

Under their skin



Leather's  
impact on —

Other reports in the series:

Leather's impact on the planet  
Leather's impact on animals  
A just transition beyond leather

# Under their skin: a report series on leather

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## Introduction

### Leather has been seen as an unshakably prominent and important aspect of the fashion industry and dressing for millennia.

The oldest intact leather shoe, uncovered by archaeologists in an Armenian cave, is over 5,500 years old, made from cow skin and predating the Pyramids of Giza by 1,000 years.<sup>1</sup> Since this shoe was made, plenty about the fashion industry has changed: today, over 1.4 billion cattle have been bred and stand on once biodiverse land until they are slaughtered for production purposes,<sup>2</sup> leather is now often coated with plastic or tanned with harsh, carcinogenic chemicals,<sup>3,4</sup> while the ever-increasing scale of the fashion industry is utterly unsustainable: leather supply chains are highly industrialized, harmfully implicating many workers and surrounding communities, while making luxury and mainstream brands massive profits.<sup>5</sup> At the same time, very little has changed: animals continue to be exploited and slaughtered for the production of shoes, clothes and other goods, and skins must be fleshed and altered to ensure they do not rot on our feet.

So many centuries later, as we finally come to grips with our responsibility to address not only a human-induced climate crisis, but an animal and social wellbeing crisis built on commodification and endless-growth capitalism, it is time to move beyond leather – a material produced by an industry disproportionately contributing to these serious troubles, compared to other international industries.<sup>6</sup> Such a move would allow the fashion industry to better align with the Intergovernmental Panel on Climate Change's (IPCC) targets and the United Nations Sustainable Development Goals such as 'clean water and sanitation' (6), 'reduced inequalities' (10), 'responsible consumption and production' (12), 'climate action' (13), 'life below water' (14) and 'life on land' (15).<sup>7</sup>

A human ability to destroy, shown so clearly in the fashion and leather industries, is remedied by a human capacity for innovation and progress. Today, numerous materials replicate many of the properties which made leather so useful to us, produced with a far smaller, less harmful impact on our planet and those living on it. Material innovation only continues to grow, and rapidly, proving the possibility of a total ethics fashion future, one which has evolved beyond the skins we benefited from using millennia ago.

In this report series, Collective Fashion Justice – aided by the work and support of organisations including the Center for Biological Diversity, FOUR PAWS, Material Innovation Initiative, Defend the Wild, Fashion Act Now, Faunalytics, and numerous experts contributing in their specialist areas – explores leather production and its place in the global agricultural and fashion industry, in addition to its impact on domestic and native species, the planet and our fellow humans. The series also outlines available and soon-to-be-available total ethics alternatives, and the practical possibilities of a just transition towards more communally and environmentally beneficial production – a step that is sorely needed in efforts to ensure collective liberation. Fashion cannot be truly sustainable unless it is ethical, too. We cannot sustain environmental degradation, nor injustices facing humans and non-humans.



# Leather is not a by-product: the importance of addressing hides

4

## Despite common misconception, leather is not simply a worthless by-product, but a co-product.

While the leather industry likes to claim skins are tanned as a kind of waste reduction initiative, thus supposedly making leather neither cruel nor unsustainable, this is not the case.<sup>1</sup> Leather is a valuable co-product, with even meat and dairy industries labeling it as such.<sup>2,3</sup>

The leather industry itself states the massive income losses involved in losing skin sales.<sup>4</sup>

Slaughterhouses purchase cattle from saleyards or farms, factoring in the likely profit gains from the flesh, skin and other parts of a cow's body. While some calves are raised specifically for their young, soft skins, even those cattle whose skins are considered a 'co-product' bring in profits for the animal-industrial complex

and fashion industry.<sup>5</sup> On a micro-scale, individual slaughterhouses have reported multi-million dollar losses and the consideration of closing up when skins don't sell – often due to the rise in leather alternative popularity.<sup>6-8</sup> At a macro level, the global leather goods market was valued at \$394 billion USD in 2020, with that number only increasing.<sup>9</sup> Leather is for-profit business, and the entire leather supply chain, farms included, must be considered when exploring the environmental and ethical implications of fashion's use of it.

### Valuing hides versus flesh

Global raw leather and hide exports were valued at over \$18.5 billion in 2019, with an expected rise of 9.46% by the end of 2022,<sup>10</sup> while global beef exports sat at over \$45 billion USD in 2020. Leather can account for up to 26% of major slaughterhouses' earnings around the world.<sup>11,12</sup>

In India, a leading leather footwear and garment producer, most exports by share go to the United

States and Europe.<sup>13</sup> Here in India, the skins of bovine animals, including cattle and buffalo, are tanned, with particular complexity surrounding cattle skins given laws banning cow slaughter across the country. Despite these laws and high tariffs on hide but not meat exports, the value of exported hides from animals slaughtered in India is \$3 billion USD, compared to all animal product exports such as meats and dairy equating to \$10.1 billion USD.<sup>14,15</sup>

In Brazil, slaughterhouses killing cattle in 2020 made \$34.74 billion USD in revenue. Leather sales in the domestic market and through export made up over \$1.1 billion USD, or over 3% of total value. Meanwhile, all beef sales made up approximately 88% of revenue. While it is clear that leather is not the primary product in Brazil, it is the second-most profitable aspect of the industry, and a highly valuable co-product, given it brings in over \$1 billion in revenue.<sup>16</sup> About 80% of Brazil's leather is exported, making the impact of the industry globally relevant.<sup>17</sup>

5

It is important to note that hides once had a much greater value, accounting for a larger amount of the total revenue made from slaughtering cattle. As Meat and Livestock Australia once noted, after yet another price drop for hides, 'the hide market has fallen further as decreased demand, the increase of synthetic leather, and environmental regulations have an impact.'<sup>18,19</sup>

As noted by Earthsight, some research suggests that prior to the steep rise of leather alternatives, a cow's hide accounted for up to 8% of an animal's total value at slaughter, and a much higher proportion of the sales value.<sup>20,21</sup> Reduced hide prices are not a justification for further funding a harmful industry: they are a consequence of this harm, in a society evolving beyond a desire for destruction in the name of fashion.

Should the global leather industry lose the billions of dollars worth of revenue made through the sale of skins,

the impact would be significant. Currently, leather sales effectively subsidise beef production, and by removing this 'subsidy', beef would become more expensive. The more expensive meat becomes, while plant-based meat alternatives become more affordable, the sooner price parity will be met – and this is when the meat industry, responsible for massive ecological, human and non-human harm, will significantly shrink.<sup>22</sup> In turn, our planet and those living on it will live better.

# Industry overview

**The Leather Council states that 67% of skins used for leather belong to cattle and buffalo, followed by sheep (12%), pigs (11%) and goats (10%).<sup>1</sup> It is estimated that less than 0.5% of leather is made from other animals, such as native kangaroos and even domestic species like dogs and cats.<sup>1-3</sup>**

With labelling laws across the globe largely not requiring species identification for leather,<sup>4</sup> it can sometimes be extremely challenging to know what species has been killed, given the murkiness of global fashion supply chains.

