



Tanners turn material that might have gone to waste into colourful, sensual, durable, flexible, vibrant, beautiful leather. CREDIT: LE CUIR A PARIS

All the world needs leather

The volume of hides and skins coming as a by-product from the global meat industry is truly enormous. Figures suggest the meat industry generates no fewer than 240 million cattle hides a year, together with 540 million sheepskins and 425 million goatskins. The leather industry buys up this by-product, which would otherwise mostly go to waste, and transforms it into one of the most versatile and attractive materials on earth, a material that is also the mainstay of the world's footwear industry.

The weight of the hides and skins the meat industry casts off each year is likely to be around 7 million tonnes for cattle hides, 375,000 tonnes for sheepskins and 300,000 tonnes for goatskins. This means that the meat industry generates almost 7.7 million tonnes of waste per year in the form of animal hides and skins. The consumption of meat shows no sign of decreasing despite the demands of some environmentalists. On the contrary, rising global living standards

are creating greater demand, so this volume of waste is likely to increase rather than decrease.

Disposing of this waste would cause severe problems for all cities and countries where animal slaughter and meat processing takes place. In the developing world, it would exacerbate an already serious municipal solid waste situation. Municipal solid waste has almost doubled so far this century to reach 1.3 billion tonnes a year in 2010. It is expected to reach 2.5 billion tonnes a year by 2025. At the moment, around 15 million of the poorest people in the world scrape a living by picking out from municipal solid waste things they can sell. The presence of large volumes of perishable waste material from the meat industry could have serious consequences for their health.

At the same time, the meat industry would need to consider how much money it would have to spend in order to manage its hides and skins in the same way as other waste; an increasingly costly business. The UK, for example, imposed a landfill tax of £80

per tonne of waste from April of this year, an increase of 25% on the 2012 figure. At these rates, putting its by-product into landfill would cost meat companies more than \$1 billion per year, without factoring in the transportation and labour involved. This cost would, in all likelihood, be passed on to consumers, making a valuable food source more expensive and less accessible.

The size of the world's cattle, sheep and goat herds is greater than many consumers might imagine. Demand for meat around the world remains high and is growing in developing economies. The meat and livestock sectors are important and lucrative parts of the global economy; meat means money. An inevitable consequence is the high volume of hides and skins that abattoirs have to find a home for. Turning the meat industry's waste into leather is, in the eyes of most of humanity, the best way of dealing with it. It adds value to the animal, creates jobs and wealth and enhances the lives of people everywhere.

In any case, few alternatives exist. Landfill sites fill up quickly these days and are becoming increasingly expensive. Many governments want to impose steep rises in landfill tax as witnessed by the recent dramatic increase in the UK. Where one government leads, others will soon follow. The authorities have also said specifically that they want to encourage new uses for old material. As far as discarded hides and skins are concerned, people have known since the earliest times that there is no better way of doing this than by turning them into leather.

HERD SIZES

Across all breeds of cattle, the global herd size in 2013, according to the US Department of Agriculture, was 1.03 billion head. It identified the countries with the largest cattle populations, showing India in first place by a long way with 329.6 million head, followed by Brazil on 209.8 million, China with 104.2 million, the US with 89 million and the 27 European Union states with a combined total of 84.8 million (*Figure 1*). For its part, the US Hide Skins and Leather Association (USHSLA) calculates 27 main regions for cattle farming, slaughter and meat production around the world and states that, together, they generate 240 million hides a year.

As far as weight is concerned, there are large variations. However, for the purpose of illustration, it calculated that hides from bulls, halfway through the year in the northern hemisphere, might

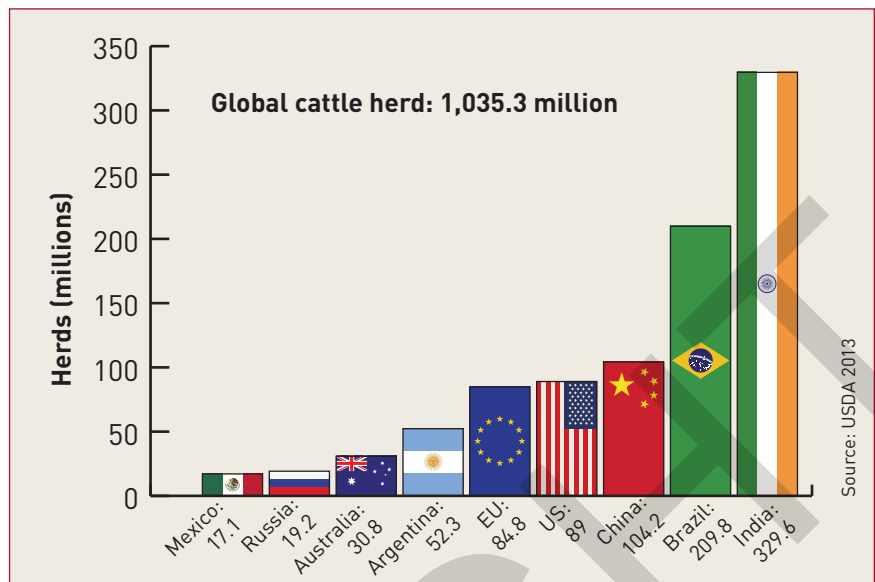


Figure 1 – Cattle herds 2013.

weigh an average of 35 kilos, those of dairy cows an average of 29 kilos and heifers an average of 25 kilos, with all weights relating to green hides. The average across all three is around 30 kilos. If we take 30 kilos per hide for this calculation, the 240 million hides a year that USHSLA states abattoirs have to dispose of would weigh 7.2 billion kilos.

