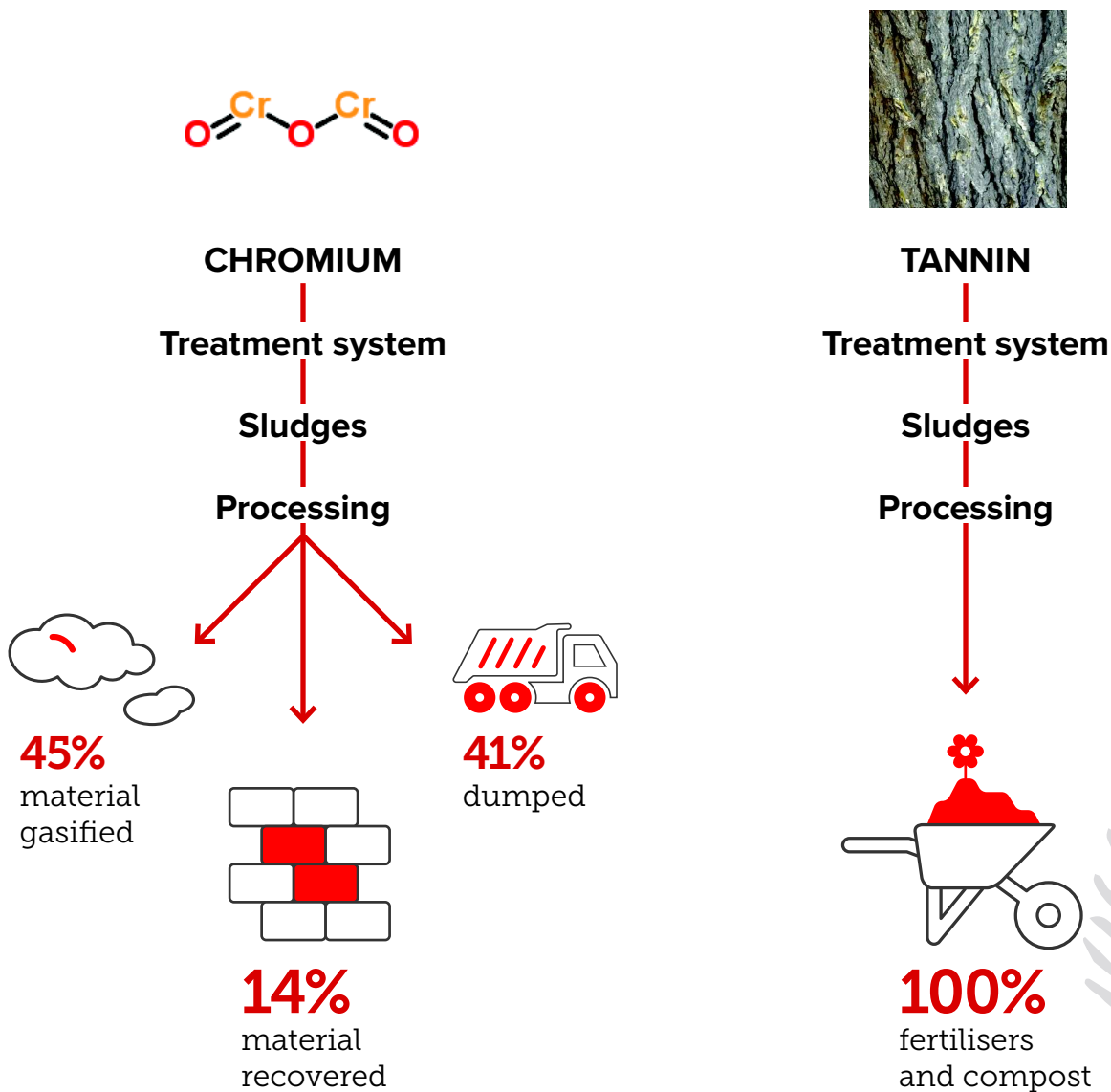




# TANNIN SLUDGE AND CHROMIUM SLUDGE

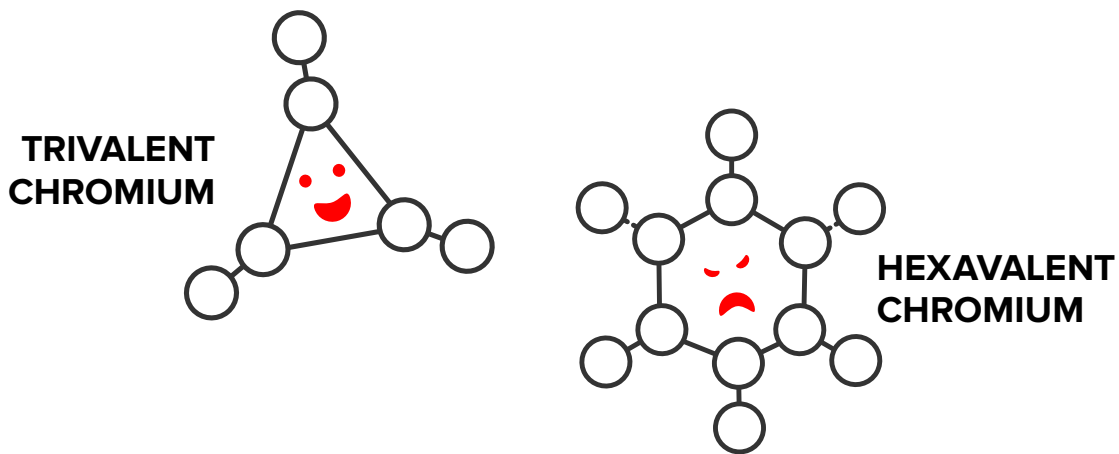
Tanning can be performed using two broad categories of substances: vegetables and minerals. **80% of the tanning** performed worldwide uses a specific mineral product, **chromium**.

The most widely used vegetable alternative is tannins, which unlike chromium, make it possible to recover all of the sludge residues produced.



The treatment of residues from chromium-based tanning is limited to recovery of approximately 14% of wastes, in the form of inert materials for the building industry.

# CHROMIUM ON THE SKINS OF CONSUMERS



Chromium can take numerous forms because of its chemical bonds and electrical and physical characteristics. The form of chromium usually used in tanning is **trivalent chromium**, which, according to current scientific knowledge, does not raise any particular concerns for human health. But under certain conditions, particles of trivalent chromium that remain in an unbound state in the tanned skin can **change form**, changing into **hexavalent chromium**, which, unlike the trivalent form, is highly **toxic**. Most of the compounds of hexavalent chromium are **irritant for the eyes, skin and mucosa**. It is also recognised as a known carcinogenic agent for human beings (Group I according to IARC). It is no coincidence that Regulation (EU) No 301/2014 prohibits the sale of leather products that contain chromium VI in concentrations greater than 3 mg/kg.