Alongside these sometimes misleading labeling laws, the lack of transparency across leather supply chains may result in a lack of consumer and industry understanding of where leather really comes from. On this topic, fashion writer Lucy Siegle once wrote for The Guardian that “we’re comforted by ‘Italian leather’ stamps, but this could mean that the leather was imported and finished in Italy. I’m fond of saying that if all the ‘Italian leather’ merchandise was of true provenance you wouldn’t be able to move for cows in that country. They’d be drinking from the Trevi Fountain.”<sup>5</sup>

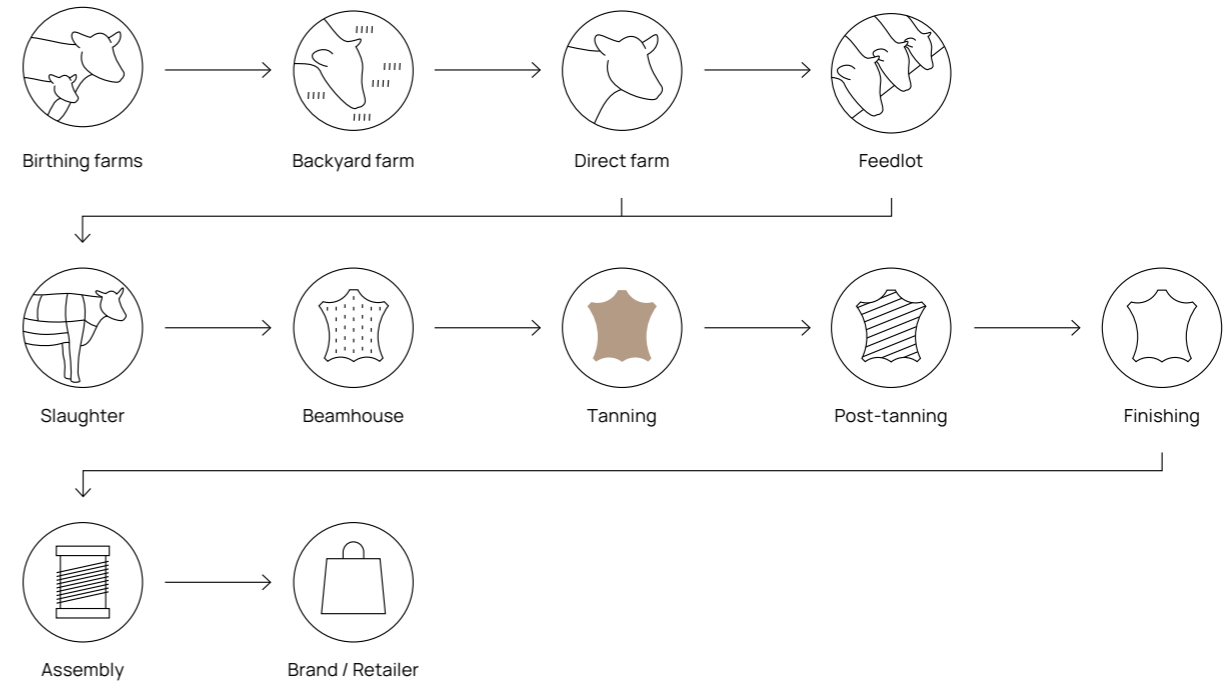
Indeed, Italy is the second largest importer of partly processed skins from cattle ranches in Brazil,<sup>6</sup> where such production is the leading cause of Amazonian deforestation.<sup>7</sup> In fact, Brazil is the third most significant producer of bovine skins, with the latest industry statistics citing 40.7 million bovine skins being produced in a single year. Brazil’s massive

output is surpassed by China’s 47.6 million bovine skins pulled from carcasses in a year, and the output of India, the most significant bovine skin producer, slaughtering and skinning 48.7 million bovines each year. China, Brazil, Russia and India are the major producers of finished, tanned bovine skins.<sup>1</sup>

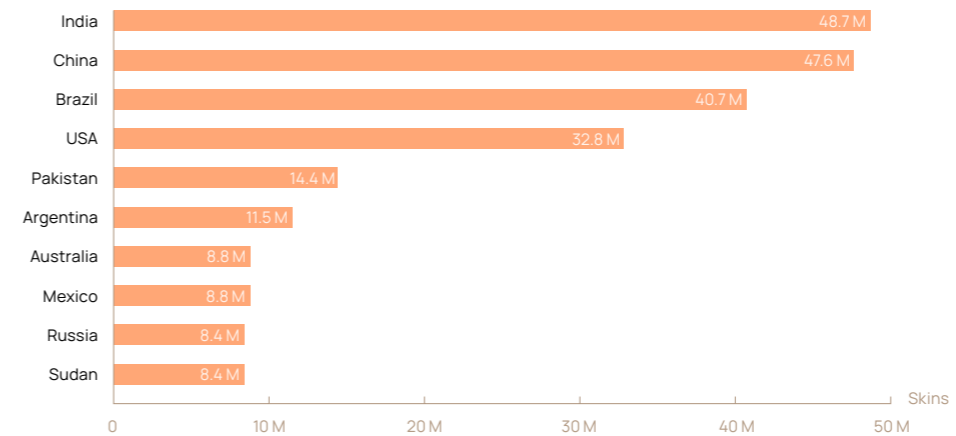
The complexity of global leather supply chains makes it difficult to trace environmental, human and non-human animal abuse and exploitation. Not only does the changing location between cattle farms, slaughterhouses and tanneries make this leather tracing challenging, but so too does the reality of multiple farms and ranches being involved in leather supply chains, due to the use of ‘birthing farms’, ‘backgrounder farms’, ‘direct farms’ and feedlots.<sup>8</sup>

This report will focus on the leather industry across India, China, Brazil, the United States and Australia – as these are all either major production and tannery countries, or countries considered to have ‘improved’ practices.

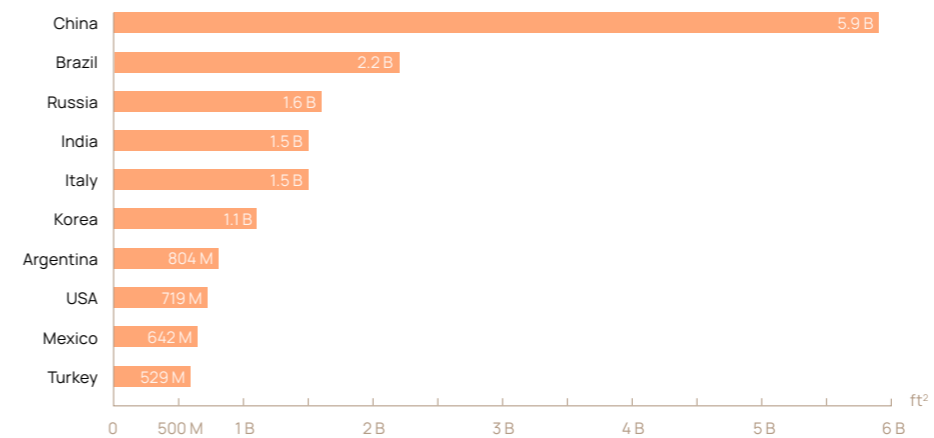
## Supply chain



## Top cattle hide producing countries\*:



## Top tanned hide producing countries\*:



\* (2015, latest available data from Leather Council)

# Leather's impact on people



## Introduction: people

**When the topic of leather has been explored in fashion and mainstream media recently, it has often been linked to sustainability. The environmental impact of leather is catastrophic and important, but it cannot be addressed properly without considering the intertwined ethical implications of leather production.**

The non-human cost of leather – of skin – being used in fashion is far less frequently covered than leather's climate and deforestation footprint. Too often as well, the human cost of fashion – in leather supply chains and generally – is either actively ignored by the industry or glazed over with empty promises and ethics-washing.