Again, for this illustration, we can calculate the cost of putting these hides into landfill in countries charging the same rate of landfill tax as the UK at £576 million (\$963 million). In this scenario, without factoring in transportation costs and other expenses, it would cost the meat industry more than \$950 million per year just to dump the hides it generates into landfill sites.

As matters stand, of course, rather

than being an almost billion-dollar cost, the raw hides can earn the meat industry revenue as a result of tanners' willingness to buy the material, even at the record-high prices seen during this decade, and transport it to leather-making facilities around the world for processing. No one denies that it is in tanners' interests to have access to this raw material. It is equally clear that the meat sector also gains by earning money from this by-product and by avoiding the need to take care of disposing of it as waste.

UPWARD TREND

One reason why hide prices have been so high is that herd sizes and slaughter levels are reducing in important markets such as Europe and North America. According to the United



Figure 2 - Raw material as hides and skins available to the global tanning industry on average 1992-1994 and 2008-2010.

Nations Food and Agriculture Organization (FAO), the global cattle herd size was closer to 1.6 billion in the years between 2008 and 2013. The same source gives figures of 1.1 billion head for the world sheep population at that time, with the goat herd size at 881.6 million.

These figures are cyclical and seasoned industry observers have said that the national herd in the US, for example, should begin to build back up again during this year or 2015 after standing at 89.3 million head on January 1, 2013, the lowest level since 1952. Over time, trends show a steady increase in herd sizes and in the volumes of hides and skins the meat industry is producing from them (Figure 2).

To return to a specific examination of sheep and goats, there is growing demand for dairy products from sheep and goat milk, but demand for cow's milk is still much higher so incentives for farmers to hold back sheep and goat from meat production are therefore fewer. A higher proportion go to slaughter. The FAO put the total annual slaughter for sheep over that period at 542.5 million (almost 50% of the herd) and for goat at 424.6 million (over 48% of the total). In the case of both sheep and goat, the figures include young animals.

Sheep and goat skins are a lot smaller than cow hides, but each still weighs around 700 grammes, giving total skin weight of roughly 675 million kilos. Under a similar scenario to the one described above, disposal of these skins into landfill would, in theory, cost farmers or meat companies a total of \$90 million a year. An added consideration is that a large proportion of these skins come from slaughter that

takes place in the developing world. In the case of goats in particular, the FAO puts developing economies' share of annual slaughter at over 95%. This is particularly significant due to the fact that few up-to-date waste management strategies are in place in these parts of the world.

SOLID WASTE DOUBLING

According to a 2012 report from PROPARCO, a financial institution, partly owned by the Agence Française de Développement, that aims to promote private investment in developing countries to help societies achieve the Millennium Development Goals, municipal solid waste has almost doubled in volume already this century, reaching 1.3 billion tonnes a year in 2010. This volume is expected to almost double again to reach 2.5 billion tonnes per year by 2025. The organisation's chief executive, Claude Périou, has said that fast growing urban populations and changes in consumption patterns are driving this increase.

PROPARCO goes on to say that as open waste dumps remain the dominant processing mode in developing countries, so this growth in solid waste will have a serious impact on both the environment and on people's health. Every year developing nations spend more than \$45 billion on managing their municipal solid waste and this figure could exceed \$150 billion by 2025. Imagine the impact on this situation of adding millions of animal skins to the material that already goes into these open waste dumps. Imagine the effect on the estimated 15 million people in the poorest countries in the

world who scrape a living by combing these dumps for material they can sell.

CONCLUSION

The leather industry is clearly providing the world with a major service by taking the hides and skins the meat industry generates and saving them from going to waste. Without this raw material, the leather industry would be unable to continue. Without the leather industry, the world would have to find a new way to cope with the expense and the trouble of getting rid of the material while, at the same time, losing out completely on its potential value. Despite all the attempts to find a truly viable substitute for leather, it remains the material of choice for the global footwear industry and its billions of customers. The world needs leather. 📌

The information used in this article has come from two principal sources.

The International Council for Hides, Skins and Leather Traders Associations (ICHSLTA) is an international body that works to promote global trade in hides and skins, with a specific focus on quality and on environmental issues. It sets out guidelines and gives advice on production, grading and marketing to improve reliability and understanding throughout the world.

The Food and Agriculture Organization of the United Nations (FAO) has as its aims the eradication of hunger, food insecurity and malnutrition; the elimination of poverty and the driving forward of economic and social progress for all; and, the sustainable management and utilisation of natural resources, including land, water, air, climate and genetic resources for the benefit of present and future generations.

A herder in Africa looks after his goats. The FAO says more than 95% of goat slaughter around the world takes place in developing economies. CREDIT: ANDRZEJ KUBIKSHUTTERSTOCK