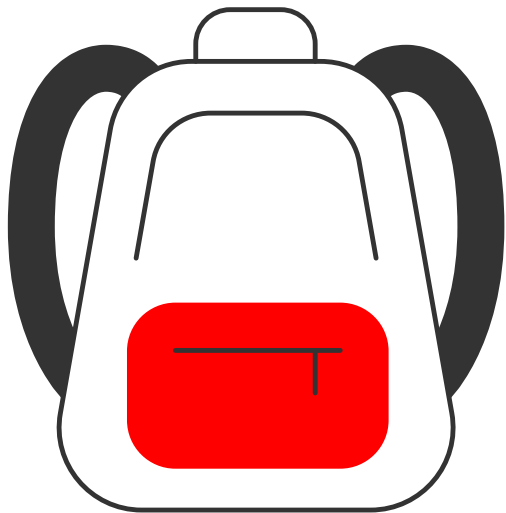
The risk of mutation into hexavalent chromium increases with the quantity of trivalent chromium remaining in unbound form within the skin. For some, the problem can therefore be **avoided** if the best possible **tanning procedures** are correctly applied, and for others the only option is to use **tanning products other than chromium**.

# THE ECOLOGICAL RUCKSACK OF THE SKIN

16

An ecological rucksack represents the quantity of **resources used** and the quantity of **wastes produced** during the production process of a given good.

This is what is behind the process used for chromium-based tanning of **1 kilo of skins**.



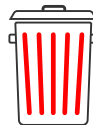
**From 60 to 250 litres** of water used and to be purified



**From 37.2 to 210 megajoules** of energy used



**From 2 to 2.5 kg of chemical** substances to be disposed of

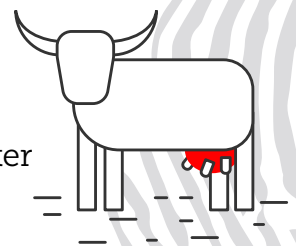


**From 4.3 to 6.15 kg** of solid wastes



**Please note:**

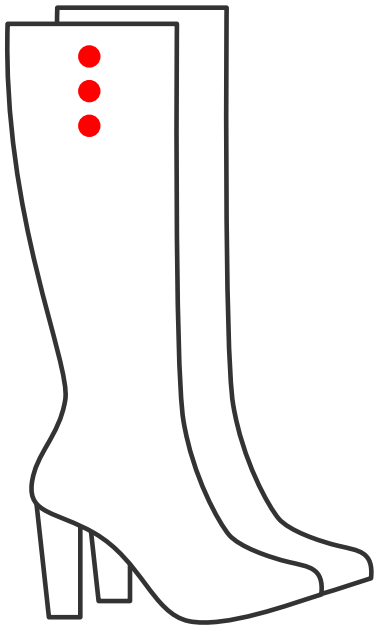
the entire ecological rucksack should be considered, including the water and feed consumed by the animal (see Sheet 3).