Brands often talk about their commitment to ensuring 'legal minimum wages' for workers, despite such wages often equating to a 'poverty wage' below what could cover a person's most basic needs.<sup>1</sup> Currently, estimates suggest that as little as 2% of garment workers, who are largely women of colour, earn a living wage.<sup>2,3</sup> What's more, when we talk about 'garment workers', we are talking about the people sewing

materials together and turning them into clothes. But so many more hands are involved in making clothes – and the same is true for leather bags, belts and shoes.

In leather garment, shoe and accessory supply chains, we need to consider not only garment workers, but also tannery workers, slaughterhouse workers and farm workers. Without all of these people, leather products would not exist, and so the fashion industry must take responsibility for the exploitation of these people.

# Supply chain tiers explained

**Fashion and leather supply chains are made up of several tiers, with each step farther away from consumers and even brands themselves becoming more murky and hard to trace.**

**Here's where products come from before they are ready for sale:**

Tier 1: Where clothes are made



This is where finished leather is stitched into shoes, jackets and bags.

Tier 2: Where finished materials are made



If we're really simplifying things, this is where raw hides are turned into leather (though this often occurs over a number of facilities and even countries, breaking up the tier further).

Tier 3: Where raw materials are processed



If we were talking about a plant-based material like cotton, this would be 'ginning', but for leather, this is a slaughterhouse.

Tier 4: Where raw materials are made



This is the 'farm level', where cattle graze before their slaughter. Again, this tier can be broken up further, with cattle moving from farms to feedlots, and with 'breeder farms' involved.

Fashion Revolution's 2022 Fashion Transparency Index found that of the 250 largest brands and retailers, just 48% disclose where their first tier manufacturing occurs (where garments are made). Just 32% share information on their material processing facilities, and a shocking 12% disclose where their raw materials are sourced from.<sup>4</sup> This lack of transparency is concerning, given how common exploitation is across fashion's (leather) supply chains.

Leather tannery workers face disproportionately high rates

of cancer due to their work,<sup>5</sup> slaughterhouse workers are more likely to battle with a mental illness similar to PTSD and people working on cattle ranches in leading bovine skin production countries like Brazil are known to be trapped in a system of forced labour.<sup>6,7</sup> Members of the public surrounding each tier of the leather supply chain are troubled by the overflow of the industry's issues, too, particularly through pollution.<sup>8</sup>

While human exploitation is unfortunately far from unique to leather supply chains, and is

instead the reality across the majority of fashion production, some of the harms caused across leather production are uniquely dangerous and unavoidable. While wages and working conditions can and should be improved across all fashion supply chains, some issues can only be stamped out of fashion by moving beyond particular modes of production. While worker safety in tanneries and the rights of farm workers can and must be improved, only a just transition away from leather will solve the industry's harms to humans.

# Following the supply chain of human harms: Garment workers and leather

12

The exploitation of garment workers is an industry-wide issue, with leather goods being no exception. Whether cheap fast fashion or expensive and supposedly luxurious supply chains are explored, there is often illegal employee treatment, underpayment and abuse.

In 2021, Burberry made headlines when the owners of a Florence-based operation called Samipell Srl were arrested for exploiting immigrant workers – and the business was found to be a subcontractor to the luxury brand.<sup>1,2</sup> Despite Burberry's calf skin leather bags being sold for as much \$3,150 USD – with no cow skin leather bags available for less than \$2,090 USD – these workers were being paid just over 3 euros per hour, equal to less than \$3.2 USD.<sup>3,4,1</sup> These exploited immigrant people – from countries including China, Pakistan and Bangladesh – were made to work for up to 14 hours per day. The arrest warrant for the owners of Samipell Srl, which

worked as a subcontractor to Burberry supplier Tivoli Group Spa, stated that at least 40 workers were taken advantage of, given their 'state of need'.<sup>1,2</sup>

Just a month earlier, arrests were made in relation to the alleged exploitation of workers from across China and Africa, making luxury bags for Chloé.<sup>1</sup> Similarly, in 2019, workers making leather goods were found to be dealing with unlawful and exploitative practices that risked their health. Amongst these workers was a pregnant woman and two teenagers. In 2013, inspection of 8,000 small- to medium-sized mills and workshops, including some leather goods production facilities, found 93% to be 'committing egregious safety-code violations'.<sup>5</sup> Inadequate reporting mechanisms, limited transparency and an unwillingness from brands to spend more time and money on ensuring ethical supply chain operations all prevent these problems from being stamped out. These issues have

been consistently documented for well over a decade.<sup>6-8</sup>

Italy is reported to be the thirteenth most significant producer of shoes in the world, and the first in Europe.<sup>9</sup> The 'Made in Italy' label has become synonymous with fine artisan crafting, and in turn, assumptions of ethical labour are wrongfully made. Expensive price tags on 'luxury' leather goods do not equate to the fair treatment of people stitching bags together.

On the other end of the spectrum, animal-derived leather bags are sold for as little as \$60 USD at Zara.<sup>10</sup> Products from similar fast fashion brands are produced by a company with supply chains tied up with forced labour camps in China and fenced-off working facilities with constant monitoring in Brazil, reported to enforce 'slave labour conditions' and underpaid, 16-hour long days.<sup>11</sup> This kind of exploitation is likely more expected among fast fashion

13



brands, given the price tags which cannot possibly cover the actual costs of production.

Perhaps the only bags that cost even less are those made from the cheapest of synthetic materials, with no regard for worker safety, toxic chemicals or the planet, by ultra-fast fashion brands such as SHEIN. Such brands are not using alternatives to leather for any kind of ethical or environmental reason, but rather to maximise their already enormous profits.<sup>12</sup> When exploring issues in leather goods supply chains, it is critical that we do not consider all alternatives to such unjust and unsustainable supply chains as acceptable replacements.

It is essential that the people making fashion garments and accessories are treated and paid far better than they are by not only ensuring the legal minimum requirements, but by providing a genuinely fair living wage and comfortable conditions. Too, brands cannot be complacent and accept greater transparency and ethical practices in tier one of their supply chains while ignoring what festers further back.

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# Tannery workers

14



## The state of Italian tanneries

Italian leather is pushed out to citizen consumers not only as luxurious, but as a responsible choice. However, while so many high-end brands claim to source all or much of their leather from Italy, tanneries across the country – like other production facilities – are often built on worker exploitation. It is important we explore practices in areas considered 'more responsible' to highlight just how widespread tannery worker mistreatment really is.