**Until the 1970s**, Santa Croce was ruled by the law of the **jungle** in environmental terms.

The water released from tanneries flowed directly into local watercourses, the gases produced were discharged directly into the atmosphere, and organic wastes built up in the large municipal dumps. In the rivers, fish died in droves, while the inhabitants of the district were forced to breathe air full of the bitter smell of rotten eggs. The breakthrough came through **popular protest**, which resulted in the **enacting of laws** to protect the rivers and the air, which required all entities in the district to take steps to protect the environment and, therefore, the health of the people. Tanneries were forced to make massive investments to install filters and organise initial separation of wastes. **Today**, the district has **2 major treatment plants** to which the waste water from the tanneries is channelled by means of corresponding sewers.

# THE ECOLOGICAL FOOTPRINT OF A PAIR OF SHOES



The production of a pair of leather boots, from the birth of the animal to manufacture, requires the use of:



**14,503 litres** of water with treatment

or



**25,024 litres** of water without treatment



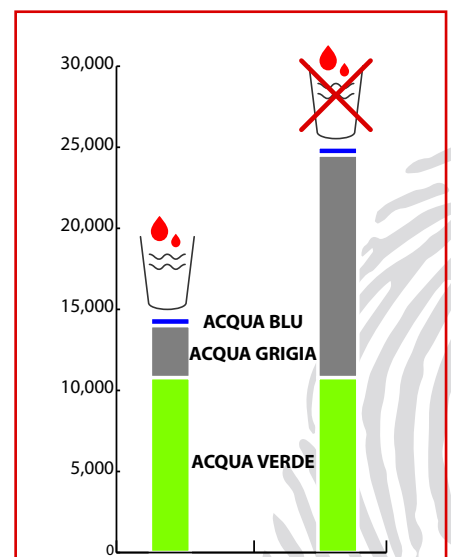
The largest factor in the land footprint for a pair of boots is from cattle farming (86%).

The size of the water footprint however depends on where the skin is treated. Tanneries that have effluent treatment plants have much smaller water footprints than tanneries that dump their waste.

If the effluent is not treated, some 10,500 extra litres of grey water are needed for every pair of boots to deal with the chemical waste. **With proper waste treatment, the water footprint for a pair of boots is reduced by 42%**, with the main demand for water coming from the cattle farming stage of the supply chain.

Some 10,700 litres of green water are used to grow the cattle feed, while a significant quantity of grey water is required because of the animal waste.

Although leather is just one of the products of the cattle industry, its full impacts must be recognised.



Comparing volumes of blue, grey and green water used in the production of a pair of leather boots, with and without effluent treatment.

- Blue water:** surface water and ground water
- Green water:** rainwater taken from the natural cycle
- Grey water:** water necessary to dilute the load of pollutants produced