'A Tough Story of Leather', a report produced by the New Model Centre Development Association and the Clean Clothes Campaign, was built on interviews and field research in one of the main Italian tannery districts, Santa Croce. In this region,

240 tanneries and 500 contractors together employed 12,700 people at the time of reporting. The report found that over 48% of inspected facilities used illegal practices, with 53% of workers unregistered. In these Italian tannery areas, 16% of workers are non-EU citizen migrants. Many of these people are from Senegal.<sup>1</sup>

"...the Senegalese are employed mostly in contract manufacturing, where they work under very difficult hygiene conditions: in wet conditions, with noise, in arduous operations, and with abnormal hours", an Italian labourer, Mario, shared to the report's researchers, who went on to find that "bosses often prefer Senegalese workers over Italian. They believe they are more reliable because they are available to do overtime and to

work on Saturdays, they do not complain and they can always be found. This is not, however, behaviours caused by character, but the result of specific dynamics of exploitation and blackmail."<sup>1</sup>

Both Italian and migrant workers are given contracts which do not provide them with financial security. These unjust and unsafe contracts secure work for only a day or a week at a time, meaning that anyone who wants to continue being offered work to afford food and shelter must put up with exhausting and unsafe work. Many workers are even offered only half-day contracts, despite the working days being far longer. As for wages, the most common level of labourer receives very little, and, if not enough hours are worked, the final sum is 'basically poverty'.<sup>1</sup>

15

"They make you work more than normal, they kill you at work and then send you away, you come home from work with a sore, aching body"

– Mbaye, 41

"You're practically a slave – they say – if one week you complain or mess up, they send you away, they have you by the throat. If you refuse to work as hard as they demand, they stop calling you, they use someone else"

– Anonymous worker

"We're like lemons, they squeeze us and then throw us away"

– Mamadou, 47<sup>1</sup>

As a result, dangerous conditions are forcibly accepted, where people are made to work with dangerously unrepaired, old machinery and to handle skins soaked in more chemicals than is safe without adequate gloves for protection, for the sake of keeping costs low for businesses.

Unsurprisingly, these outcomes have major health implications. Not only are egregiously dangerous safety failings by tanneries reported – such as when unions stated that an extractor which prevents hydrogen sulphide poisoning was not turned on during the acid pickling tanning stage, resulting in the 'gas chamber'-like killing of a 35-year-old Senegalese worker who 'entered the tannery humming and exited lifeless on a stretcher' – but consistent occupational diseases caused by long-term exposure to hazardous chemicals are recorded, too. Bone and joint diseases, neoplasia, dermatitis, hearing loss from noise and respiratory diseases have all been documented many times in the region.<sup>1</sup>

## 'Italian leather' labels and non-Italian tanneries

The 'Made in Italy' label on leather goods further deceives citizen consumers by implying that all leather products are indeed wholly Italian-made. This is not the reality. Leather supply chains are complex, and it is common for skins to be pulled from carcasses in slaughterhouses in one country, salted and shipped for partial tanning in another country, before further shipment for leather 'finishing' in a final country.

Brazil, for example, is a major net exporter of wet blue (and finished) leather.<sup>1</sup> These partly tanned skins are mainly exported to China, the United States and Italy, where they are finished. Such leather is then legally sold as 'Made in Italy', obscuring a far more complex and often insidious supply chain from view.<sup>3</sup> Similarly, courts of law have found leather goods to be made nearly wholly in China, then labelled as 'Made in Italy'.<sup>4</sup> It is also often unclear if 'Made in Italy' refers to leather itself, or the finished product, such as shoes, a bag or a jacket.

While it is clear conditions in Italy are often extremely poor for workers, it is even more concerning that so many other people working in leather supply chains are often unseen, unthought of and untraceable, allowing suppliers and the brands profiting from their work to exploit them.

## Spotlight on Chinese tanneries

Great industrial secrecy across significant portions of fashion and other production in China likely exists to protect profits. For this reason, unfortunately, there is less information available on tanneries in the most significant producer of tanned hide in the world than would be helpful for ►



a more in-depth analysis.<sup>5</sup> The same can be said of tanneries in Brazil and Russia.

However, we do know that, as with other countries, tanneries exist across a spectrum of harms in China. Some tanneries in the country are Leather Working Group certified, while others are small and do not properly dispose of waste.<sup>6,7</sup>

In 2013, the Chinese Ministry for Environmental Protection released new standards for the discharge of water pollutants by leather tanning and fur dressing industries. These new standards came in large part as a response to global attention on what have been referred to even by the government as 'cancer villages'.<sup>8,9</sup> These are communities of people who experience disproportionately higher rates of cancer, most likely due to their close proximity to waterways polluted with heavy metals from leather tanneries and other industrial production.

Unfortunately, despite these new standards being in place, reports of morbidity tied to tannery waste continue to roll out. Local counties full of 'cancer blackspots' are tied to water pollution from leather tanneries and other industrial run-off.<sup>10</sup>

"Many villagers were suffering from cancer. The doctor only started telling us not to drink the river water several years ago. By then I had already helped bury my three neighbours"

— Wang Shiyang, a local living in one 'cancer blackspot', where many people have reportedly either 'died or moved away to protect their health.'<sup>10</sup>

As of late 2021, China has aimed to cut heavy metal emissions, which also impact human health, by 5%, with leather processing recognized as a major industry to manage.<sup>7,11</sup>

Diseases associated with tannery work

'Occupational cancers in leather tanning industries: a short review' explores the many studies which show tannery workers across the globe to face disproportionately high risks of cancer, in some cases with as much as a 50% increase in cancer reporting. These findings cover Sweden, Italy, China, Russia, America and many other countries, showing this to be an issue across the industry.<sup>12</sup> While some of these studies are dated, workplace health and safety has in far too

many cases unfortunately not improved at all, or enough to render them outdated:

- Lung cancer ⚠️
- Pancreatic cancer ⚠️
- Skin cancer and melanoma ⚠️
- Kidney cancer ⚠️
- Buccal cavity and pharynx cancers ⚠️
- Bladder cancer ⚠️
- Sinonasal cancer ⚠️
- Testicular cancer ⚠️
- Soft tissue sarcoma ⚠️

**Spotlight on Indian tanneries**

15 states across India produce and export leather products, with the country's government claiming to produce 13% of all footwear, second only to China.<sup>13</sup> Most leather and leather goods are exported, headed to wealthy locations such as the United States, European countries, the United Kingdom, Hong Kong, China and the United Arab Emirates. Most such exports go to Europe. Every day, an estimated 50 million litres of toxic tannery wastewater

is generated by tanneries across Kanpur, India. Old infrastructure designed to manage the output of far fewer tanneries than exists today cannot handle so much wastewater, with just 9 million litres being processed. As a result, it is suggested that nearly 40 million litres of untreated wastewater, full of carcinogenic substances like chromium and formaldehyde, is dumped into the Ganga River (or Ganges) each day.<sup>14</sup> Ganga has been referred to as the 'lifeblood' of India, providing water to nearly half a billion people.<sup>15</sup> The ongoing pollution of the Ganga river is a major health risk for human and non-human communities and the environment they live amongst.<sup>16</sup>

When Pulitzer Center videographer Sean Gallagher visited tanneries in India, he documented children working in poorly regulated and unsafe conditions.<sup>17</sup>

Other documentation has reported children expressing pain and discomfort caused by their work in nearby Bangladesh, which they feel they must continue to support their family.<sup>18</sup> The chemicals used in conventional tanning cause chronic coughing, skin ailments – including those which appear to strip melanin from the skin – and other diseases in those working, children included.<sup>17</sup> Gallagher also documented young

children with disabilities, with their communities stating that the pollution was to blame.

"Without any safety we work here only for our family living. Sometimes we feel sick working in this toxic environment but we need to work there."

— Solayman, 17<sup>18</sup>

If fair, living wages were paid to adults who worked in safer facilities, child labour would not be required. Unfortunately, wealthy, largely Western countries have outsourced cheap production and labour, alongside consequential health and environmental harms, for the sake of profit.

Tannery certifications fail workers

With an awareness of the many injustices involved in the tanning of leather, some brands turn to certifications. Unfortunately, there are no common certifications in place which ensure the protection of workers in leather tanneries. The Leather Working Group's (LWG) certification is undoubtedly the most well known and in-depth tannery certification available.<sup>19</sup>

Even referring to 'ethical leather' on their website, LWG-certified leather goods are sold by brands as 'responsible'.<sup>19,20</sup> LWG auditing of a leather manufacturing facility takes place over two days, and is valid for two years. The process involves hundreds of questions, and does ensure safer and less destructive use of hazardous chemicals such as chromium and formaldehyde, which are accepted by the certification.<sup>19,21</sup>

Shockingly, though, the LWG does not conduct social auditing, and it is currently possible to achieve 'gold status' without any social auditing. Some very limited worker health and safety auditing does take place, focussing mostly on access routes, machinery guards and emergency plans. Here, an audit score of just 50% is considered a pass.<sup>19,21</sup>

No further worker safety assessment is made. In fact, in the LWG's FAQ, for the question 'is worker safety assessed in this audit?', the answer begins: 'No. The focus is environmental issues.' Presently, consumers may be deceived by the way this certification is framed through marketing – potentially led to believe tannery workers are protected by the certification.<sup>19,22</sup>

# Slaughterhouse workers

**The skins pulled off of animal carcasses to be transformed into leather – seen as a valuable commodity – could not exist without slaughterhouse workers; people who often suffer through a job most would desperately avoid.**

No one really wants to work in a slaughterhouse, so vulnerable people are made to do it. The vast majority of people who kill cattle, skinning them for leather production are Brown and Black people, people at a financial disadvantage, people with less access to education and other work, as well as people who are migrants – in many cases undocumented – and refugees.<sup>1-5</sup> In some nations, refugees have been offered 'express entry' to the country if they will work for little pay in a slaughterhouse,<sup>6</sup> as the jobs become increasingly difficult to fill, with people who 'walk away after a couple of hours' of the confronting work.<sup>6,7</sup> Journalists have referred to Australia's slaughterhouses as 'visa factories',

where Chinese workers 'bear the scars of mistreatment'.<sup>8</sup>

Across Brazil, the United States, Australia and other top bovine skin-producing countries, a large number of slaughterhouses are owned by JBS,<sup>9-11</sup> a company known not only for mass deforestation for cattle ranching, but for fraud and corruption, as well as unjust and even forced labour practices.<sup>11-13</sup> JBS also owns tanneries throughout the world.<sup>14</sup>

### Dangerous work for poor pay

Slaughterhouse workers face similar unjust payment and exploitation as garment workers, with long hours of gruelling, repetitive work for (sometimes illegally) low pay and at times without an adequate break.<sup>15</sup> This work is also extremely dangerous. In countries with less 'modern' slaughtering equipment, like India and Pakistan, distressed animals can kick, wind and seriously injure workers attempting to slaughter them for the global meat and leather industry. In countries with newer equipment, injuries persist. In fact, in the United States, one quarter of slaughterhouse workers are ill or injured at any one time.<sup>16</sup> Human Rights Watch once referred to their factory job as the most dangerous

in the country, with two limb amputations required each week, and a risk seven times greater than the average American worker of repetitive strain injuries.<sup>17-18</sup> These chronic ailments can leave workers permanently disabled.

Slaughterhouse workers are also often found to have higher risk of contamination through zoonotic disease spread, as was shown so severely in the COVID-19 crisis, in which some abattoir managers even placed bets on which workers would get sick first.<sup>19-21</sup> Articles referred to the high risk these working people faced – seemingly deemed an acceptable outcome of continued slaughtering – as treating workers 'like meat'.

### The mental health risks in leather supply chain slaughterhouses

In addition to the risk of physical injury, slaughterhouse workers killing cattle (and other animals skinned for fashion like goats, sheep and even pigs) often experience negative impacts on their mental health.

The inherently violent nature of killing animals for a living sees workers more likely to suffer with perpetration-induced traumatic stress (PITS), a condition often suffered by soldiers. PITS is similar



to PTSD, with a fundamental difference: for these workers suffering with the mental health condition, trauma comes not from being a victim of violence, but from being 'the direct reason for another being's trauma'. As with PTSD, symptoms include 'drug and alcohol abuse, anxiety, panic, depression, increased paranoia, a sense of disintegration, dissociation or amnesia, which are incorporated into the "psychological consequences" of the act of killing.'<sup>22</sup>

"I needed that job. In a country town, jobs are not really readily available like in the city... So, I stuck with it, I desensitised myself, picked up addictions such as drugs and alcohol to help me cope and go through it... It's very common in the industry. The most disturbing moment was killing my first animal. Traumatic. I didn't like it. I didn't feel comfortable doing it at all. I had to suppress the emotions."

– Craig Whitney, ex-slaughterhouse worker who killed approximately 800 cattle each day for years, totalling to over 1 million slaughtered individuals.<sup>23</sup>

"I'll never forget the day, after I'd been at the abattoir for a few months, when one of the lads cut into a freshly killed cow to gut her – and out fell the foetus of a calf. She was pregnant. He immediately started shouting and throwing his arms about."

I took him into a meeting room to calm him down – and all he could say was, 'It's just not right, it's not right' over and over again. These were hard men, and they rarely showed any emotion. But I could see tears pricking his eyes."

– Anonymous worker, who later described 'taunting nightmares', as well as the suicide of a co-worker.<sup>24</sup>

While it is unknown just how many slaughterhouse workers struggle with PITS and other trauma-related strife due to a lack of research and transparency in the sector, countless recounts from workers themselves highlight the inherently disturbing nature of the work, and the toll this takes on one's psyche.

Unfortunately, the trauma of slaughtering animals extends beyond its impact on slaughterhouse workers.