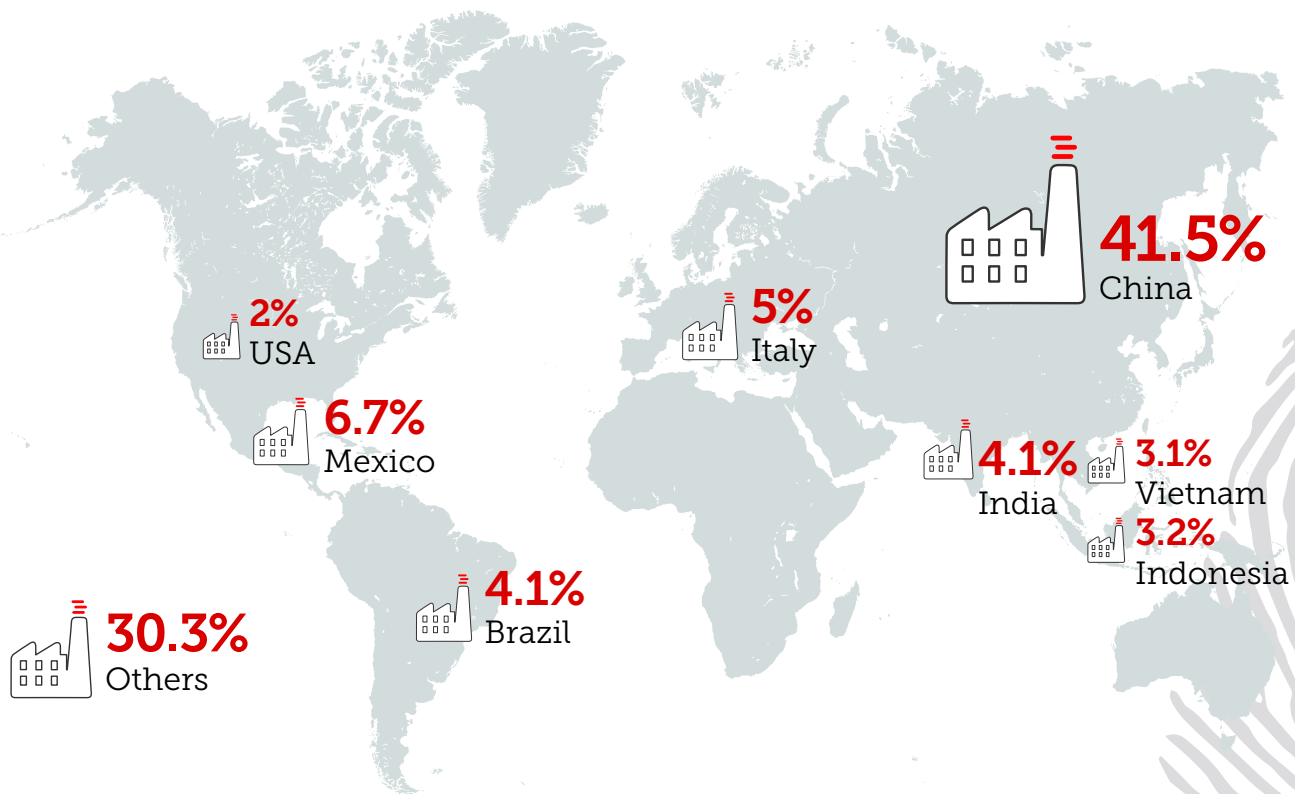
*Helen Burley, Mind your step. The land and water footprints of everyday products, Friends of the Earth, May 2015*

# THE MAJOR COUNTRIES PRODUCING LEATHER SHOES

A significant proportion of **cow hides** produced throughout the world (slightly more than **50%**) is used for the manufacture of **shoes**. The leading producer is China, which is alone responsible for almost half of world production, followed by Mexico, Italy and Brazil. But producing a lot does not automatically mean earning a lot.

Indeed, while in terms of quantity, **the South exports more than double** the number of pairs of shoes exported by the North (1.38 billion compared to 673 million), in terms of **monetary value**, the situation is **reversed**: the North earns more than 28.6 billion dollars from its exports, while the South earns 25.6.

## LEADING PRODUCER NATIONS OF LEATHER SHOES (in % of world production 2014)



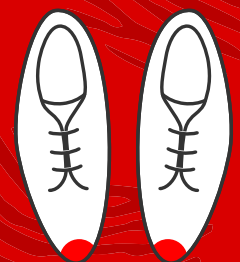
### Luxury production is concentrated in the North