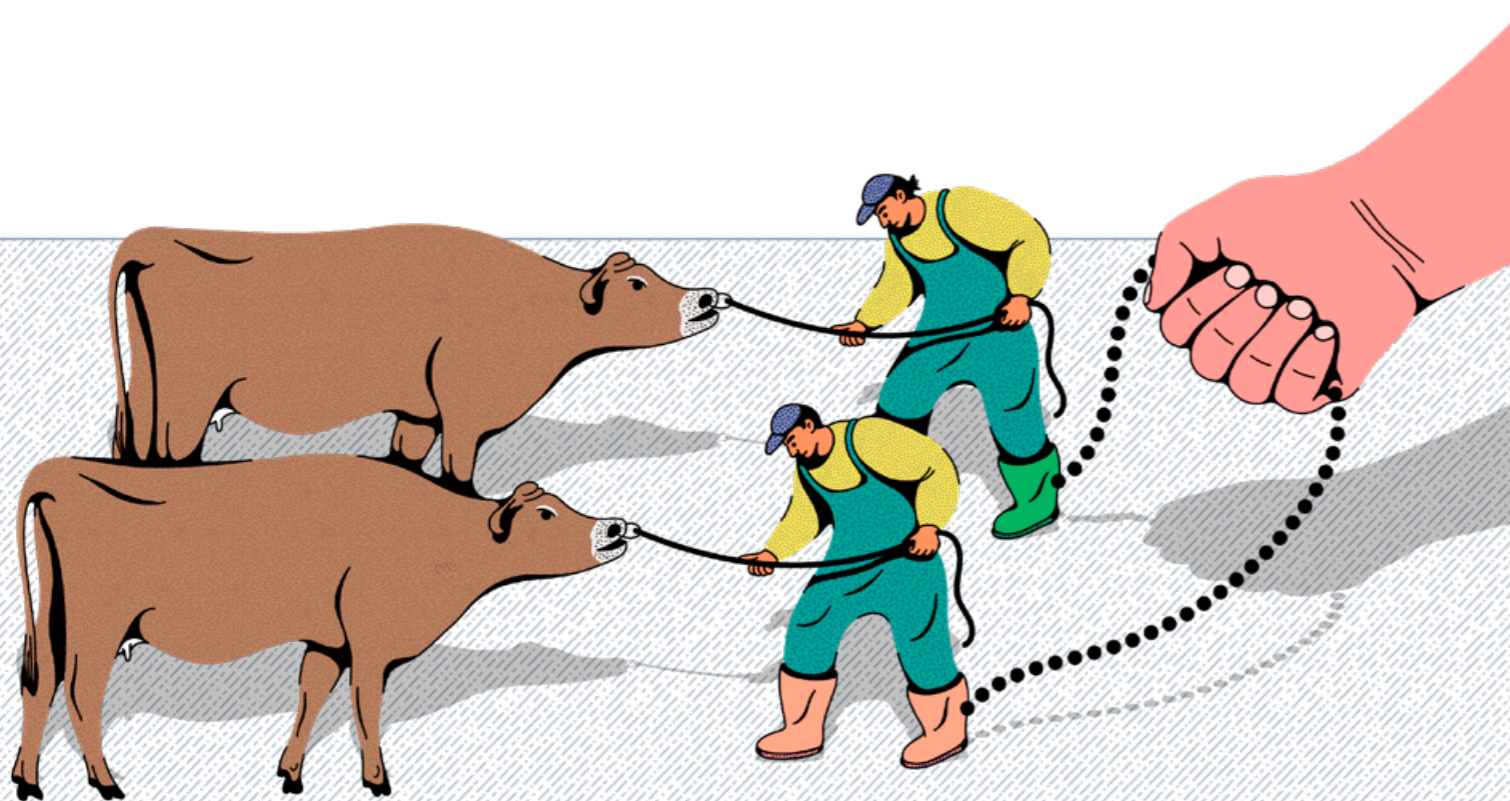
An article in The Yale Global Health Review cites a study that refers to a 'spillover' of violence from slaughterhouses to the communities surrounding them.<sup>22, 25</sup>

Paid to act violently towards non-human animals, these traumatised workers have been documented to start to lash out at those around them, both at work and at home. Again, while further research is required, data has shown that across over 500 US counties, communities surrounding slaughterhouses fall victim to disproportionately high numbers of violent offences, including sexual assault and rape.<sup>22, 25</sup>

Some claim that the potential for VR-controlled slaughtering robots could make this work safer and less traumatic, as it provides a layer of separation for those paid to kill on our behalf.<sup>26</sup> However, we must consider what this really means: if a job can only be performed virtually and through robotic means in order to prevent immense psychological harm, perhaps the answer is not more technology, but a move towards a food and fashion system which doesn't require such immense and – given the alternatives – ultimately needless violence.

While it is possible to reduce the number of physical injuries ▶

in slaughterhouses by slowing down kill lines, the traumatic and violent nature of this work cannot truly be reimagined, but only transitioned away from. So long as the fashion industry purchases skins from slaughterhouses, it will be perpetuating and giving social licence to this industrial, complex and compounding harm.



## Farm workers

Further back into the leather supply chain are farm and ranch workers. At this point, brands generally have little to no awareness of where they are sourcing their leather. If they do, it is worth noting too that there are often a number of farms and ranches in a single leather supply chain. This is because in some instances, including in Brazil, herds are split across breeding and birthing farms, background farms, the farms most directly linked to slaughterhouses, as well as in feedlots, where animals are sent for fattening just before their slaughter.<sup>1</sup> These suppliers are sometimes referred to as 'direct' and 'indirect' suppliers, with brands often oblivious to the existence of these indirect suppliers.<sup>2</sup>

When it comes to the humans working on these farms, similar mental health struggles as with slaughterhouse workers can occur. Not only do farm workers have the opportunity to connect with these animals more – making their eventual slaughter more distressing – but they in many cases mutilate calves and older animals under standard industry practices.

On Australian cattle stations, workers have been documented stating, "here I have to switch my love for animals a bit off, you have to if you work here. I mean normally

I couldn't send an animal to death but here you have to do it", and, "you should not feel bad for them. If you have a thought about that you can't be in the industry, you can't feel bad for them, you just can't".<sup>3</sup> Meanwhile, other farmers like Jay Wilde, who inherited a cattle farm from his father, said that the work was 'soul destroying', and that he felt as though he was playing a 'dirty trick' on animals he cared for when sending them to slaughter.<sup>4-6</sup>

Fashion Revolution's Out of Sight report shows that beyond mental anguish, problems of forced labour are found in leather supply chains, too.<sup>7</sup> In Brazil, one of the top producers of animal skin, illegal mistreatment of farming workers is rife.<sup>8,2</sup> In fact, 60% of the nation's 'Dirty List' of employers linked to labour trafficking, debt bondage and other forms of forced labour are from the cattle industry. Interviewed workers have reported death threats and beatings from ranch owners, debt-bondage cycles and humiliation.<sup>9</sup> When speaking to the rescue of enslaved people working on one particularly egregious ranch, chief labour inspector Raimundo Barbosa from Brazil's police force stated that "slave labour is extremely common on cattle ranches out here in southern Pará".<sup>9</sup>

JBS slaughterhouses in Brazil have been confirmed to source cattle from 'supplier farms that made use of workers kept in slavery-like conditions'.<sup>2</sup> A report from Brazilian investigative agency Repórter Brasil found these workers were being paid less than \$10 USD per day, living in 'degrading conditions'; shacks without toilets, running water or kitchens.<sup>10</sup> Workdays have been documented to often go 'well beyond overtime', endangering workers' physical wellness.<sup>10</sup>

Similarly, 'poor working conditions, labour trafficking and instances of forced labour have been documented among communities in Paraguay and Vietnam' involved in cattle ranching in leather supply chains. Wage theft, bonded labour and exploitation – including sexual exploitation – has been documented on cattle ranches in the United States and Australia.<sup>11,12</sup>

Unfortunately, while these issues are particularly prevalent across leather supply chains, many forms of agricultural production involve such risks, where low paid workers considered to be 'unskilled' continue to be undervalued.



# Environmental racism and pollution

Environmental racism is the targeting of people of colour to bear the disproportionate burdens of health hazards and ecosystem collapse, often caused by the demands of outside wealthier populations. Unfortunately, environmental racism is deeply rooted in leather production. We see such racism with the widespread pollution involved in leather tanning, largely located in the Global South, and in the locations of slaughterhouses in leather supply chains.

## Dying agricultural fields and people near tanneries

Near tanneries across China and India, it is not only workers that are harmed but entire agricultural industries and communities, whose land is poisoned by chromium and other substances, including arsenic, sulphuric acid, sodium chlorate, and formaldehyde, to name a few.<sup>1-4</sup>

Tanneries appear on the US' Environmental Protection Agency's Superfund list more than any other type of business, and 95% of once-US tanneries now operate overseas to avoid environmental oversight penalties.<sup>5</sup> Land under

ex-tanneries in the States legally cannot be used for farming or development, and in many cases cannot even be sold.<sup>5</sup>

Despite the seriousness with which the issue of environmental pollution from tanneries is treated in wealthier nations, this consideration is not carried overseas, despite these – largely Asian – people building wealth for European, American, Australian and United Kingdom brands. Similarly, environmental racism exists within these nations, too.

"Our area, Jajmau, belongs to a minority community, mostly Muslims. The tanneries are here but the government doesn't care about us. For that reason, more pollution is also here.

In the air there is pollution, in the water there is pollution, everywhere you will find pollution. Some people have died of asthma. People have had heart attacks. Even my wife died of asthma... About 45 years. In life sadness comes. Everyone has to die. Nobody is going to stay forever. Everyone has to die but this

has only happened because of the pollution."

— Javad Akhter, local politician and resident of Jajmau, India<sup>1</sup>

Local environmental and economic health can be impacted by tanneries too, as stated by Sonalal Yadav, a farmer's cooperative member in India who spoke to a camera as carcinogenic, chemical-filled tannery waste flowed out onto a desolate, sludgy area:

"The place which you are seeing was once completely rose agriculture. Now it has vanished. Many crops have vanished. When it started coming to the fields, in four years, our productivity totally went down. The situation is very bad here. Our people are facing lots of hardships."<sup>1</sup>

Everyone who profits or benefits from the sale and existence of leather shoes, bags, jackets and accessories must critically analyse their supply chains, and recognise

their responsibility to dismantle environmental racism and systems which perpetuate it.

## Slaughterhouses sickening and killing surrounding communities

Like tanneries, slaughterhouses also pose an array of environmental justice issues to nearby communities. Slaughterhouses – particularly in leading hide production locations – are often poorly or practically unregulated, resulting in complications such as the pollution of land, air and water with untreated waste and by-products.<sup>6-11</sup>

Pollution at slaughterhouses is mostly generated through the processing of animal body parts, with waste containing blood, bones, urine, faeces, fat and remnants of chemicals and

medications added and fed during the production of saleable flesh and skins.<sup>12</sup> The disposal of this waste often causes health concerns for communities, who tend to be poorer, and in leather supply chains, are often made up of people of colour.<sup>11, 13</sup>

Peer-reviewed studies ranging from India to America have shown health and environmental outcomes in these communities to be worse than others.<sup>14, 15</sup> In Brazil, JBS ended up in court after continually pouring cow's blood into a river near their slaughterhouse.<sup>16</sup> In India, frontline communities near slaughterhouses live in 'deplorable' conditions, with many unable to safely utilise their local water as it is unsuitable for drinking, bathing, irrigation and other necessary daily needs.<sup>11</sup> Sylvia Lam, Attorney with the Environmental Integrity Project, was involved in a lawsuit against

the Environmental Protection Agency when she stated that the 'EPA's national standards for water pollution from slaughterhouses are either weak and outdated or nonexistent'.<sup>17</sup> This case resulted in some positive progress,<sup>18</sup> but slaughterhouses and cattle rearing for leather still cause deaths due to air pollution.<sup>19</sup> This is true around the globe, including in the US,<sup>19</sup> as well as in China, where air pollution from the animal-industrial complex has been found to significantly increase pollution-related premature deaths.<sup>20</sup>

We are witnessing a trend of slaughterhouses around the world expanding in order to meet the rising demand of animal-derived goods, which include leather, leading to an epidemic of adverse environmental impacts for vulnerable populations.



# Environmental justice and land rights

Leather's impact on people  
Environmental justice and land rights

24

## The raising of cattle for beef and leather production is an environmental justice issue resulting in native land destruction and harm to front-line communities.

Around the world, this industry is a driving force behind crucial ecosystem destruction and the brutalisation of native and other marginalised people.

It is reported that while Indigenous communities make up just 6% of the global population, these people protect 80% of remaining biodiversity.<sup>1</sup> 24 million people live in the Brazilian Amazon rainforest, where destructive leather production has received the most attention.<sup>2</sup> Amazonia's destruction is both an ecological and human rights crisis, with these issues always existing as one; humans are a species of animal, we are a part of nature.

At least 80% of Amazonia's deforestation is due to cattle

rearing,<sup>3</sup> with one of the next major causes being soy, of which 95% is fed to farmed animals such as cattle.<sup>4,5</sup> 'Rampant forest destruction' has been documented in Amazonia,<sup>6</sup> despite the best efforts of Indigenous defenders, who fight against a system benefiting colonialist cattle ranchers and prioritising profits gained from leather and beef sales.<sup>7</sup> Both industry and government forces largely ignore and are complicit in the violation of supposedly protected human rights through illegal land seizures.<sup>8,9</sup>

This neo-colonisation brings with it renewed violence as ranchers are known to arrive with guns to forcibly remove Indigenous people. Government agencies who are supposed to protect the land and people are also targeted by cattle ranchers, who threaten them with further violence if they interfere.<sup>10</sup>

Meanwhile, Brazil's right-wing president, Jair Bolsonaro, has drastically cut funding to environmental protection and Indigenous agencies, while ignoring Indigenous murders.<sup>10,11</sup>

In 2020, highly conservative estimates found that 227 people

were killed for their work as environmental defenders, with many others facing intimidation, surveillance, sexual violence and criminalisation.<sup>12</sup> These attacks have disproportionately impacted Indigenous people, and in Brazil and Peru, 70% of such defenders were protecting forests, with 30% of these tied to 'resource exploitation', including large-scale agriculture like cattle ranching.<sup>12</sup> Brazil is the third-deadliest country for land defenders.<sup>13</sup>

One of Amazonia's most vulnerable and previously uncontacted tribes, the Piripkura, has seen their land invaded and destroyed by ranchers who brought in hundreds of cattle, constructing infrastructure such as fencing, airstrips and roads. The rate of deforestation on Piripkura land has drastically increased as beef and leather demand rises, amounting to more than 27,000% in the two years prior to 2021.<sup>14</sup> The Piripkura's territory is now considered the most deforested of any uncontacted tribe. The Karipuna, Uru-Eu-Wau-Wau, Rio Ouro Preto, Rio Jacy-Paraná and Manoki people have also been greatly affected by increased cattle ranching, despite being on supposedly protected land.<sup>15</sup>

25



"My name is Nemonte Nenquimo. I am a Waorani woman, a mother, and a leader of my people. The Amazon rainforest is my home... the land grabbers are cutting down primary forest so that the cattle can graze... When you say that you are urgently looking for climate solutions, yet continue to build a world economy based on extraction and pollution, we know you are lying because we are the closest to the land, and the first to hear her cries... The Earth does not expect you to save her, she expects you to respect her. And we, as Indigenous peoples, expect the same."