38.4 €

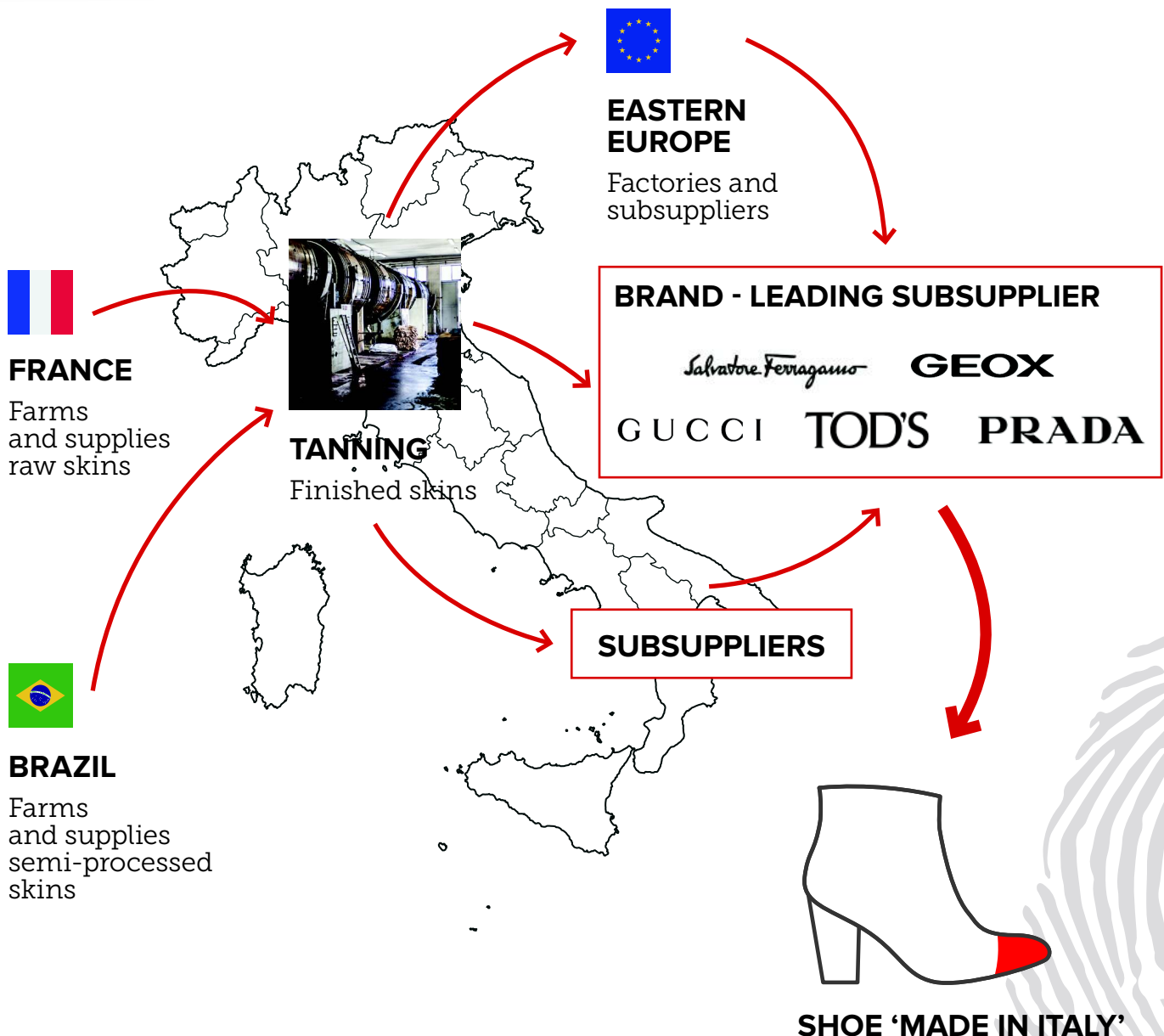
Average purchase price for shoes produced and exported by Italy

12.5 €

Average price of the shoes imported in Italy



# THE POTENTIAL VOYAGE OF A SHOE 'MADE IN ITALY'



The raw and semi-processed skins are imported primarily from Brazil and France, while the central tanning process takes place in Italy. The main purchasers of tanned skins are the major luxury brands, which assemble shoes directly using the services of suppliers in Italy or abroad, for certain specific phases, but which also have shoes produced by shoe manufacturers in Italy or abroad, so-called leading suppliers, using sub-suppliers for specific phases.

# WAYS TO AVOID BEING PART OF THE PROBLEM

## WE RECOMMEND

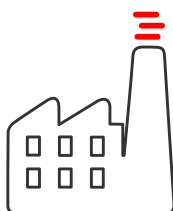


### To consumers



- ✓ Buy good shoes that you can have repaired a few times by a good shoe repairer.
- ✓ Ask in the shop/the company how the shoes were produced.

### To companies



- ✓ Pay a living wage to the workers throughout the entire production chain.
- ✓ Monitor working conditions throughout the entire production chain.

### To policy makers



- ✓ Make consumers a transparent supply chain of their shoes available.

If you are against the processing of animal skins, there are alternative industrially-derived products.



**PUBLISHED BY:**

**Centro Nuovo Modello di Sviluppo (CNMS)**

Via della Barra, n. 32 - 56019 Vecchiano (PI)

November 2016

**AUTHORS:**

Pierpaolo Corradini, Stefano Gallo, Francesco Gesualdi.

**DESIGN BY:**

YOGE Comunicazione Sensibile

**CHANGE YOUR SHOES** is a partnership of 15 European and 3 Asian organizations.

We believe that workers in the shoe supply chain have a right to a living wage and to safe working conditions, and that consumers have a right to safe products and transparency in the production of their shoes.