— Nemonte Nenquimo, via The Guardian<sup>16</sup>

While some may consider a commitment to only avoiding Brazilian leather a solution, Indigenous land is being depleted for beef and leather production and profits beyond the Amazon, too. The Gran Chaco forest spanning Paraguay, Bolivia and Argentina is also being decimated by cattle ranching and associated clearing, with Indigenous communities

fighting for the protection of their land.<sup>17,18</sup> Similar dispossession of land has been faced by Native Americans in the the United States.<sup>19</sup> In Australia, Aboriginal and Torres Strait Islander people fight for rights on their unceded land, on which cattle industry production is the leading cause of deforestation and clearing.<sup>20,21</sup> The country is a global deforestation hotspot with cattle production accounting for 73% of all deforestation, rising to 90% in the Great Barrier Reef catchment area.<sup>22</sup> Traditional Owners have reported illegal cattle grazing on sacred land sites,<sup>23</sup> and have referred to the colonialist destruction of land, often led by the industry leather is built upon, as 'devastating' and 'shattering'.<sup>24</sup> This industry-led colonisation has resulted in ongoing water scarcity, the destruction of Indigenous food sources, pollution and community displacement.<sup>25</sup>

"The Earth wants to repair itself, that's the thing; we see it all the time. The farm I'm working on, I got rid of the cattle and within a season the grass was knee-high again. And areas that had been cut, that should never have been cleared at all, where they

were showing their bones through the soil, they've come good again."

— Bruce Pascoe, Indigenous Bunurong and Yuin man and author of Dark Emu<sup>24</sup>

The fashion industry must take less from the Earth, and so too, from Indigenous communities who are so harmed by its destruction. This can be achieved not only by producing less, but by choosing bio-based and recycled non-animal materials which have smaller, less harmful land footprints.

Further, the fashion industry must note that it is Indigenous, Global Majority and low-income people who suffer the consequences of the climate crisis most,<sup>26-28</sup> despite their contribution to this human-induced problem being the smallest.<sup>29</sup> The emissions tied to leather production must be considered here, as we look further into the environmental consequences of fashion's desire for the material.

# Conclusion

26

Leather's impact on people

Conclusion

27

**The complex and immense impacts of the leather industry on people – whether they are working inside of it, fighting against it, or simply living around it – are clear. While some of these injustices could be remedied by industry reform, some are built into the DNA of the leather industry, which cannot be altered to be free from profits driven by traumatic animal slaughter and inherently land-inefficient, high-emitting animal-based production.<sup>1-4</sup>**

It is possible for garment, bag, shoe and accessory makers, as well as tannery and farm workers to be offered genuinely fair pay and safe working conditions. The fashion industry must broadly and urgently prioritise transparency back to tier one of supply chains, and use this transparency to ensure living wages and safe, respectable working conditions for all fashion workers. Likewise, legislation could and should demand limits to the amount of pollution which impacts communities surrounding each tier of the leather industry – however, change is not possible for everyone. Both farm and slaughterhouse workers cannot be separated from the likely trauma of their gruesome tasks, and should the cattle and leather industries continue to grow as is hoped by those profiting, more land will be eaten up, more emissions released and more positive human relationships with

the surrounding world and those we share it with fractured.

While more challenging, and requiring more scientific and culturally-driven imagination for a better future, a just transition away from leather production is a far more effective and all-encompassing solution than industry reform. But what would this look like? James Arbib, the co-founder of RethinkX – an independent think tank forecasting the speed and scale of technology-driven disruption – states that while cost and distribution vary the speed, it can take about 15 years for a new product to effectively disrupt a market.<sup>5, 6</sup> Positive feedback loops can allow for such disruption to begin following a tipping point in which 10% of a market is made up of such a new, more sustainable solution.<sup>7</sup> In the case of circumfaunal, next-gen leather,

these materials will not be widely available for another few years, even with existing investment. Nicole Rawlings, CEO of Material Innovation Initiative, estimates that with this in mind, and with a healthy, expected growth of investment in the space, broad disruption will likely occur around 2040.<sup>8</sup>

RethinkX also estimates in their agricultural report that by 2030, demand for some cow-based products will have fallen by as much as 70%.<sup>9</sup> This shift will greatly help us reach IPCC goals of reducing methane emissions by about one third.<sup>10</sup> Meanwhile, experts suggest that the fashion industry must work to reduce in size fourfold in order to stay within planetary boundaries, and these critical calls cannot be ignored.<sup>11</sup> With this in mind, it is entirely reasonable to recommend the following actions from fashion:



1. Fashion industry initiatives, certifications and media publications, alongside the not-for-profit ethical and sustainable fashion sector, should update their language to acknowledge the harm leather production causes to the planet, as well as the humans and non-humans living here. Terms like 'ethical', 'conscious', 'sustainable', 'natural', 'circular', and 'eco-friendly' should not be used in reference to animal-derived leather.

2. Fashion brands should publicly commit to reducing leather use by at least 50% by 2027, fully phasing out leather no later than 2035. These timelines should be used as conservative targets, with more immediate change being both critically needed and achievable for many brands.

3. In phasing out animal-derived leather, brands should embrace alternatives that shift the fashion industry away from a reliance on fossil fuels, and towards greater circularity.

4. Large fashion brands should invest in the research and development of leather alternative material innovation – ensuring these materials consider the need for a just transition, and will ultimately be open-source and available for wider industry use.

These recommendations are certainly significant asks of the fashion industry, but their substantial scale is reflective of the urgent need to divest from the interconnected harms of leather production, and from the environmental crises which it perpetuates, as explored throughout this report series. Brands which primarily profit from leather goods will find more challenges in attempting to fulfil the outlined time-based recommendation than brands which include leather goods as one of many offerings. This recommendation should be seen and used as a clear target for what is hypothetically possible for a large portion of brands, should the industry act together effectively and quickly, as it must. For those brands which could not feasibly reach this particular recommendation, serious consideration as to what the closest practical possibility is should be explored and set as a brand-specific target. Immediate interim action to improve traceability and the fair treatment and payment of leather supply chain workers is essential.



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30

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31

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## Conclusion

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